

**WISeNET**

# **NETZWERKKAMERA**

Benutzerhandbuch

QND-6012R/6022R/6032R/6072R/6082R

QNV-6012R/6022R/6032R/6072R/6082R

QNO-6012R/6022R/6032R/6072R/6082R



# Netzwerkamera

## Benutzerhandbuch

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❖ Design und technische Daten können ohne vorherige Ankündigung geändert werden.

❖ Die initiale Administrator-ID ist "Administrator" und das Passwort sollte eingestellt werden, wenn Sie sich das erste Mal anmelden.  
Bitte ändern Sie das Passwort alle drei Monate um die persönlichen Daten zu schützen und Schaden infolge Datendiebstahl zu vermeiden.  
Beachten Sie bitte, der Benutzer ist für die Sicherheit und alle weiteren Probleme, die sich aus einem Missmanagement des Passworts ergeben verantwortlich.

## WICHTIGE SICHERHEITSHINWEISE

1. Lesen Sie diese Anweisungen.
2. Bewahren Sie sie auf.
3. Beachten Sie alle Warnungen.
4. Befolgen Sie alle Anweisungen.
5. Verwenden Sie dieses Gerät nicht in der Nähe von Wasser.
6. Die verunreinigte Stelle auf der Produktoberfläche mit einem weichen, trockenen oder feuchten Tuch reinigen. (Keine Reinigungs- oder kosmetischen Mittel verwenden, die Alkohol, Lösungsmittel oder Ölbestandteile enthalten, da diese das Produkt deformieren oder schädigen können.)
7. Blockieren Sie keine Belüftungsöffnungen. Installieren Sie es gemäß den Herstelleranweisungen.
8. Installieren Sie das Gerät nicht in der Nähe von Wärmequellen wie beispielsweise von Radiatoren, Heizkörpern oder anderen Geräten (einschließlich Verstärkern), die Wärme erzeugen.
9. Bitte achten Sie darauf, die Schutzvorrichtung des gepolten bzw. geerdeten Steckers nicht zu beschädigen. Ein gepolter Stecker verfügt über zwei Stifte, von denen einer breiter als der andere ist. Ein geerdeter Stecker hat zwei Stifte und einen Erdungsstift. Der breite Stift oder der dritte Stift ist für Ihre Sicherheit vorgesehen. Wenn der vorgesehene Stecker nicht in Ihre Steckdose passt, wenden Sie sich an einen Elektriker, um die veraltete Steckdose austauschen zu lassen.
10. Schützen Sie das Netzkabel so, dass nicht darauf getreten wird, und dass es insbesondere an den Steckern oder passenden Steckdosen bzw. der Stelle, an der das Kabel das Gerät verlässt, nicht abgeklemt wird.
11. Verwenden Sie nur die vom Hersteller angegebenen Zusatzgeräte/Zubehöerteile.
12. Verwenden Sie für das Gerät nur Gestelle, Ständer, Stative, Konsolen und Tische, die vom Hersteller empfohlen oder in Verbindung mit dem Gerät verkauft werden. Bei Verwendung eines Transportwagens bewegen Sie das Gerät nur mit äußerster Vorsicht, um Verletzungen durch Umkippen zu vermeiden.
13. Trennen Sie das Gerät bei Gewitter oder längerer Abwesenheit vom Stromnetz.
14. Überlassen Sie alle Wartungsarbeiten qualifiziertem Kundendienstpersonal. Wartungsarbeiten sind erforderlich, wenn das Gerät in irgendeiner Weise beschädigt wurde, wie zum Beispiel ein beschädigtes Netzkabel oder Stecker, verschüttete Flüssigkeiten oder Gegenstände, die in das Gerät gefallen sind, das Gerät Regen oder Feuchtigkeit ausgesetzt wurde, nicht normal funktioniert oder fallen gelassen wurde.
15. Dieses Produkt soll ein zugelassenes Stromversorgungseinheit sein, die mit „Klasse 2“ oder „LPS“ gekennzeichnet ist und mit 12 V DC, 0,55 A oder PoE (48 V), 0,16 A bemessen ist. (QND-6072R/6082R, QNV-6072R/6082R)
16. Dieses Produkt soll ein zugelassenes Stromversorgungseinheit sein, die mit „Klasse 2“ oder „LPS“ gekennzeichnet ist und mit 12 V DC, 0,54 A oder PoE (48 V), 0,16 A bemessen ist. (QND-6012R/6022R/6032R, QNV-6012R/6022R/6032R)
17. Dieses Produkt soll ein zugelassenes Stromversorgungseinheit sein, die mit „Klasse 2“ oder „LPS“ gekennzeichnet ist und mit 12 V DC, 0,55 A oder PoE (48 V), 0,16 A bemessen ist. (QNO-6072R/6082R)
18. Dieses Produkt soll ein zugelassenes Stromversorgungseinheit sein, die mit „Klasse 2“ oder „LPS“ gekennzeichnet ist und mit 12 V DC, 0,51 A oder PoE (48 V), 0,15 A bemessen ist. (QNO-6012R/6022R/6032R)
19. Dieses Produkt soll mit Isolationsstrom verwendet werden.
20. Wenn Sie bei der Installation des Gerätes zu viel Kraft verwenden, kann es zu Beschädigungen und Fehlfunktionen der Kamera kommen. Wenn Sie das Produkt mit Gewalt und nicht konformen Werkzeugen installieren, kann das Produkt beschädigt werden.
21. Stellen Sie das Produkt nicht an Orten auf, an denen chemische Stoffe oder Ölnebel vorhanden sind oder entstehen können. Da Speiseöle wie Sojaöl das Produkt beschädigen oder verwerfen können, darf das Produkt nicht in der Küche oder in der Nähe des Küchentisches installiert werden. Dies kann zu Schäden am Produkt führen.
22. Achten Sie beim Einbau des Produkts darauf, dass die Oberfläche des Produkts nicht mit chemischer Substanz gefärbt wird. Einige chemische Lösungsmittel wie Reiniger oder Klebstoffe können schwere Schäden an der Oberfläche des Produkts verursachen.



23. Wenn Sie das Produkt in einer nicht empfohlene Weise installieren oder demontieren, können die Produktionsfunktionen / Leistung nicht garantiert werden. Installieren Sie das Produkt unter "Installation und Anschluss (Installation and connection)" in der Bedienungsanleitung.
24. Installation oder Verwendung des Produkts ins Wasser kann zu ernsthaften Schäden am Produkt führen.
25. Auch wenn eine schnelle Temperaturänderung Frost in der Kuppel erzeugen könnte, gibt es kein Problem mit dem Video.

## WARNUNG

SETZEN SIE DIESES GERÄT NICHT REGEN ODER FEUCHTIGKEIT AUS, UM DIE GEFAHR EINES BRANDS ODER ELEKTROSCHOCKS ZU REDUZIEREN. STECKEN SIE KEINE METALLGEGENSTÄNDE DURCH DIE BELÜFTUNGSSCHLITZE ODER ANDERE ÖFFNUNGEN DER AUSRÜSTUNG.

Schützen Sie das Gerät vor Flüssigkeitsspritzern und Tropfen. Stellen Sie keine mit Flüssigkeiten gefüllten Behälter auf dem Gerät ab (z. B. Vasen).

Zur Vermeidung von Verletzungen muss das Gerät gemäß der Montageanleitung sicher an der Wand oder Decken befestigt werden.

## VORSICHT

	<b>VORSICHT</b> GEFAHR EINES ELEKTROSCHOCKS NICHT ÖFFNEN	
<b>VORSICHT : NICHT DIE RÜCKSEITIGE ABDECKUNG ÖFFNEN, ABDECKUNG (ODER RÜCKSEITE) NICHT ABNEHMEN. KEINE VOM BENUTZER ZU WARTENDE TEILE INNEN. WENDEN SIE SICH AN QUALIFIZIERTES KUNDENDIENSTPERSONAL.</b>		

## ERKLÄRUNG DER GRAPHISCHEN SYMBOLE



Das Blitzsymbol im gleichseitigen Dreieck warnt den Benutzer davor, dass im Inneren des Produkts nicht isolierte, „gefährliche Spannungen“ anliegen. Dies kann zu einem elektrischen Schlag führen und stellt eine ernsthafte Verletzungsgefahr dar.



Das Ausrufezeichen im gleichseitigen Dreieck soll Benutzer darauf hinweisen, dass die zum Lieferumfang des Produkts gehörende Dokumentation wichtige Bedienungs- und Instandhaltungsanweisungen (Reparaturanweisungen) enthält.

## Klasse I nbauart

Ein Gerät der KLASSE I sollte nur an einen NETZ-Anschluss mit Schutzerdung angeschlossen werden.

## Akku

Akkus (Akkusatz oder eingelegerter Akku) dürfen keiner extremen Hitze, z. B. Sonneneinstrahlung, Feuer oder Ähnlichem, ausgesetzt werden.

Die Batterie kann nicht ersetzt werden.

## Trennung des Geräts

Trennen Sie den Hauptstecker vom Gerät, wenn dieser beschädigt ist. Und wenden Sie sich bitte für die Reparatur an einen Fachmann in Ihrer Nähe.

**Außerhalb der USA könnte ein HAR-Code verwendet werden. Eine Fachwerkstatt wird mit Zubehör einer Fachwerkstatt beauftragt.**

## ACHTUNG

Wird die Batterie nicht mit der richtigen Batterie ausgetauscht, besteht Explosionsgefahr. Entsorgen Sie gebrauchte Batterien vorschriftsgemäß.

Diese Hinweise zur Wartung und Reparatur gelten nur für qualifiziertes Kundendienstpersonal. Um die Gefahr von Stromschlägen zu verringern, führen Sie nur die Reparaturen aus, die in der Bedienungsanleitung enthalten sind. Überlassen Sie alle weiterführenden Reparaturarbeiten qualifiziertem Personal.

Bitte verwenden Sie die Eingangsleistung für nur eine Kamera und schließen Sie keine zusätzlichen Geräte an.

**Der ITE darf nur mit PoE-Netzwerken und ohne Routing zur äußeren Anlage verbunden werden.**

Lesen Sie die folgenden empfohlenen Sicherheitsmaßnahmen sorgfältig durch.

- Stellen sie das Gerät nicht auf eine unebene Fläche.
- Setzen Sie das Gerät keiner direkten Sonneneinstrahlung aus, stellen Sie es nicht in der Nähe von Heizgeräten oder in sehr kalten Bereichen auf.
- Das Gerät nicht in der Nähe von leitendem Material aufstellen.
- Versuchen Sie auf keinen Fall, selbst Reparaturarbeiten auszuführen.
- Stellen Sie kein Glas Wasser auf das Produkt.
- Stellen Sie das Gerät nicht in der Nähe einer magnetischen Quelle auf.
- Blockieren Sie nicht die Belüftungsöffnungen.
- Legen Sie keine schweren Gegenstände auf das Produkt.
- Bitte nutzen Sie beim Installieren/Entfernen der Kamera Schutzhandschuhe. Die hohe Temperatur der Produktoberfläche könnte zu Verbrennungen führen.

Das Benutzerhandbuch ist ein Anleitungsbuch zur Art der Verwendung von Produkten.

Die Verwendungshinweise im Handbuch bedeuten folgendes.

- Referenz : Im Falle einer weiterleitenden Information als Hilfe bei der Produktverwendung
  - Hinweis : Wenn die Möglichkeit besteht, dass Güter oder Menschen durch das Nichtbefolgen der Anleitung zu Schaden kommen
- ※ Bitte lesen Sie das vorliegende Benutzerhandbuch zur eigenen Sicherheit vor der Verwendung von Gütern sorgfältig durch, und heben Sie es an einem sicheren Ort auf.

In bestimmten Installationsumgebungen kann es zu Störungen der Funkkommunikation kommen. Wenn eine Störung von elektromagnetischen Wellen zwischen dem Produkt und einem Funkkommunikationsgerät auftritt, wird empfohlen, einen gewissen Abstand zwischen den beiden einzuhalten oder die Richtung der Empfangsantenne zu ändern.

## ACHTUNG

Um Schäden durch die IR-LED zu vermeiden, blicken Sie nicht direkt auf die Betriebsleuchte.

Nur für folgende Modelle.

QND-6012R/6022R/6032R/6072R/6082R  
QNV-6012R/6022R/6032R/6072R/6082R  
QNO-6012R/6022R/6032R/6072R/6082R

<b>Risikogruppe 1</b>
<b>ACHTUNG: Dieses Produkt strahlt IR ab. Nicht in die Betriebsleuchte blicken.</b>
Produkt gemäß IEC 62471 getestet

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## PRODUKT-FUNKTIONEN

- **Staub/Wasserdicht (IP66) (QNV-6012R/6022R/6032R/6072R/6082R, QNO-6012R/6022R/6032R/6072R/6082R)**  
Durch die staub- und wasserdichte Auslegung kann diese Kamera problemlos außerhalb von Gebäuden auch an Orten installiert werden, an denen Sie Regen ausgesetzt ist.
- **IR-Modus**  
Wenn die IR-Anzeige anspricht, schaltet das Gerät in den IR-Modus, damit ein Objekt nicht zu hell dargestellt wird, wodurch sich nahe am Objektiv befindende Objekt leichter identifiziert werden können.
- **Videos mit einer Auflösung von 2 Megapixel**
- **Multi-Übertragung**  
Dieser Netzwerk Encoder kann Videos in verschiedenen Auflösungen und Qualitäten über verschiedenen CODECs gleichzeitig anzeigen.
- **Überwachung über Webbrowser**  
Der Webbrowser kann verwendet werden, um die Bildanzeige in einer lokalen Netzwerkumgebung wiederzugeben.
- **Alarm**  
Bei Eintritt eines Ereignisses, wird das Video entweder an die vom Benutzer angegebene E-Mail-Adresse oder an den FTP-Server geschickt, auf eine microSD-Karte oder NAS gespeichert oder es wird an den Alarmausgabeterminal ein Signal übermittelt.
- **Manipulation Erkennung**  
Erkennt Versuche, die Video Überwachung zu manipulieren.
- **Funktion der Unschärfe-Ermittlung**  
Ermittelt das Unschärfe-Phänomen der Kameralinse.
- **Bewegungserkennung**  
Erkennt Bewegungen auf den von der Kamera eingehenden Videobildern.
- **Automatische Erkennung eines unterbrochenes Netzwerk**  
Erkennt ein unterbrochenes Netzwerk, bevor ein Ereignis ausgelöst wird.
- **ONVIF Compliance**  
Dieses Produkt unterstützt das ONVIF Profil S&G.  
Weitere Informationen finden Sie unter [www.onvif.org](http://www.onvif.org).



Driving network video through global standardization

## EMPFOHLENE PC-SPEZIFIKATIONEN

- CPU : Intel(R) Core(TM) i7 3.4 GHz oder höher
  - RAM : 8G oder höher
  - Unterstützte Betriebssystem : Windows 7, 8.1, 10, Mac OS X 10.12, 10.13, 10.14
  - Empfohlener Browser: Google Chrome
  - Unterstützte Browser : MS Explore11, MS Edge, Mozilla Firefox(nur Windows 64bit), Apple Safari(wird nur bei Mac OS X)
  - VGA : PCIe 256MB GDDR3 Videografikkarte oder höher
- ※ Sie können detaillierte Informationen zu verifizierten Betriebssystemen und Browsern im Anhang finden.

## EMPFOHLENE TECHNISCHE DATEN FÜR MICRO SD/SDHC/SDXC SPEICHERKARTEN

- Empfohlene Kapazität : 16GB bis 128GB (MLC-Typ)
- Empfohlene Hersteller : SanDisk, Transcend
- Produkttyp : Hochleistung
- Die Kompatibilität variiert je nach Kartenhersteller und -typ.

## EMPFOHLENE NAS-SPEZIFIKATIONEN

- Empfohlene Kapazität : 200GB oder mehr wird empfohlen.
- Gleichzeitiger Zugriff : Eine NAS-Einheit kann maximal sechzehn Kamerazugriffe aufnehmen.
- Bei dieser Kamera raten wir zu NAS mit den folgenden Spezifikationen.


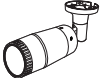






Empfohlene Produkte	Verfügbare Größen
QNAP NAS	Maximal 16 Kameras können gleichzeitig zugreifen.
Synologie NAS	Maximal 16 Kameras können gleichzeitig zugreifen.



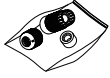











- Falls Sie NAS-Geräte für sonstige Zwecke, als die Videospeicherung verwenden, wird möglicherweise die Anzahl von zugänglichen Kameras reduziert.

## LIEFERUMFANG

Überprüfen Sie bitte, ob in der Produktverpackung die Kamera und alle Zubehörteile enthalten sind.  
(Da in jedem Vertriebsland die Zubehörteile nicht die gleichen sind.)

Produktdesign	Bezeichnung	Menge	Beschreibung	Modellbezeichnung
	Kamera	1		QND-6012R/6022R/ 6032R/6072R/6082R
		1		QNO-6012R/6022R/ 6032R/6072R/6082R
		1		QNV-6012R/6022R/ 6032R/6072R/6082R
	Kurzanleitung (Optional)	1		QND-6012R/6022R/ 6032R/6072R/6082R, QNV-6012R/6022R/ 6032R/6072R/6082R, QNO-6012R/6022R/ 6032R/6072R/6082R
	Garantiekarte (Optional)	1		QND-6012R/6022R/ 6032R/6072R/6082R, QNV-6012R/6022R/ 6032R/6072R/6082R, QNO-6012R/6022R/ 6032R/6072R/6082R
	Schablone	1	Installationsanleitung des Produkts	QND-6012R/6022R/ 6032R/6072R/6082R, QNV-6012R/6022R/ 6032R/6072R/6082R, QNO-6012R/6022R/ 6032R/6072R/6082R
	Netzklemmleiste	1	Der Netzstecker ist eingesteckt	QND-6012R/6022R/ 6032R/6072R/6082R, QNV-6012R/6022R/ 6032R/6072R/6082R
	L-förmiger Schraubenschlüssel	1	Wird verwendet, um die Richtung der Kamera zu steuern	QNO-6012R/6022R/ 6032R/6072R/6082R

Produktdesign	Bezeichnung	Menge	Beschreibung	Modellbezeichnung
	Inbusschlüssel (Sternenform)	1	Wird verwendet, um die Dome-Abdeckung zu entfernen und zu ersetzen	QNV-6012R/6022R/ 6032R/6072R/6082R
	Alarmkabel	1	Wird zum Verbinden mit einem Alarm genutzt	QND-6012R/6022R/ 6032R/6072R/6082R
	RJ45 wasserdichtes Zubehör	1	Wird zur Installation an feuchten Orten verwendet	QNO-6012R/6022R/ 6032R/6072R/6082R
	Sonnenschutz	1	Schützt die Kamera vor direkter Sonneneinstrahlung	QNO-6012R/6022R/ 6032R/6072R/6082R
	Sonnenschutz Halterung	1	Dient der Befestigung des Sonnenschutzes an der Kamera	QNO-6012R/6022R/ 6032R/6072R/6082R
	Kartentyp Feuchtigkeitsabsorbierend	3	Bei Installation befestigt.	QNO-6012R/6022R/ 6032R/6072R/6082R
		1		QNV-6012R/6022R/ 6032R/6072R/6082R
	Netzkabel	1	Wird zum Anschließen an den Netzanschluss verwendet	QNV-6012R/6022R/ 6032R/6072R/6082R
	Audio-/Alarmkabel	1	Für die Verbindung mit dem Audio- und Alarmport	QNV-6012R/6022R/ 6032R/6072R/6082R
	Testmonitor-Kabel	1	Wird zum Testen des Kameraanschlusses an ein tragbares Displaygerät verwendet	QND-6012R/6022R/ 6032R/6072R/6082R, QNV-6012R/6022R/ 6032R/6072R/6082R, QNO-6012R/6022R/ 6032R/6072R/6082R

Produktdesign	Bezeichnung	Menge	Beschreibung	Modellbezeichnung
	Kabeltülle	1	Wird zum Verbinden des LAN-Kabel	QNV-6012R/6022R/ 6032R/6072R/6082R
	Installationsvorrichtung für Kappen	1	Wird beim Anschließen eines RJ45-Kabels verwendet	QNV-6012R/6022R/ 6032R/6072R/6082R

## Optionales Zubehör für die Installation

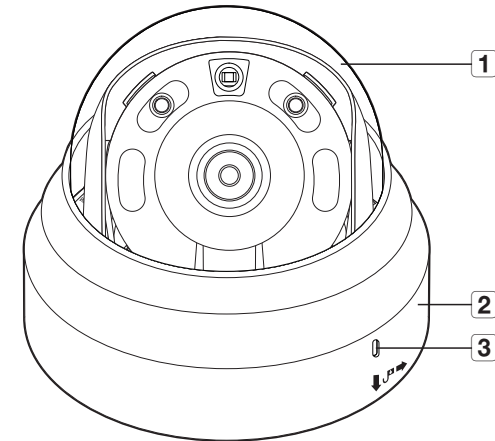
Damit sich die Installation einfacher gestaltet, können Sie das entsprechende optionale Zubehör kaufen.



Modellname	Hängebefestigung	Hinteres Gehäuse	Stangenbefestigung	Alle
QNV-6012R/6022R/6032R	SBP-122HMW	SBV-120GW		SBP-300LMW (Brüstungsbefestigung)
QNV-6072R/6082R	SBP-301HMW2	SBV-136BW		SBP-300CMW (Deckenbefestigung)
QND-6012R/6022R/6032R	SBP-300HMW7			SBP-300WMW1 (Wandbefestigung)
QND-6072R/6082R	SBP-122HMW			SBP-300NBW (Installationsgehäuse)
QNO-6012R/6022R/ 6032R/6072R/6082R		SBO-100B1	SBP-302PM	SBP-300PMW (Stangenbefestigung)
				SBP-300KMW (Eckenbefestigung)

## AUF EINEN BLICK (QND-6012R/6022R/6032R)

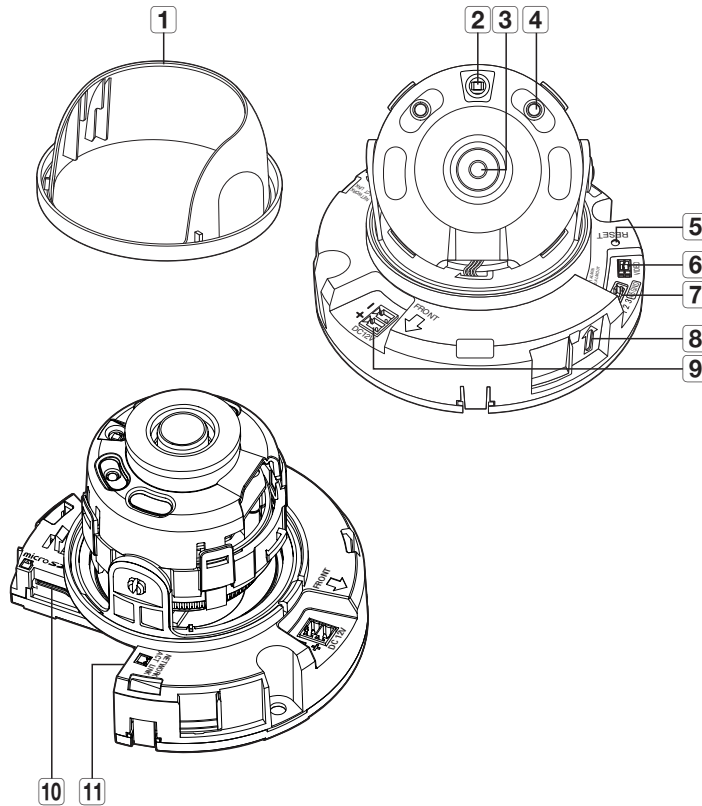
### Aufbau



Bezeichnung	Beschreibung
<b>1</b> Abdeckklappe	Gehäuseabdeckung zum Schutz des Objektivs und der Haupteinheit.
<b>2</b> Kamera-Gehäuse	Teil des Kameragehäuses.
<b>3</b> Mikrofonloch	Integriertes Mikrofon.



## Komponenten

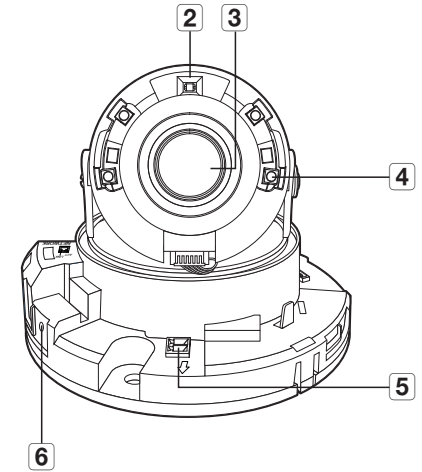
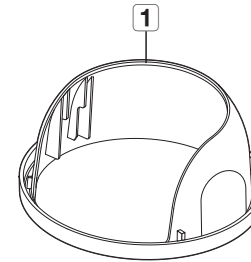
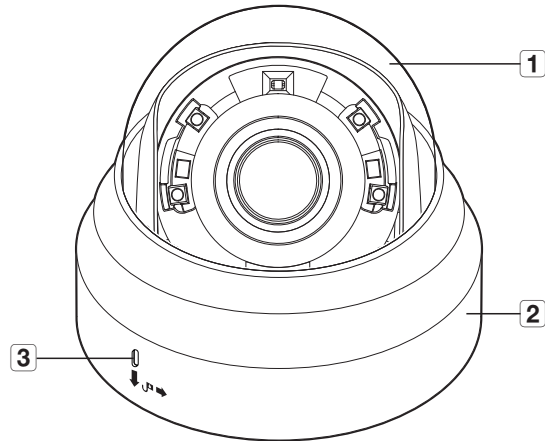


Bezeichnung	Beschreibung	
<b>1</b> Innendeckel	Schutzabdeckung für das Gehäuse.	
<b>2</b> Beleuchtungssensor	Erkennt das einfallende Licht, und steuert die Infrarot-LED.	
<b>3</b> Objektiv	Kameraobjektiv.	
<b>4</b> IR LED	Diese infrarot LEDs werden über den Beleuchtungssensor gesteuert.	
<b>5</b> Reset-Taste	<p>Diese Taste setzt alle Kameraeinstellungen auf die Werkseinstellungen zurück. Drücken und 5 Sekunden gedrückt halten, um das System neu zu starten.</p> <p>■ Wenn Sie die Kamera zurücksetzen, werden die Netzwerkeinstellungen so eingestellt, dass DHCP aktiviert sein kann. Wenn im Netzwerk kein DHCP-Server vorhanden ist, muss das Programm Device Manager ausgeführt werden, um die grundlegenden Netzwerkeinstellungen, wie IP-Adresse, Subnetzmaske, Gateway, etc. zu ändern, bevor es möglich ist, sich mit dem Netzwerk zu verbinden.</p>	
<b>6</b> Test Monitor Ausgang	Anschluss zum Testen der Videoausgabe. Verwenden Sie das Test Monitor Kabel, um ein tragbares Anzeigergerät anzuschließen und das Videobild zu testen.	
<b>7</b> Anschlüsse für Alarm E/A	ARM-IN	Wird verwendet, um den Alarm-Eingang-Sensor oder den externen Tag-/Nachtsensor zu verbinden.
	ARM-OUT	Anschluss für Audioausgabe.
	GND	Dies sind gebräuchliche Ports um Alarmeingangs/-ausgangssignale zu verbinden.
<b>8</b> Mikrophonloch	Integriertes Mikrofon.	
<b>9</b> Stromanschluss	Port für die Netzklemmenleiste.	
<b>10</b> Micro SD-Speicherkartenfach	Fach für die Micro SD-Speicherkarte.	
<b>11</b> Netzwerkanschluss	Dient zum Anschluss des PoE oder Ethernet Kabels für die Netzwerkverbindung.	

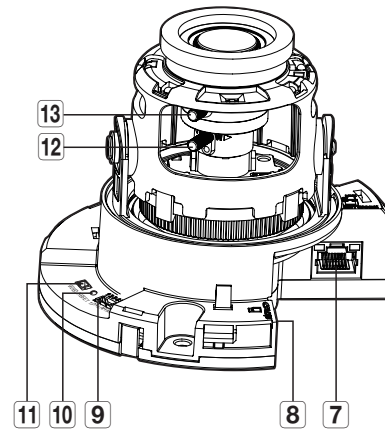
## AUF EINEN BLICK (QND-6072R/6082R)

## Komponenten

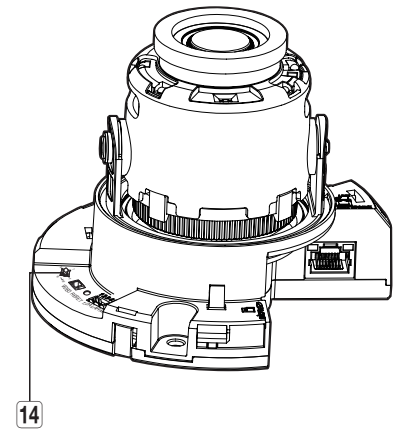
### Aufbau



Bezeichnung	Beschreibung
<b>1</b> Abdeckklappe	Gehäuseabdeckung zum Schutz des Objektivs und der Haupteinheit.
<b>2</b> Kamera-Gehäuse	Teil des Kameragehäuses.
<b>3</b> Mikrofonloch	Integriertes Mikrofon.



<QND-6072R>



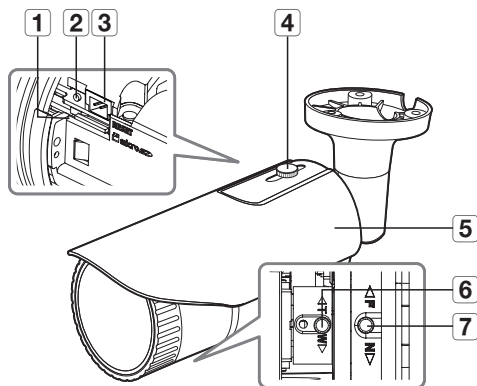
<QND-6082R>

Bezeichnung	Beschreibung	
<b>1</b> Innendeckel	Schutzabdeckung für das Gehäuse.	
<b>2</b> Beleuchtungssensor	Erkennt das einfallende Licht, und steuert die Infrarot-LED.	
<b>3</b> Objektiv	Kameraobjektiv.	
<b>4</b> IR LED	Diese infrarot LEDs werden über den Beleuchtungssensor gesteuert.	
<b>5</b> Stromanschluss	Port für die Netzklemmenleiste.	
<b>6</b> Mikrofonloch	Integriertes Mikrofon.	
<b>7</b> Netzwerkanschluss	Dient zum Anschluss des PoE oder Ethernet Kabels für die Netzwerkverbindung.	
<b>8</b> Micro SD-Speicherkartenfach	Fach für die Micro SD-Speicherkarte.	
<b>9</b> Anschlüsse für Alarm E/A	ARM-IN	Wird verwendet, um den Alarm-Eingang-Sensor oder den externen Tag-/Nachtsensor zu verbinden.
	ARM-OUT	Anschluss für Audioausgabe.
	GND	Dies sind gebräuchliche Ports um Alarmeingangs-/ausgangssignale zu verbinden.
<b>10</b> Reset-Taste	Diese Taste setzt alle Kameraeinstellungen auf die Werkseinstellungen zurück. Drücken und 5 Sekunden gedrückt halten, um das System neu zu starten. <b>I</b> Wenn Sie die Kamera zurücksetzen, werden die Netzwerkeinstellungen so eingestellt, dass DHCP aktiviert sein kann. Wenn im Netzwerk kein DHCP-Server vorhanden ist, muss das Programm Device Manager ausgeführt werden, um die grundlegenden Netzwerkeinstellungen, wie IP-Adresse, Subnetzmaske, Gateway, etc. zu ändern, bevor es möglich ist, sich mit dem Netzwerk zu verbinden.	
<b>11</b> Test Monitor Ausgang	Anschluss zum Testen der Videoausgabe. Verwenden Sie das Test Monitor Kabel, um ein tragbares Anzeigergerät anzuschließen und das Videobild zu testen.	

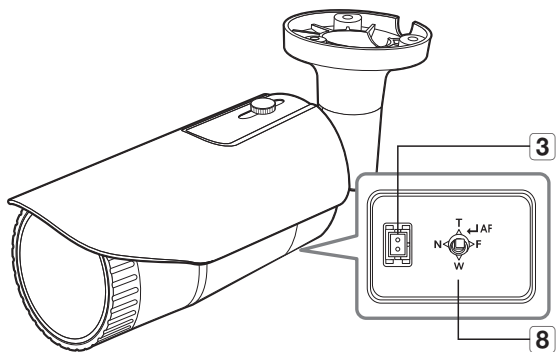
Bezeichnung	Beschreibung	
<b>12</b> Zoom-Schalthebel (QND-6072R)	T	Vergrößern (Tele)
	W	Verkleinern (breit)
Lösen Sie den Hebel und bewegen Sie ihn nach links oder rechts, um die Linse rein- oder rauszuzoomen. Drehen Sie den Hebel im Uhrzeigersinn, um die angepasste Position zu fixieren und eine Verschiebung zu verhindern.		
<b>13</b> Schalthebel für Bildscharfe (QND-6072R)	N	Scharfeinstellung eines nahen Objekts (nah)
	F	Scharfeinstellung eines entfernten Objekts (fern)
Lösen Sie den Hebel und bewegen Sie ihn nach links oder rechts, um den Linsenfokus anzupassen. Drehen Sie den Hebel im Uhrzeigersinn, um die angepasste Position zu fixieren und eine Verschiebung zu verhindern.		
<b>14</b> Zoom-/Fokusregler-Schaltfläche (QND-6082R)	T	Vergrößern (Tele)
	W	Verkleinern (breit)
	N	Scharfeinstellung eines nahen Objekts (nah)
	F	Scharfeinstellung eines entfernten Objekts (fern)
Fokusregler		Diese Schaltfläche für die automatische Fokusreglung drücken.

## AUF EINEN BLICK (QNO-6012R/6022R/6032R/6072R/6082R)

### Aufbau



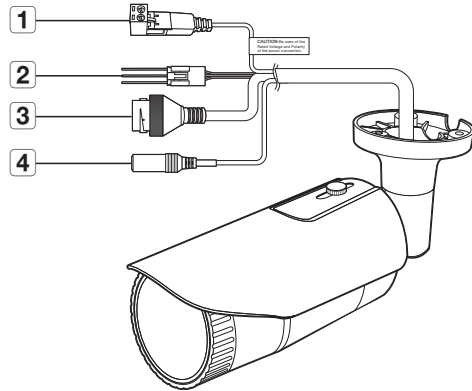
<QNO-6072R>



<QNO-6082R>

Bezeichnung	Beschreibung
<b>1</b> Micro-SD-Kartensteckplatz	(Innenraum des Produkts) In diesen Steckplatz lässt sich eine Micro-SD-Karte einlegen.
<b>2</b> Reset-Taste	Diese Taste setzt alle Kameraeinstellungen auf die Werkseinstellungen zurück. Drücken und 5 Sekunden gedrückt halten, um das System neu zu starten. <b>!</b> Wenn Sie die Kamera zurücksetzen, werden die Netzwerkeinstellungen so eingestellt, dass DHCP aktiviert sein kann. Wenn im Netzwerk kein DHCP-Server vorhanden ist, muss das Programm Device Manager ausgeführt werden, um die grundlegenden Netzwerkeinstellungen, wie IP-Adresse, Subnetzmaske, Gateway, etc. zu ändern, bevor es möglich ist, sich mit dem Netzwerk zu verbinden.
<b>3</b> Test Monitor Ausgang	Anschluss zum Testen der Videoausgabe. Verwenden Sie das Test Monitor Kabel, um ein tragbares Anzeigergerät anzuschließen und das Videobild zu testen.
<b>4</b> Sunshield Hold	It fixes the sunshield with the camera.
<b>5</b> Sunshield	It protects the camera from the direct sunlight.
<b>6</b> Zoom-Schalthebel (QNO-6072R)	T      Vergrößern (Tele)
	W      Verkleinern (breit)
Lösen Sie den Hebel und bewegen Sie ihn nach links oder rechts, um die Linse rein- oder rauszuzoomen. Drehen Sie den Hebel im Uhrzeigersinn, um die angepasste Position zu fixieren und eine Verschiebung zu verhindern.	
<b>7</b> Schalthebel für Bildscharfe (QNO-6072R)	N      Scharfeinstellung eines nahen Objekts (nah)
	F      Scharfeinstellung eines entfernten Objekts (fern)
Lösen Sie den Hebel und bewegen Sie ihn nach links oder rechts, um den Linsenfokus anzupassen. Drehen Sie den Hebel im Uhrzeigersinn, um die angepasste Position zu fixieren und eine Verschiebung zu verhindern.	
<b>8</b> Zoom-/Fokusregler-Schaltfläche (QNO-6082R)	T      Vergrößern (Tele)
	W      Verkleinern (breit)
	N      Scharfeinstellung eines nahen Objekts (nah)
	F      Scharfeinstellung eines entfernten Objekts (fern)
	Fokusregler      Diese Schaltfläche für die automatische Fokusreglung drücken.

## Komponenten

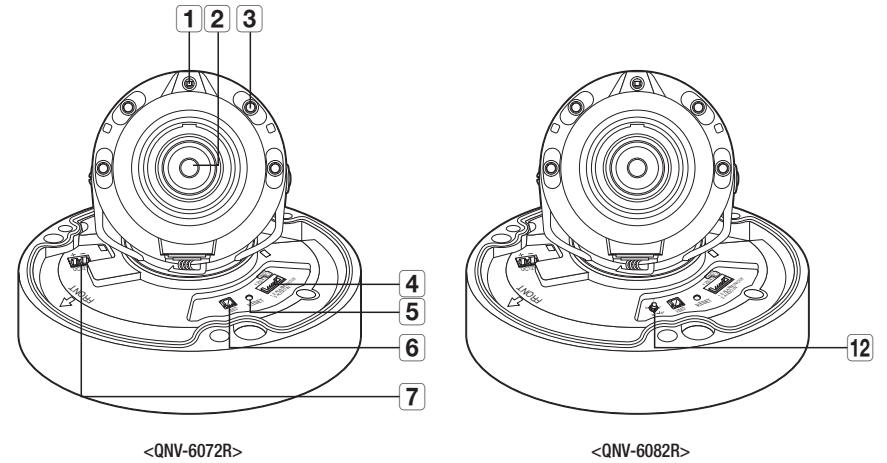
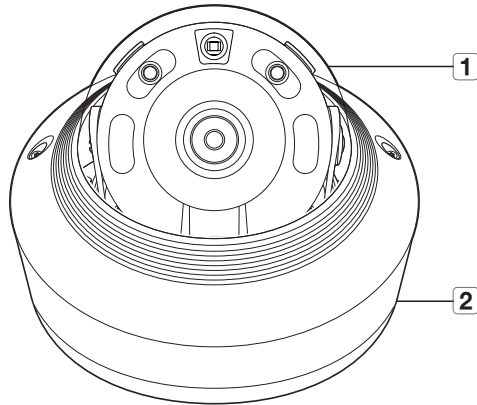


Bezeichnung	Beschreibung	
<b>1</b> Stromanschluss	Zum Anschluss des Stromkabels.	
<b>2</b> Anschlüsse für Alarm E/A	ARM-OUT	Anschluss für Audioausgabe.
	GND	Dies sind gebräuchliche Ports um Alarmeingangs-/ausgangssignale zu verbinden.
	ARM-IN	Wird verwendet, um den Alarm-Eingang-Sensor oder den externen Tag-/Nachtsensor zu verbinden.
<b>3</b> Netzwerkanschluss	Dient zum Anschluss des PoE oder Ethernet Kabels für die Netzwerkverbindung.	
<b>4</b> Audioeingang	Wird zum Anschließen eines Mikrofons verwendet.	

## AUF EINEN BLICK (QNV-6012R/6022R/6032R/6072R/6082R)

## Komponenten

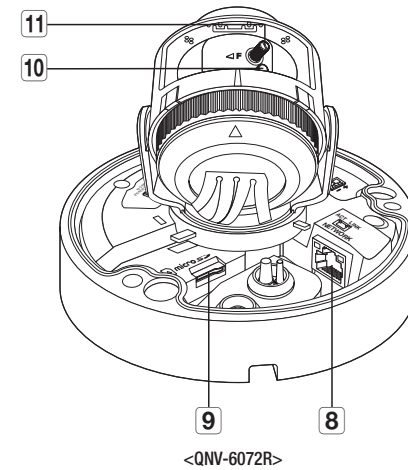
### Aufbau



<QNV-6072R>

<QNV-6082R>

Bezeichnung	Beschreibung
<b>1</b> Abdeckklappe	Gehäuseabdeckung zum Schutz des Objektivs und der Haupteinheit.
<b>2</b> Kamera-Gehäuse	Teil des Kameragehäuses.



<QNV-6072R>

Bezeichnung	Beschreibung	
<b>1</b> Beleuchtungssensor	Erkennt das einfallende Licht, und steuert die Infrarot-LED.	
<b>2</b> Objektiv	Kameraobjektiv.	
<b>3</b> IR LED	Diese infrarot LEDs werden über den Beleuchtungssensor gesteuert.	
<b>4</b> Audio- und Alarmkabelanschluss	ARM-IN	Wird verwendet, um den Alarm-Eingang-Sensor oder den externen Tag-/Nachtsensor zu verbinden.
	ARM-OUT	Anschluss für Audioausgabe.
	GND	Dies sind gebräuchliche Ports um Alarmeingangs/-ausgangssignale zu verbinden.
	AUDIO IN	Wird zum Anschließen eines Mikrofons verwendet.
<b>5</b> Reset-Taste	<p>Diese Taste setzt alle Kameraeinstellungen auf die Werkseinstellungen zurück. Drücken und 5 Sekunden gedrückt halten, um das System neu zu starten.</p> <p>■ Wenn Sie die Kamera zurücksetzen, werden die Netzwerkeinstellungen so eingestellt, dass DHCP aktiviert sein kann. Wenn im Netzwerk kein DHCP-Server vorhanden ist, muss das Programm Device Manager ausgeführt werden, um die grundlegenden Netzwerkeinstellungen, wie IP-Adresse, Subnetzmaske, Gateway, etc. zu ändern, bevor es möglich ist, sich mit dem Netzwerk zu verbinden.</p>	
<b>6</b> Test Monitor Ausgang	Anschluss zum Testen der Videoausgabe. Verwenden Sie das Test Monitor Kabel, um ein tragbares Anzeigegerät anzuschließen und das Videobild zu testen.	
<b>7</b> Stromanschluss	Port für die Netzklemmenleiste.	
<b>8</b> Netzwerkanschluss	Dient zum Anschluss des PoE oder Ethernet Kabels für die Netzwerkverbindung.	
<b>9</b> Micro SD-Speicherkartenfach	Fach für die Micro SD-Speicherkarte.	
<b>10</b> Zoom-Schalthebel (QNV-6072R)	T	Vergrößern (Tele)
	W	Verkleinern (breit)
	Lösen Sie den Hebel und bewegen Sie ihn nach links oder rechts, um die Linse rein- oder rauszuzoomen. Drehen Sie den Hebel im Uhrzeigersinn, um die angepasste Position zu fixieren und eine Verschiebung zu verhindern.	
<b>11</b> Schalthebel für Bildschärfe (QNV-6072R)	N	Scharfeinstellung eines nahen Objekts (nah)
	F	Scharfeinstellung eines entfernten Objekts (fern)
	Lösen Sie den Hebel und bewegen Sie ihn nach links oder rechts, um den Linsenfokus anzupassen. Drehen Sie den Hebel im Uhrzeigersinn, um die angepasste Position zu fixieren und eine Verschiebung zu verhindern.	

Bezeichnung	Beschreibung	
<b>12</b> Zoom-/Fokusregler-Schaltfläche (QNV-6082R)	T	Vergrößern (Tele)
	W	Verkleinern (breit)
	N	Scharfeinstellung eines nahen Objekts (nah)
	F	Scharfeinstellung eines entfernten Objekts (fern)
	Fokusregler	Diese Schaltfläche für die automatische Fokusreglung drücken.

## INSTALLATION (QND-6012R/6022R/6032R/6072R/6082R)

### Bevor Sie mit der Installation beginnen

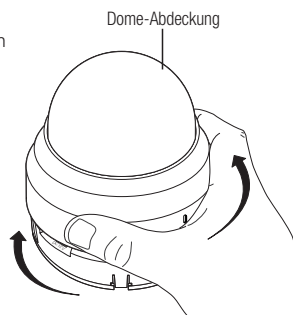
Bitte lesen Sie die folgenden Anweisungen, bevor Sie die Kamera installieren:

- Sie muss an einer Stelle (Decke oder Wand) installiert werden, die fünf (5) Mal das Gewicht der Kamera zusammen mit der Halterung tragen kann.
- Verklebte Kabel oder ein abgelöster Kabelschutz können zu Schäden an dem Produkt und Brandgefahr führen.
- Halten Sie aus Sicherheitsgründen andere Personen von dem Ort der Kamerainstallation fern. Achten Sie darauf, dass sich in der Nähe der Kamerainstallation keine Gegenstände des Personals befinden.

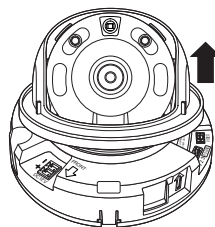
### Demontage

1. Um sie zu trennen den Kameraboden mit einer Hand halten und mit der anderen Hand den Kameradeckel gegen den Uhrzeigersinn drehen.

- ! ■ Berühren Sie nicht den durchsichtigen Teil der Kuppelabdeckung, sobald die Schutzfolie entfernt wurde.

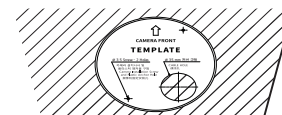


2. Den inneren Deckel heben, um sie zu trennen.

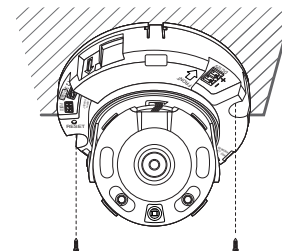


### Installation

1. Ziehen Sie die die zu überwachende Richtung in Erwägung, befestigen Sie die Schablone und bohren Sie Löcher, indem Sie nach der Schablone verfahren.

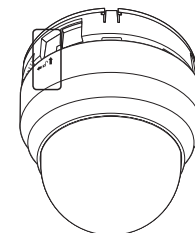


2. Bringen Sie die Kamera mithilfe von 2 Blechschrauben in den beiden Löchern, die mit einer Schablone gebohrt wurden, an.
  - Die <↑> Markierung, die auf der Kamera aufgedruckt ist, so festlegen, dass sie der Kamerarichtung zur Überwachung gegenüberliegt.
3. Das kamerainterne Terminal mit dem entsprechenden Kabel verbinden.
4. Stellen Sie das Objektiv in eine gewünschte Richtung ein, indem Sie den Abschnitt „Überwachungsrichtung der Kamera einstellen“ nachsehen. (Seite 23)

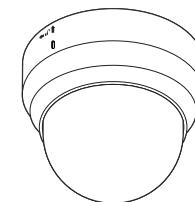


- ! ■ Wir empfehlen, die Kameralinse nicht zu berühren, da diese während der Herstellung korrekt fokussiert wurde. Falls Sie sie berühren, kann der Fokus der Linse verändert oder diese verunreinigt werden.

5. Bitte schließen Sie die innere Decke an den Hauptteil an.
6. Während Sie die Unterseite der Kamera mit der Hand greifen, bitte drücken Sie ihre Abdeckung mit der anderen Hand, so dass sie mit den zwei Pfeil-Symbolen ausgerichtet wird, wie es in der Abbildung angezeigt wird.



- ! ■ Um den Domdeckel zu montieren, stellen Sie die Pfeile aufeinander und drücken Sie die Abdeckung fest. Wenn das Kuppelgehäuse während des Zusammenbaus gedreht oder falsch zusammengebaut wird, kann es vorkommen, dass eine diffuse Reflexion auftritt oder die Linsensektion sich dreht, wodurch sich die Aufnahmereichweite ändern kann.
- Stellen Sie sicher, dass die Kuppelabdeckung korrekt mit dem unteren Teil verbunden ist, wie in der Abbildung angezeigt. Wenn der Schnapphaken nicht korrekt eingerastet ist, könnte die Kuppelabdeckung herunterfallen. Dies könnte zu einer Verletzung führen.





## INSTALLATION (QNO-6012R/6022R/6032R/6072R/6082R)

- ! Diese Kamera ist wasserdicht und entspricht den IP66-Spezifikationen, allerdings trifft das nicht auf die an das äußere Kabel angeschlossene Buchse zu. Es wird eine Produktinstallation unter der Traufenkante empfohlen, damit eine äußerliche Freilegung des Kabels unterbunden wird.

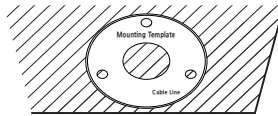
### Bevor Sie mit der Installation beginnen

Bitte lesen Sie die folgenden Anweisungen, bevor Sie die Kamera installieren:

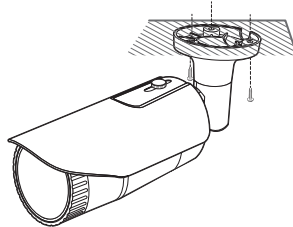
- Sie muss an einer Stelle (Decke oder Wand) installiert werden, die fünf (5) Mal das Gewicht der Kamera zusammen mit der Halterung tragen kann.
- Verklemmte Kabel oder ein abgelöster Kabelschutz können zu Schäden an dem Produkt und Brandgefahr führen.
- Halten Sie aus Sicherheitsgründen andere Personen von dem Ort der Kamerainstallation fern. Achten Sie darauf, dass sich in der Nähe der Kamerainstallation keine Gegenstände des Personals befinden.
- Sonnenschutzloch nicht für andere Zwecke als zum Anschließen der Sonnenblende verwenden.
- Für die manuelle, variable Fokus-Objektiv-Kamera müssen Funktionen, wie z.B. Fokus und Zoom, vor der Installation angepasst werden. Bei Anpassung dieser stellen Sie sicher, dass sich keine fremdartigen Materialien anhaften.

### Installation

1. Ziehen Sie die zu überwachende Richtung in Erwägung, befestigen Sie die Schablone und bohren Sie Löcher, indem Sie nach der Schablone verfahren.

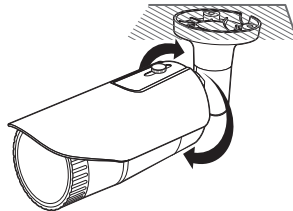


2. Setzen sie die 3 Blechschrauben in die 3 Löcher ein und ziehen sie sie fest, um die Kamera zu sichern.
3. Die entsprechenden Kabel mit den Kameraanschlüssen verbinden.



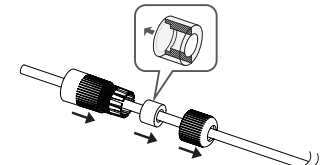
4. Die Kamerarichtung mit dem gelieferten L-Schraubenschlüssel einstellen.

- ! Wird die Kameraposition mit einem Halter eingestellt, bitte die Schraube vom Halter lockern, die Kamera einstellen und Schraube wieder anziehen. Sollten Sie versuchen, während die Schraube fest angezogen ist, die Einstellung mittels Kraftaufwand vorzunehmen, kann es Kratzer oder andere Probleme geben.

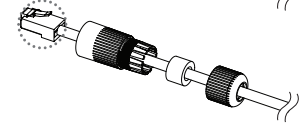


### So verbinden Sie das wasserdichte RJ45-Kabel mit einem LAN-Kabel

1. Schieben Sie es in Pfeilrichtung durch.

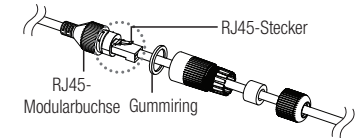


2. Verbinden Sie den LAN-Stecker mit dem Kabel.

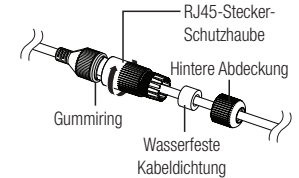


3. Verbinden Sie die RJ45-Modularbuchse mit dem RJ45-Stecker.

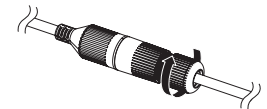
- ! Halten Sie bitte jeden Teil getrennt von einander.



4. Montieren durch Drehen der RJ45-Modularbuchse und der Schutzklappe im Uhrzeigersinn (dem Pfeil folgen).



5. Montieren durch Drehen der RJ45-Schutzhaube und der hinteren Abdeckung im Uhrzeigersinn (dem Pfeil folgen). Die hintere Abdeckung montiert, wird die wasserfeste Dichtung des Kabels fest an dem Kabel angebracht, damit das Kabel wasserdicht ist.

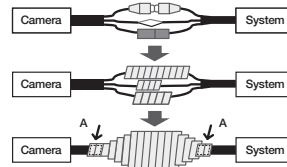


- ! Sie müssen es vollständig montieren, um die hintere Abdeckung bis zum Ende des Gewindes des RJ45-Steckers zu drehen.

## Einbau im Außenbereich

Wird die Installation außerhalb des Gebäudes vorgenommen, ist sie mit einem Butylisolerband (im Handel erhältlich) wasserundurchlässig zu machen, damit das Wasser nicht vom an die Außenseite angeschlossenen Kabelspalt auslaufen kann.

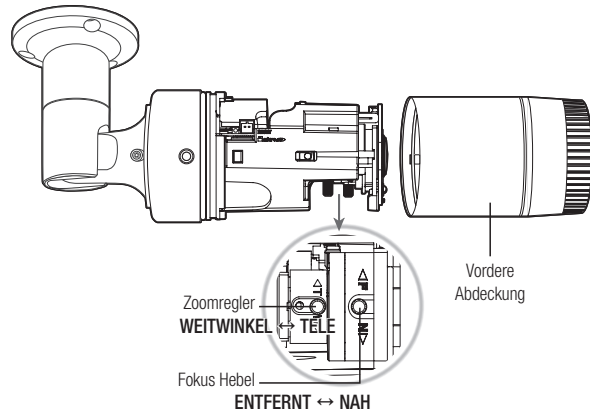
1. Stromversorgung, E/A, AUDIO, und LAN-Kabel anschließen.
2. Die schwarze Kabelummantelung (Bereich A) und den Kabelanschlussbereich mit dem wasserundurchlässigen (Butylisoler-) Band so umwickeln, dass mehr als die Hälfte des Butylisolerbandes überlappt wird.



- ! Sollte die Kabelummantelung nicht richtig wasserundurchlässig sein, kann das zu einer unmittelbaren Undichtigkeit führen. Stellen Sie sicher, dass das Kabel dicht mit einem Klebeband geschützt ist.
- Das wasserdichte Butylklebeband besteht aus Butylkautschuk und kann auf das Doppelte seiner normalen Länge ausgedehnt werden.

## Für die einstellung des zoomfaktors oder der bildschärfe (QNO-6072R)

1. Die vordere Abdeckung wie dargestellt abnehmen.
2. Den Zoom/Fokus Hebel vorsichtig lösen.
3. Den Zoom/Fokus Hebel auf WEITWINKEL (NAH) oder entsprechend TELE (ENTFERNT) einstellen.
4. Anschließend den Zoom/Fokus Hebel festziehen, um die eingestellte Position fest einzustellen.
5. Durch Drehen die vordere Abdeckung befestigen.



- ! Um die Wasserdichtigkeit zu gewährleisten, die vordere Abdeckung bis zum Anschlag drehen. Wenn die Frontklappe zusammengefügt wird, bitte den Hauptkörper und die Frontklappe zusammensetzen, damit der Sperrindikator verriegelt ist.
- Mit Hilfe des Hebels den Zoomfaktor oder die Bildschärfe einstellen und den Hebel im Uhrzeigersinn drehen, um ihn zu fixieren.
- Bevor der Zoomfaktor oder die Bildschärfe des Objektivs eingestellt werden kann, die vordere Abdeckung lösen und entfernen.

## INSTALLATION (QNV-6012R/6022R/6032R)

- ! Diese Kamera ist wasserdicht und entspricht den IP66-Spezifikationen, allerdings trifft das nicht auf die an das äußere Kabel angeschlossene Buchse zu. Es wird eine Produktinstallation unter der Traufenkante empfohlen, damit eine äußerliche Freilegung des Kabels unterbunden wird.

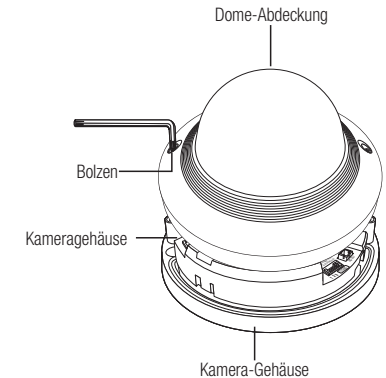
### Bevor Sie mit der Installation beginnen

Bitte lesen Sie die folgenden Anweisungen, bevor Sie die Kamera installieren:

- Sie muss an einer Stelle (Decke oder Wand) installiert werden, die fünf (5) Mal das Gewicht der Kamera zusammen mit der Halterung tragen kann.
- Verklemmte Kabel oder ein abgelöster Kabelschutz können zu Schäden an dem Produkt und Brandgefahr führen.
- Halten Sie aus Sicherheitsgründen andere Personen von dem Ort der Kamerainstallation fern. Achten Sie darauf, dass sich in der Nähe der Kamerainstallation keine Gegenstände des Personals befinden.

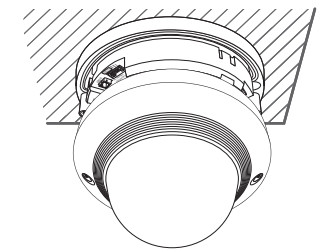
### Demontage

1. Drehen Sie die 2 Befestigungsschrauben der Kuppelabdeckung mithilfe des mitgelieferten Inbusschlüssels gegen den Uhrzeigersinn, um die Abdeckung zu entfernen.



### Installation

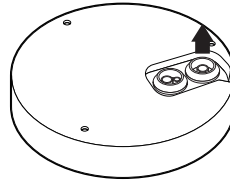
1. Unter Verwendung der als Zubehör mitgelieferten Vorlage, Bohren des Installationslochs für die Schraube (Durchmesser 6 mm, mindestens 55 mm tief) und den ebenfalls mitgelieferten Plastikdübel fest bis zum Anschlag in das Loch einführen.
2. Passen Sie den Loch zum Anker-Loch und ziehen Sie und befestigen Sie die Selbstdrehende Schraube (M4.5xL50).
3. Verbinden Sie und ordnen Sie die benötigten Kabel sorgfältig, andernfalls werden sie während der Installation beschädigt oder verdreht.
4. Stellen Sie das Objektiv in eine gewünschte Richtung ein, indem Sie den Abschnitt „Überwachungsrichtung der Kamera einstellen“ nachsehen. (Seite 23)
5. Die Dome-Abdeckung schließen.
  - Befestigen Sie die Befestigungsschrauben sicher mithilfe des Inbusschlüssels, damit kein Wasser eindringen kann.



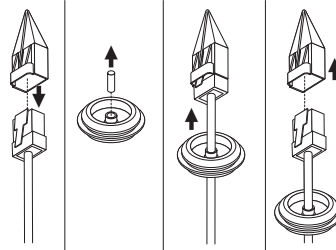
## Anschließen des LAN-Kabels

1. Die Dome-Abdeckung und den Behälter entfernen.
2. Ziehen Sie die Kabeleinführung an der Unterseite, wie abgebildet, heraus.

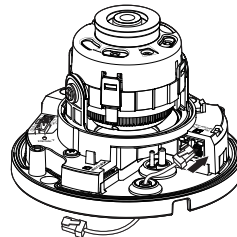
- ! ■ Eine geeignete Kabeltülle zum Verbinden des LAN-Kabels verwenden.  
 - Basiskamera : Das Kabel mit dem Durchmesser 5-6,5 verwenden



3. Ziehen Sie das Spritzteil der mitgelieferten einfachen Einführung ab.
4. Verwenden Sie den Kappen-Installierer, um das LAN-Kabel durch die Kabeleinführung zu führen.

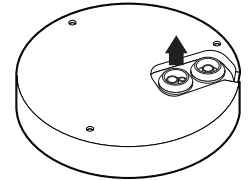


5. Führen Sie das LAN-Kabel durch die Öffnung, die nach Abzug der Kabeleinführung in Schritt 2 entstanden ist. Verbinden Sie es anschließend mit dem Ethernet-Anschluss.
6. Führen Sie die Einführung des LAN-Kabels in die Öffnung ein.

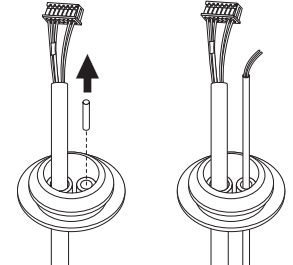


## Anschließen des Audio-/Alarmkabels und Stromkabels

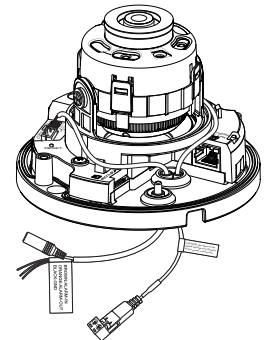
1. Die Dome-Abdeckung und den Behälter entfernen.
2. Ziehen Sie die Kabeleinführung an der Unterseite, wie abgebildet, heraus.



3. Ziehen Sie den kleinen Spritzteil der Einführung des Alarm-/ Audiokabels und führen Sie das Stromversorgungskabel durch die Einführung.



4. Führen Sie das Alarm-/Audiokabel durch die Öffnung, die nach Abzug der Kabeleinführung in Schritt 2 entstanden ist. Schließen Sie jedes Kabel am Alarm-/Audioanschluss respektive am Stromklemmenblock der Leiterplatte an.
5. Hängen Sie die Kabel bei der Anbringung der Kamera an den festen Haken, um zu verhindern, dass die Kabel beschädigt oder gequetscht werden.
6. Führen Sie die Einführung der Alarm-/Audiokabel in die Öffnung ein.
7. Stellen Sie das Objektiv in eine gewünschte Richtung ein, indem Sie den Abschnitt „Überwachungsrichtung der Kamera einstellen“ nachsehen. (Seite 23)
8. Befestigen Sie die Dome-Abdeckung.



## INSTALLATION (QNV-6072R/6082R)

- ! Diese Kamera ist wasserdicht und entspricht den IP66-Spezifikationen, allerdings trifft das nicht auf die an das äußere Kabel angeschlossene Buchse zu. Es wird eine Produktinstallation unter der Traufenkante empfohlen, damit eine äußerliche Freilegung des Kabels unterbunden wird.

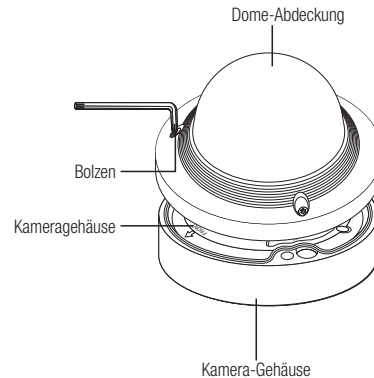
### Bevor Sie mit der Installation beginnen

Bitte lesen Sie die folgenden Anweisungen, bevor Sie die Kamera installieren:

- Sie muss an einer Stelle (Decke oder Wand) installiert werden, die fünf (5) Mal das Gewicht der Kamera zusammen mit der Halterung tragen kann.
- Verklemmte Kabel oder ein abgelöster Kabelschutz können zu Schäden an dem Produkt und Brandgefahr führen.
- Halten Sie aus Sicherheitsgründen andere Personen von dem Ort der Kamerainstallation fern. Achten Sie darauf, dass sich in der Nähe der Kamerainstallation keine Gegenstände des Personals befinden.
- Für die manuelle, variable Fokus-Objektiv-Kamera müssen Funktionen, wie z.B. Fokus und Zoom, vor der Installation angepasst werden. Bei Anpassung dieser stellen Sie sicher, dass sich keine fremdartigen Materialien anhaften.

### Demontage

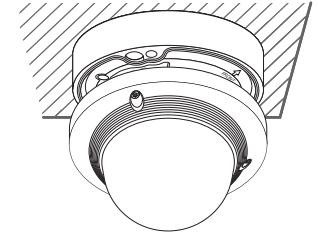
1. Drehen Sie die 3 Befestigungsschrauben der Kuppelabdeckung mithilfe des mitgelieferten Inbusschlüssels gegen den Uhrzeigersinn, um die Abdeckung zu entfernen.



### Installation

1. Unter Verwendung der als Zubehör mitgelieferten Vorlage, Bohren des Installationslochs für die Schraube (Durchmesser 6 mm, mindestens 55 mm tief) und den ebenfalls mitgelieferten Plastikübel fest bis zum Anschlag in das Loch einführen.
2. Passen Sie den Loch zum Anker-Loch und ziehen Sie und befestigen Sie die Selbstdrehende Schraube (M4.5xL50).
3. Verbinden Sie und ordnen Sie die benötigten Kabel sorgfältig, andernfalls werden sie während der Installation beschädigt oder verdreht.
4. Stellen Sie das Objektiv in eine gewünschte Richtung ein, indem Sie den Abschnitt „Überwachungsrichtung der Kamera einstellen“ nachsehen. (Seite 23)

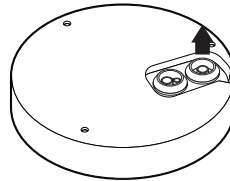
- ! Für die manuelle, variable Fokus-Objektiv-Kamera müssen Funktionen, wie z.B. Fokus und Zoom, vor der Installation angepasst werden. Bei Anpassung dieser stellen Sie sicher, dass sich keine fremdartigen Materialien anhaften.
5. Die Dome-Abdeckung schließen.
    - Befestigen Sie die Bestigungsschrauben sicher mithilfe des Inbusschlüssels, damit kein Wasser eindringen kann.



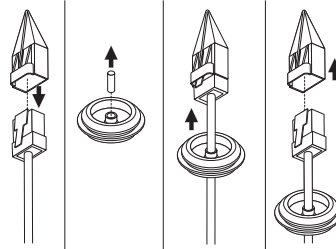
## Anschließen des LAN-Kabels

1. Die Dome-Abdeckung und den Behälter entfernen.
2. Ziehen Sie die Kabeleinführung an der Unterseite, wie abgebildet, heraus.

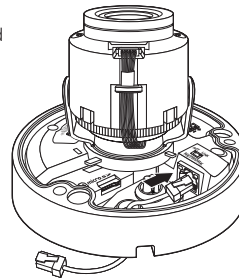
- ! ■ Eine geeignete Kabeltülle zum Verbinden des LAN-Kabels verwenden.  
- Basiskamera : Das Kabel mit dem Durchmesser 5-6,5 verwenden.



3. Ziehen Sie das Spritzteil der mitgelieferten einfachen Einführung ab.
4. Verwenden Sie den Kappen-Installierer, um das LAN-Kabel durch die Kabeleinführung zu führen.

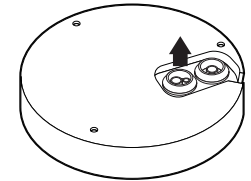


5. Führen Sie das LAN-Kabel durch die Öffnung, die nach Abzug der Kabeleinführung in Schritt 2 entstanden ist. Verbinden Sie es anschließend mit dem Ethernet-Anschluss.
6. Führen Sie die Einführung des LAN-Kabels in die Öffnung ein.

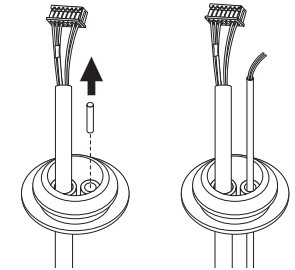


## Anschließen des Audio-/Alarmkabels und Stromkabels

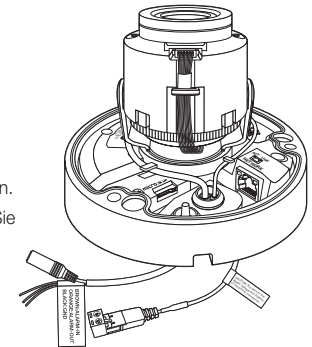
1. Die Dome-Abdeckung und den Behälter entfernen.
2. Ziehen Sie die Kabeleinführung an der Unterseite, wie abgebildet, heraus.



3. Ziehen Sie den kleinen Spritzteil der Einführung des Alarm-/Audiokabels und führen Sie das Stromversorgungskabel durch die Einführung.



4. Führen Sie das Alarm-/Audiokabel durch die Öffnung, die nach Abzug der Kabeleinführung in Schritt 2 entstanden ist. Schließen Sie jedes Kabel am Alarm-/Audioanschluss respektive am Stromklemmenblock der Leiterplatte an.
5. Hängen Sie die Kabel bei der Anbringung der Kamera an den festen Haken, um zu verhindern, dass die Kabel beschädigt oder gequetscht werden.
6. Führen Sie die Einführung der Alarm-/Audiokabel in die Öffnung ein.
7. Stellen Sie das Objektiv in eine gewünschte Richtung ein, indem Sie den Abschnitt „Überwachungsrichtung der Kamera einstellen“ nachsehen. (Seite 23)
8. Befestigen Sie die Dome-Abdeckung.



## Anbindung an den entbündelten Anschluss

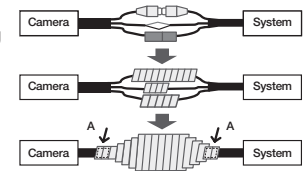
Wählen Sie eine der Optionen (entbündelt) aus und kaufen Sie was für den Ort der Installation oder Ihr Komfort notwendig ist.

1. Die Dome-Abdeckung vom Behälter entfernen, wir verweisen diesbezüglich auf den Abschnitt **„Demontage“**. (Seite 20)
2. Verwenden Sie die Maschinenschraube, um das Kameragehäuse am ungebündelten Adapter zu befestigen.
3. Verbinden Sie und ordnen Sie die benötigten Kabel sorgfältig, andernfalls werden sie während der Installation beschädigt oder verdreht.
4. Installieren Sie das Kameragehäuse in umgekehrter Reihenfolge der **„Demontage“**.
5. Stellen Sie das Objektiv in eine gewünschte Richtung ein, indem Sie den Abschnitt **„Überwachungsrichtung der Kamera einstellen“** nachsehen. (Seite 23)
6. Die Dome-Abdeckung schließen.
  - Befestigen Sie die Bestätigungsschrauben sicher mithilfe des Inbusschlüssels, damit kein Wasser eindringen kann.

## Einbau im Außenbereich

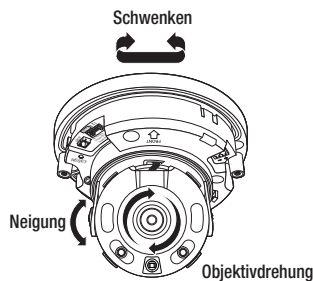
Wird die Installation außerhalb des Gebäudes vorgenommen, ist sie mit einem Butylisierband (im Handel erhältlich) wasserundurchlässig zu machen, damit das Wasser nicht vom an die Außenseite angeschlossenen Kabelspalt auslaufen kann.

1. Stromversorgung, E/A, AUDIO, und LAN-Kabel anschließen.
2. Die schwarze Kabelummantelung (Bereich A) und den Kabelanschlussbereich mit dem wasserundurchlässigen (Butylisier-) Band so umwickeln, dass mehr als die Hälfte des Butylisierbandes überlappt wird.



- ! ▪ Sollte die Kabelummantelung nicht richtig wasserundurchlässig sein, kann das zu einer unmittelbaren Undichtigkeit führen. Stellen Sie sicher, dass das Kabel dicht mit einem Klebeband geschützt ist.
- Das wasserdichte Butylklebeband besteht aus Butylkautschuk und kann auf das Doppelte seiner normalen Länge ausgedehnt werden.

## Überwachungsrichtung der Kamera einstellen (QND-6012R/6022R/6032R/6072R/6082R, QNV-6012R/6022R/6032R/6072R/6082R)



### ▪ Anpassen der Überwachungsrichtung

Sie können die Richtung der Kamera nur einstellen, wenn die Kamera an der Decke befestigt ist. Wobei das Drehen der Kamera nach links oder rechts Schwenken, die Einstellung der Neigung Neigen und das Drehen des Objektivs um seine Achse Drehen genannt wird.

- Der effektive Pan-Bereich ist insgesamt 350° Grad.
- Der effektive Rotationsbereich ist insgesamt 355° Grad.
- Der effektive Neigebereich ist insgesamt 67° Grad.

- !**
- Das Bild kann, je nach Winkel, von der Kameratasche abgedeckt werden.
  - Das Fokus-/Zoom-Objektiv nicht gewaltsam drehen, nachdem das Objektivgehäuse auseinandermontiert wurde. Ansonsten kann es aufgrund eines Motorfehlers zu einer unkorrekten Bildscharfeinstellung kommen.

### ▪ Anpassungsmethode

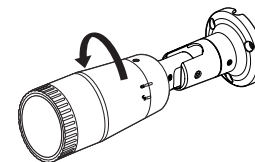
1. Nach der Installation der Kamera stellen Sie den Schwenkwinkel so ein, dass die Überwachungsrichtung berücksichtigt wird.
2. Den horizontalen Winkel so festlegen, dass das Bild nicht umgedreht ist.
3. Stellen Sie danach den Neigungswinkel so ein, dass die Kamera die Überwachungsrichtung blickt.

## EINLEGEN/HERAUSNEHMEN EINER MICRO SD-SPEICHERKARTE

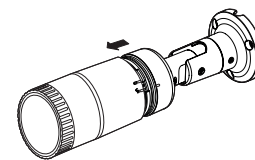
- !**
- Das Netzkabel von der Kamera abtrennen, bevor die Micro SD-Speicherkarte eingelegt wird.
  - Die Micro SD-Speicherkarte nicht mit Gewalt einlegen. Prüfen, ob die Karte richtig herum eingelegt wird. Ansonsten kann die Micro SD-Speicherkarte beschädigt werden.
  - Bei Regen oder hoher Luftfeuchtigkeit empfiehlt es sich nicht, die Micro-SD-Karte einzulegen oder zu entfernen.
  - Der Ausbau des Produktdeckels sollte innerhalb von 5 Minuten abgeschlossen sein, sonst besteht die Gefahr der Innenkondensation von Tau.

### Einlegen einer Micro SD-Speicherkarte (QNO-6012R/6022R/6032R/6072R/6082R)

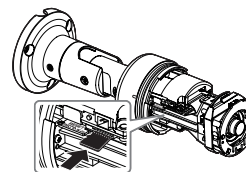
1. Drehen Sie das vordere Gehäuse in die Richtung LÖSEN [↺].



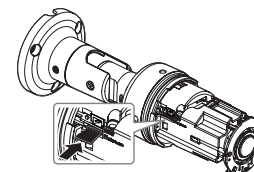
2. Vordere Abdeckung ziehen und abnehmen.



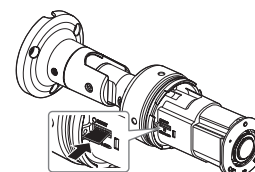
3. Eine Micro-SD-Karte in Pfeilrichtung einlegen, siehe Abbildung.



<QNO-6012R/6022R/6032R>



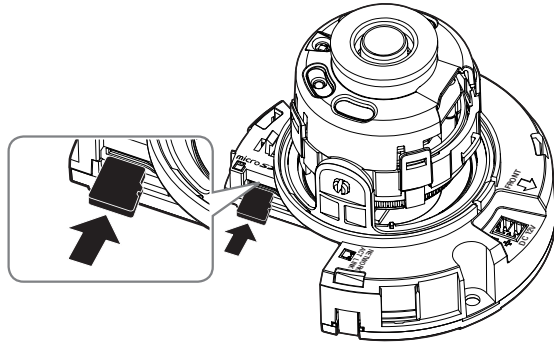
<QNO-6072R>



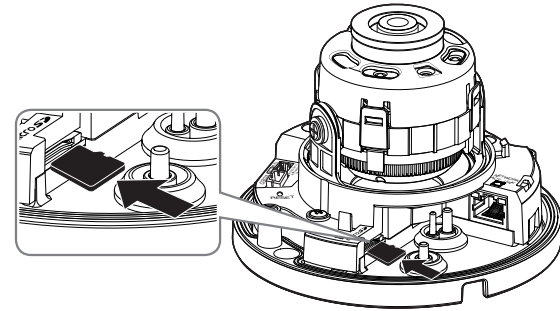
<QNO-6082R>

## Einlegen einer Micro SD-Speicherkarte (QND-6012R/6022R/6032R/6072R/6082R, QNV-6012R/6022R/6032R/6072R/6082R)

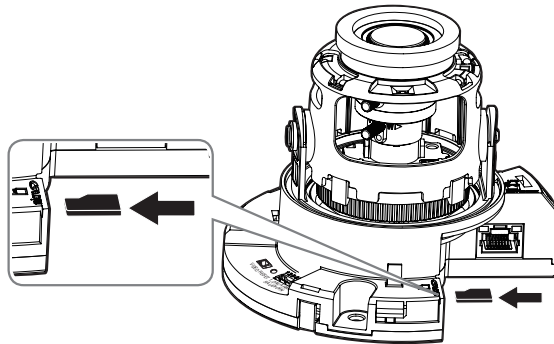
1. Den Domedeckel von der Kamera entfernen.
2. Eine Micro-SD-Karte in Pfeilrichtung einlegen, siehe Abbildung.



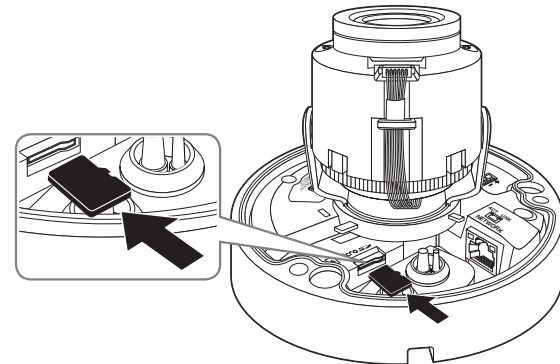
<QND-6012R/6022R/6032R>



<QNV-6012R/6022R/6032R>



<QND-6072R/6082R>

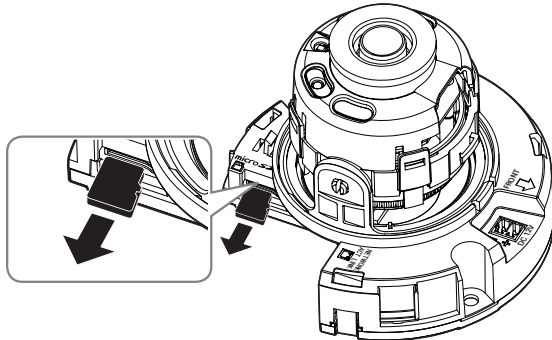


<QNV-6072R/6082R>

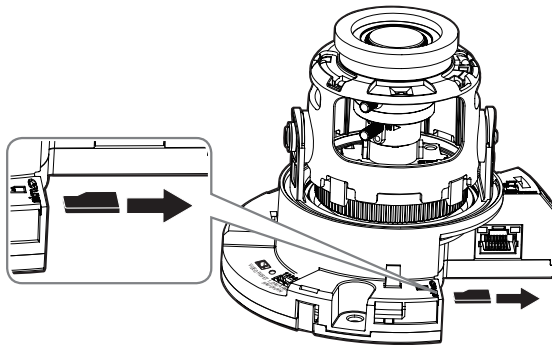


## Herausnehmen einer Micro SD-Speicherkarte

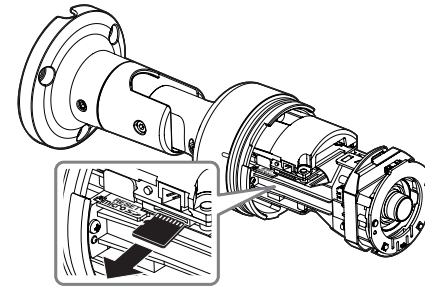
Drücken Sie leicht am ungeschützten Ende der Speicherkarte, wie im Schaubild zu sehen, um die Speicherkarte aus dem Steckplatz auszuwerfen.



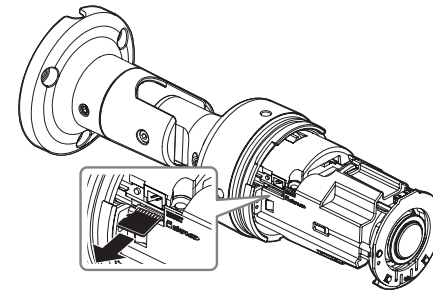
<QND-6012R/6022R/6032R>



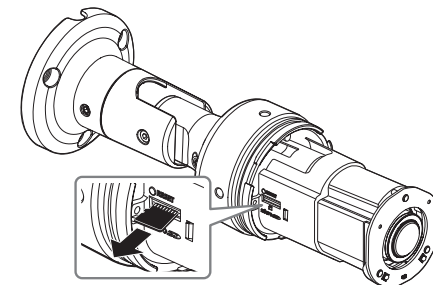
<QND-6072R/6082R>



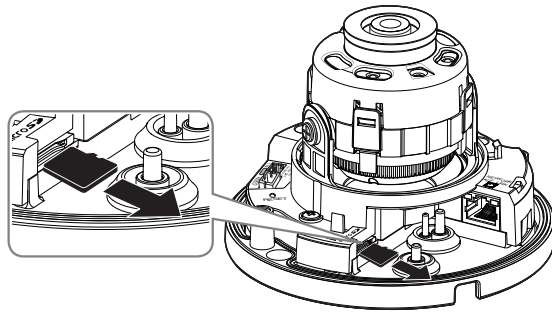
<QNO-6012R/6022R/6032R>



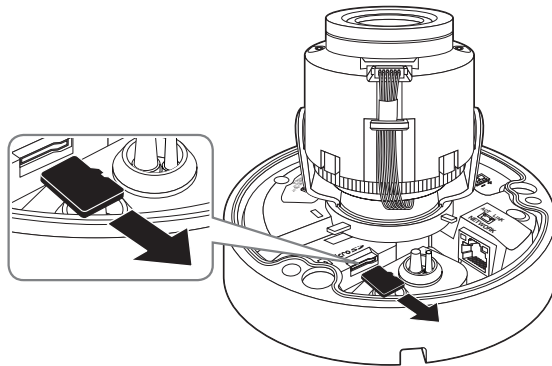
<QNO-6072R>



<QNO-6082R>



<QNV-6012R/6022R/6032R>



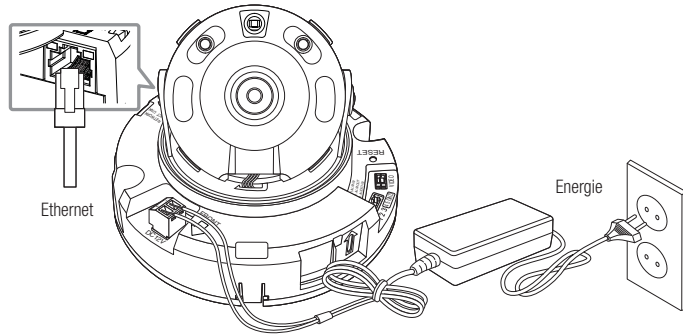
<QNV-6072R/6082R>



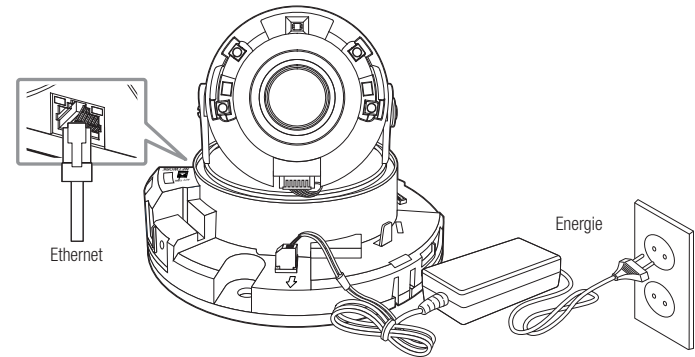
- Wenn die Micro SD-Speicherkarte zu stark hineingedrückt wird, kann die Karte beim Loslassen unkontrolliert aus dem Steckplatz herausschießen.
- Bevor Sie die Micro SD-Speicherkarte im <Speicherkapazität> entfernen, müssen Sie das Gerät auf <Aus> stellen und die [Anwenden]-Taste drücken und die Kamera deaktivieren.
- Wenn Sie die Kamera ausschalten oder die Micro SD-Speicherkarte mit Produktdaten entfernen, gehen Daten möglicherweise verloren oder werden beschädigt.

## STROMVERSORGUNG UND VERNETZUNG

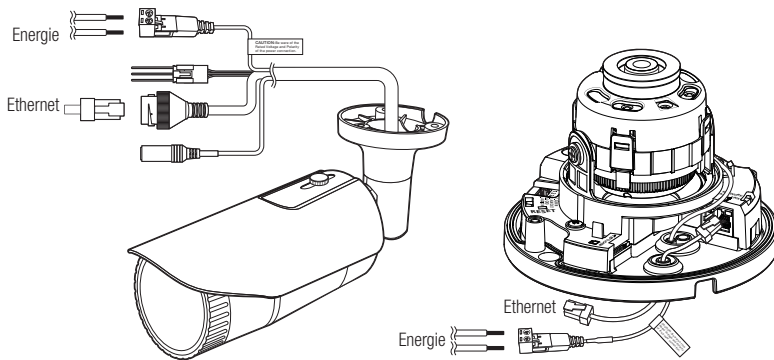
- ! ■ Bevor Sie den 12V-Netzstecker in die Steckdose stecken, montieren Sie zuerst den Klemmenblock.



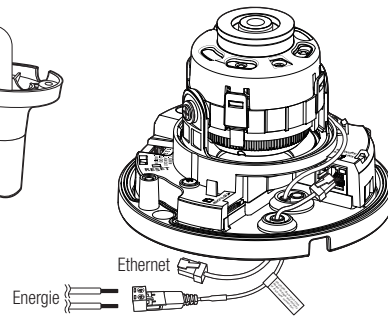
<QND-6012R/6022R/6032R>



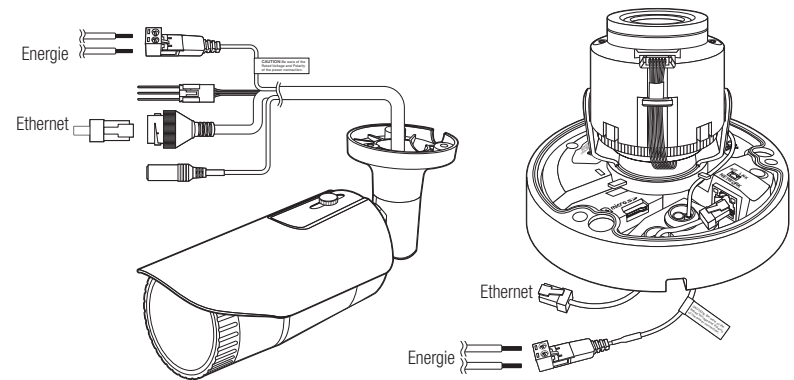
<QND-6072R/6082R>



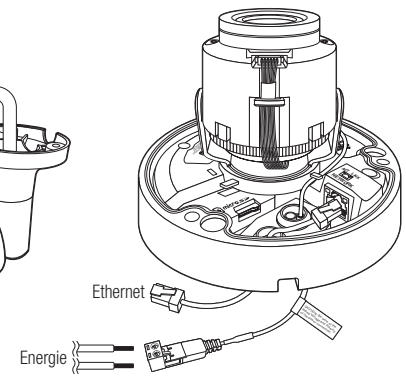
<QNO-6012R/6022R/6032R>



<QNV-6012R/6022R/6032R>



<QNO-6072R/6082R>



<QNV-6072R/6082R>

## Ethernet-Verbindung

Verbinden Sie das Ethernetkabel mit dem lokalen Netzwerk oder dem Internet.

## Stromversorgung.

Verwenden Sie einen Schraubenzieher, um die verschiedenen Leitungen (+, -) des Stromkabels an die entsprechenden Stromanschlüsse der Kamera anzuschließen.

- ! ■ Wenn sowohl PoE als auch 12 V DC gleichzeitig genutzt werden, wird das Produkt mit 12 V DC versorgt.
  - Es kann ebenfalls ein Router mit PoE Funktion für die Stromversorgung der Kamera verwendet werden.
  - Verwenden Sie PoE, das mit den IEEE 802.3af Protokollen kompatibel ist.
  - Es wird empfohlen, nur entweder die PoE oder 12 V Gleichstrom Stromversorgung zu verwenden.
- Achten Sie beim Anschluss des Stromkabels darauf, Plus- und Minuspol nicht zu vertauschen.
- Wenn ein externes Gerät angeschlossen werden soll, muss das Gerät vor dem Anschließen abgeschaltet werden.

## Netzwerkabel-Spezifikation für jedes Modell

Bei DC 12V Eingabe:

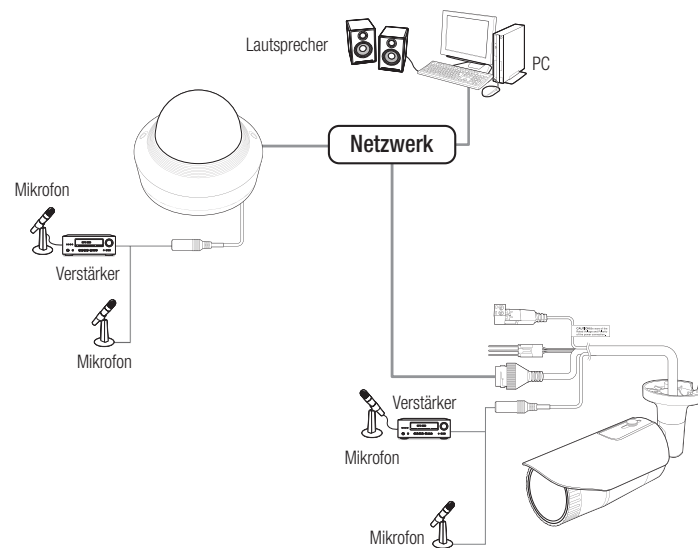
Kabeltyp (AWG)	#18	#20	#22
Modellname	Kabellänge (max.)		
QND-6072R/6082R, QNV-6072R/6082R	30m	26m	16m
QNO-6072R/6082R	30m	26m	16m
QND-6012R/6022R/6032R, QNV-6012R/6022R/6032R	30m	26m	16m
QNO-6012R/6022R/6032R	30m	26m	16m

## Netzwerkabel-Spezifikation

Artikel	Inhalte	Anmerkung
Stecker	RJ45	
Ethernet	10/100BASE-T	10/100 Mbps
Kabel	Kategorie 5e	
Max. Entfernung	100M	Gleichstromwiderstand ≤ 0,125 Ω/m
PoE Support	IEEE 802.3af	

- ! ■ Wenn Sie kein Kabel der 5e-Kategorie verwenden, ist eine Übertragungsdistanz von 100 m nicht garantiert.

## Audio E Blockdiagramm



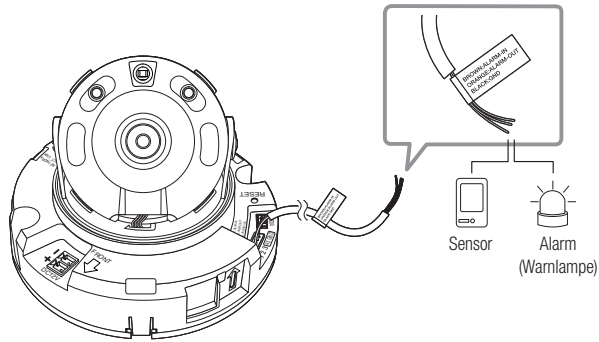
1. Verbinden Sie den AUDIO IN-Anschluss der Kamera mit dem Mikrofon- oder dem LINE OUT-Anschluss.

- ! ■ Lediglich das QND-Modell unterstützt das integrierte Mikrofon.
2. Überprüfen Sie die Spezifikationen für den Audioeingang.

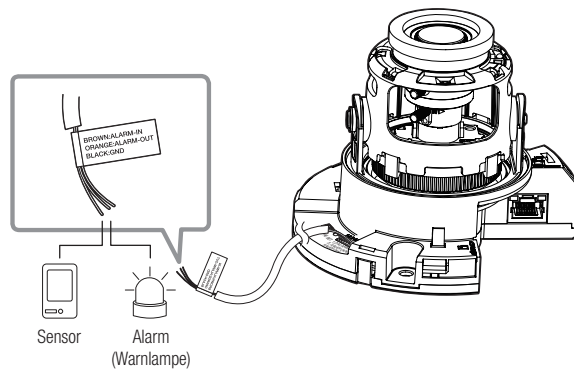
- **Audio Codec**
  - Audioeingang : G.711 PCM (Bitrate: 64 Kbps/Sampling-Frequenz: 8 kHz), G.726 ADPCM (Bitrate: 16 Kbps, 24 Kbps, 32 Kbps, 40 Kbps/Sampling-Frequenz: 8 kHz)
- **Vollduplex Audio**
- **Audio Ein (QND-6012R/6022R/6032R/6072R/6082R)** : Integriertes Mikrofon
- **Audio Ein (QNO-6012R/6022R/6032R/6072R/6082R, QNV-6012R/6022R/6032R/6072R/6082R)** : Wahlweise (Mikrofon/Line-in), unterstützte Spannung: 2,5 VDC (4 mA), Eingangsimpedanz: 2 K Ohm

## I/O-Anschlüsse

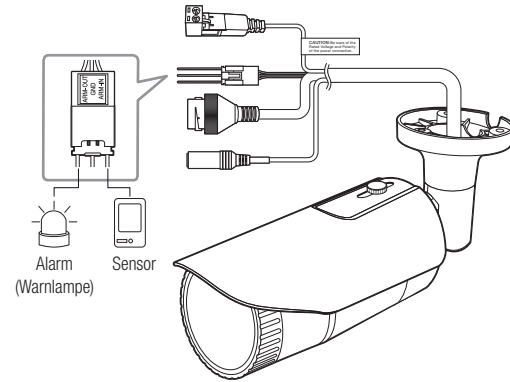
Verbinden Sie das Alarm-E/A-Kabel mit dem entsprechenden Port der Portbox.



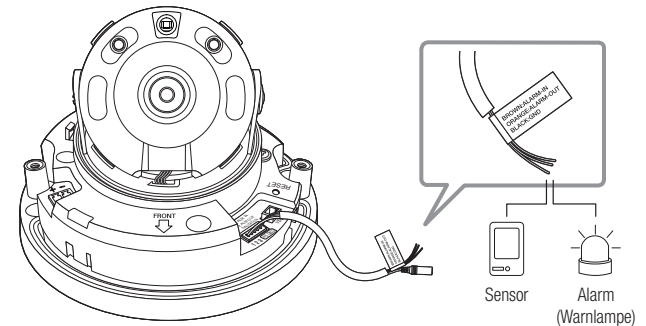
<QND-6012R/6022R/6032R>



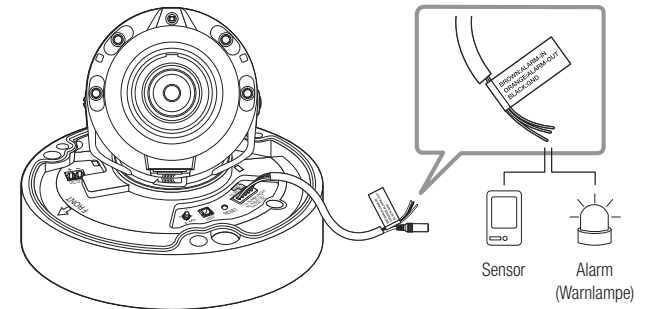
<QND-6072R/6082R>



<QNO-6012R/6022R/6032R/6072R/6082R>



<QNV-6012R/6022R/6032R>



<QNV-6072R>

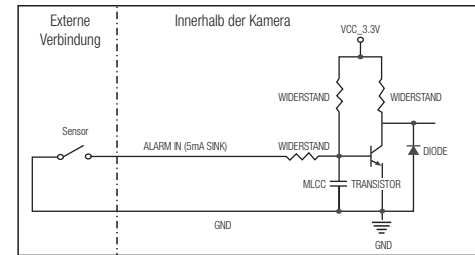
- ALARM-IN : Wird verwendet, um den Alarm-Eingang-Sensor oder den externen Tag-/Nachtsensor zu verbinden.
- ALARM-OUT : Anschluss für Audioeingang.
- GND : Gemeinsamer Port für Alarmeingang-/Alarmausgang-Signal.

- ! ■ Wenn Geräte (z.b. Blinklichter und Sirene), die die Spannungs- und Stromspezifikation überschreiten, mithilfe eines Open-Kollektors angeschlossen werden, kann es zu Funktionsstörungen kommen. Wenn Sie Geräte anschließen, die die Spezifikationen zu Netzspannung und Stromstärke überschreiten, ziehen Sie den "Schaltplan Alarmausgabe", zurate.

## Anschließen des externen Sensors

Eine Ader jedes Signalkabels (2-adrig) des Sensors an den [ALARM IN] Anschluss und die zweite Ader an den [GND] Anschluss anschließen.

## Alarm im Schaltplan

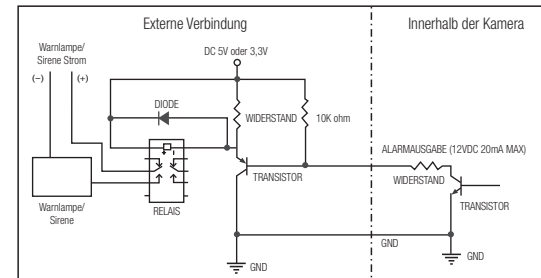


## Zum Verbinden der Alarmausgabe

Wenn Geräte (z.b. Blinklichter und Sirene), die die Spannungs- und Stromspezifikation überschreiten, mithilfe eines Open-Kollektors angeschlossen werden, kann es zu Funktionsstörungen kommen.

Sehen Sie sich den Alarmausgabe-Verbindungsschaltplan unten an, wenn Sie Geräte verbinden, die die Spannungs- und Stromspezifikationen überschreiten.

## Schaltplan Alarmausgabe

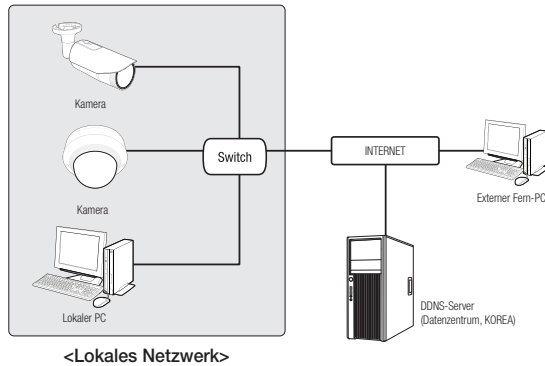


Sie können die Netzwerkeinstellungen gemäß Ihrer Netzwerkkonfigurationen einrichten.

## DIREKTES VERBINDEN DER KAMERA AN DAS LAN

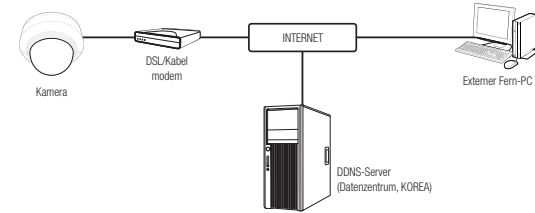
### Anschluss an die Kamera von einem lokalen PC im LAN

1. Starten sie einen Internetbrowser am lokalen PC.
2. Geben sie die IP-adresse der kamera in die adressenleiste des browsers ein.



- Ein Fern-PC in einem externen Internetausgang des LAN Netzwerks kann eventuell die im Intranet installierte Kamera nicht ansteuern, wenn die Portweiterleitung nicht korrekt festgelegt oder eine Firewall eingestellt ist. Wenden Sie sich in dem Fall zur Lösung des Problems an Ihren Netzwerkadministrator.
- Im Device Manager kann das Initialpasswort „4321“ für die Einstellung von IP-Adresse, Subnetzmaske, Gateway, HTTP-Port, VNP-Port und IP-Typ verwendet werden. Nach Änderung der Netzwerk-Schnittstelle greifen Sie zwecks besserer Sicherheit auf den Webviewer zu und ändern Sie das Passwort.
- Standardmäßig, wird die IP-Adresse vom DHCP-Server automatisch zugeteilt. Wenn keinen DHCP-Server verfügbar ist, wird die IP-Adresse auf 192.168.1.100 gesetzt. Zum Ändern der IP-Adresse den Device Manager verwenden. Für weitere Einzelheiten zur Verwendung des Device Manager, siehe „Verwenden des Device Manager“. (Seite 32)

### ■ VERBINDEN DER KAMERA DIREKT MIT EINEM DHCP BASIERTEN DSL/KABELMODEM



1. Den Benutzer-PC direkt mit der Netzwerkkamera verbinden.
2. Den Device Manager ausführen und die IP-Adresse der Kamera ändern, so dass Sie sich mit dem Webbrowser auf Ihrem Desktop mit dem Internet verbinden können.
3. Verwenden Sie den Webbrowser, um eine Verbindung mit dem Web Viewer herzustellen.
4. Gehen Sie weiter zur [Setup] Seite.
5. Gehen Sie weiter zum [Netzwerk] – [DDNS] und konfigurieren Sie die DDNS-Einstellungen.
6. Zu [Basic] – [IP & Port] navigieren und den IP-Typ auf [DHCP] einstellen.
7. Verbinden Sie die Kamera, die von Ihrem PC entfernt wurde, direkt mit dem Modem.
8. Starten Sie die Kamera erneut.

- Informationen für das Einrichten von DDNS finden Sie in der Online-Hilfe des WebViewer.
- Informationen für das Einrichten des IP-Formats finden Sie in der Online-Hilfe des WebViewer.

## VERWENDEN DES DEVICE MANAGER

- Das Programm Device Manager kann heruntergeladen werden im Menü **<Technical Guides>** – **<Online Tool>** auf der Hanwha Techwin Webseite (<http://www.hanwha-security.com>).
- Weitere Anweisungen zum Device Manager finden sich im Menü **<Hilfe>** auf der Hauptseite.

## AUTOMATISCHE SUCHE DER KAMERA

Wenn eine Kamera mit dem selben Netzwerk des PCs, auf dem der Device Manager installiert ist, verbunden ist, kann die Netzwerkkamera mit der Suchfunktion gefunden werden.

- Auf der Hauptseite des Device Manager auf **<Suchen>** klicken.
- Die Kamera in der Liste auswählen.
  - Die MAC-Adresse auf dem Aufkleber an der Kamera prüfen.

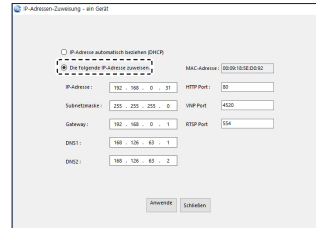
## KONFIGURIEREN DER IP-ADRESSE

Wenn Sie die Netzwerkeinstellung der Kamera ändern möchten, muss das Symbol **<Login OK>** unter **<Status>** angezeigt werden. Zum Anmelden auf der Hauptseite auf **<Authentifizierung>** klicken.

### Konfigurieren der statischen IP

IP-Adresse und Port-Informationen manuell eingeben und konfigurieren.

- In der Liste auf die Kamera klicken, von der die IP-Einstellungen geändert werden sollen.
- Auf der Hauptseite des Device Manager auf **<IP Assign (IP zuweisen)>** klicken.
- <Die folgende IP-Adresse zuweisen.>** auswählen.
  - Die IP-Informationen der Kamera werden wie zuvor eingestellt angezeigt.
- IP & Port in die entsprechenden Felder eingeben.



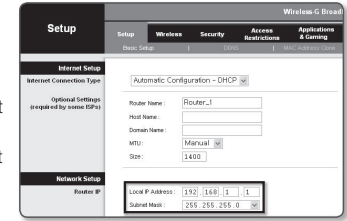
### Wenn Sie keinen Breitband-Router verwenden

Den Administrator des Netzwerks nach den Werten für **<IP-Adresse>**, **<Subnetzmaske>** und **<Gateway>** fragen.

- HTTP Port : Zum Zugriff auf die Kamera über den Internetbrowser. Standardmäßig ist der Wert 80 eingestellt.
- VNP Port : Wird verwendet, um die Videosignalübertragung zu steuern. Der Standardwert lautet 4520.
- RTSP Port: Ein Port, der das Echtzeit-Streaming steuert. Der Initialwert ist 554.

### Bei Verwendung eines Breitband-Routers

- IP Address : Geben Sie eine Adresse ein, die sich im IP-Bereich des Breitband-Routers befindet.  
bsp) 192.168.1.2~254, 192.168.0.2~254, 192.168.XXX.2~254
- Subnet Mask : Die **<Subnet Mask>** des Breitband-Routers ist ebenfalls die **<Subnet Mask>** der Kamera.
- Gateway : Die **<Local IP Address>** des Breitband-Routers ist das **<Gateway>** der Kamera.



- Die Netzwerkeinstellungen können sich je nach verbundenem Breitband-Router modell unterscheiden. Für mehr Informationen, lesen Sie im Benutzerhandbuch des Routers nach.
- Für weitere Informationen über die Portweiterleitung des Breitband Routers, bitte unter **"Portbereichweiterleitung Konfigurieren (Port Mapping)"** nachschlagen. (Seite 34)

### Wenn mehrere Kameras mit dem Breitband-Router verbunden sind

Konfigurieren Sie die IP- und Port-Einstellungen für jede Kamera einzeln und in Übereinstimmung mit den anderen.

bsp)

	Kategorie	Kamera #1	Kamera #2
IP-Einstellungen	IP Address	192.168.1.100	192.168.1.101
	Subnet Mask	255.255.255.0	255.255.255.0
	Gateway	192.168.1.1	192.168.1.1
Port-Einstellungen	HTTP Port	8080	8081
	VNP Port	4520	4521
	RTSP Port	554	555

- Wenn der Wert des **<HTTP port>** nicht 80 ist, müssen Sie die **<Port>**-Nummer in die Internetadresszeile eingeben, bevor Sie auf die Kamera zugreifen können.  
bsp) <http://IP-Adresse: HTTP-Port>  
<http://192.168.1.100:8080>

- Auf die Schaltfläche **[Anwenden]** klicken.
- Wenn die Erfolgsmeldung erscheint, auf **[OK]** klicken.

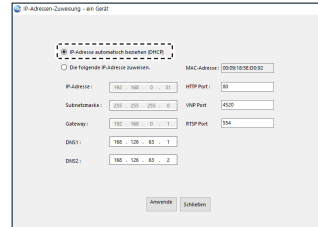


## Konfigurieren der dynamischen IP

IP-Adresse vom DHCP-Server beziehen.

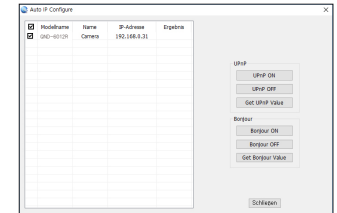
- Beispiel einer dynamischen IP-Umgebung
  - Wenn einem Breitband-Router, mit dem Kameras verbunden sind, eine IP-Adresse von einem DHCP-Server zugewiesen wird
  - Wenn die Kamera direkt mit einem xDSL- oder Kabelmodem mithilfe eines DHCP-Protokolls verbunden wird
  - Wenn die IP-Adressen von dem internen DHCP-Server über eine LAN-Verbindung zugewiesen werden

1. In der Liste auf die Kamera klicken, von der die IP-Einstellungen geändert werden sollen.
2. Auf der Hauptseite des Device Manager auf **<IP Assign (IP zuweisen)>** klicken.
3. **<IP-Adresse automatisch beziehen (DHCP)>** auswählen.
4. Auf die Schaltfläche **[Anwenden]** klicken.
5. Wenn die Erfolgsmeldung erscheint, auf **[OK]** klicken.



## AUTOMATISCHE KONFIGURATION DER IP

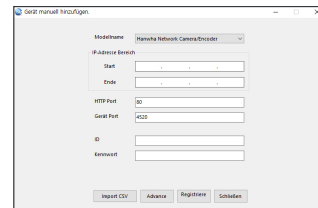
1. In der Liste auf die Kamera klicken, von der die IP automatisch konfiguriert werden soll.
2. Auf der Hauptseite des Device Manager auf **< + >** klicken.
  - Das Menü Equipment Setting erscheint.
3. Im Menü auf **<Auto IP Configure (Automatische IP-Konfiguration)>** klicken.
4. Auf die Schaltfläche **[Schließen]** klicken.



## MANUELLES REGISTRIERUNG DER KAMERA

Wenn die Kamera mit der Suchfunktion nicht gefunden werden kann, kann die Kamera aus der Ferne registriert werden, indem die IP-Information manuell eingegeben werden, wenn die Kamera mit dem externen Netzwerk verbunden ist.

1. Auf **<Geräte hinzufügen>** – **<Gerät manuell hinzufügen>** auf der Hauptseite des Device Manager klicken.
2. Den Bereich der IP-Adresse, den Sie suchen, eingeben
3. Den **<Modellname>** der Kamera, die Sie registrieren wollen, auswählen und HTTP Port, VNP-Port, ID und Passwort eingeben.
4. Auf die Schaltfläche **[Registrieren]** klicken.
5. Prüfen, ob die Kamera registriert ist.
  - Die MAC-Adresse auf dem Aufkleber an der Kamera prüfen.

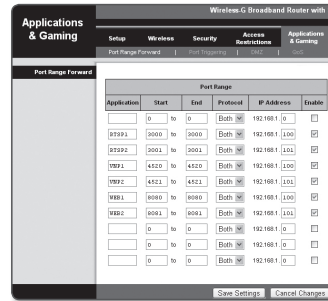


## PORTBEREICHWEITERLEITUNG KONFIGURIEREN (PORT MAPPING)

Wenn Sie einen Breitband-Router mit verbundener Kamera installiert haben, müssen Sie die Weiterleitung des Portbereichs für den Breitband-Router einstellen, damit auch ein entfernter Computer auf die verbundene Kamera zugreifen kann.

### Manuelle Portbereichweiterleitung

1. Wählen Sie aus dem Einstellungsmenü des Breitband-Routers **<Applications & Gaming>** - **<Port Range Forward>**.  
Für die Einstellung der Portbereichweiterleitung eines Breitband-Routers von einem anderen Anbieter lesen Sie die Bedienungsanleitung dieses Breitband-Routers.
2. Wählen Sie **<TCP>** und **<UDP Port>** für jede Kamera, die mit dem Breitband-Router verbunden ist.  
Jede Portnummer, die beim IP-Router eingestellt wird, sollte entsprechend der bei den **<Setup>** - **<Basic>** - **<IP & Port>** im Kamera-Web-Viewer festgelegten Portnummer übereinstimmen.
3. Wenn Sie fertig sind, klicken Sie auf **[Save Settings]**.  
Ihre Einstellungen werden gespeichert.

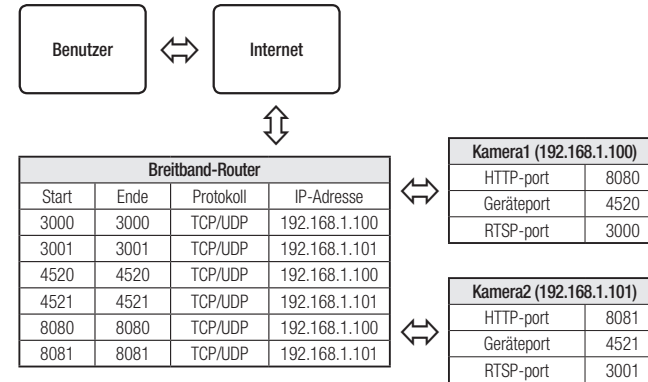


- Die Einstellung des Port-Forwarding wird am Beispiel der Einstellung eines CISCO IP-Routers gezeigt.
- Die Netzwerkeinstellungen können sich je nach Breitband-Routermodell unterscheiden.  
Für mehr Informationen, lesen Sie im Benutzerhandbuch des Routers nach.

### Einstellen des Portweiterleitungsbereichs für mehrere Netzwerkkameras

- Sie können auf dem Breitband-Router-Gerät durch seine Webseitekonfiguration Portweiterleitung-Richtlinien setzen.
- Ein Benutzer kann jeden Port durch Verwendung des Kamera-Einstellungsbildschirms ändern.


Wenn Kamera 1 und Kamera 2 an einen Router angeschlossen sind :



- Die Port-Weiterleitung lässt sich ohne zusätzliche Router-Einstellung vornehmen, wenn der Router die UPnP (Universal Plug and Play) Funktion unterstützt.  
Nach dem Anschließen der Netzwerkkamera das Kontrollkästchen aus dem Menü **<Schnelle Verbindung>** in **<Wisenet-DDNS>** unter **"Einstellungen -> Netzwerk -> DDNS"** anticken.

## VON EINEM GEMEINSAMEN LOKALEN PC EINE VERBINDUNG ZU DER KAMERA HERSTELLEN


---

1. Device Manager ausführen.  
Es wird nach verbundenen Kameras gesucht und eine entsprechende Liste angezeigt.
  2. Doppelklicken Sie auf eine Kamera, um auf sie zuzugreifen.  
Der Internetbrowser wird gestartet und stellt eine Verbindung zu der Kamera her.
-  ■ Sie können ebenfalls auf die Kamera zugreifen, indem Sie die IP-Adresse der gefundenen Kamera in der Adresszeile des Internetbrowsers eingeben.

## VON EINEM ENTFERNTEN PC EINE VERBINDUNG ZU DER KAMERA ÜBER DAS INTERNET HERSTELLEN

---

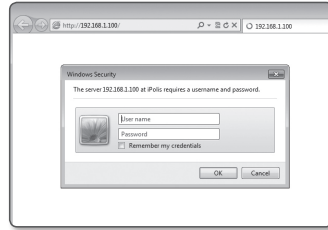
Auf einem entfernten Computer, der sich nicht im Netzwerk-Cluster des Breitband-Routers befindet, können Anwender auf Kameras im Netzwerk des Breitband-Routers durch die Verwendung der DDNS-URL der Kamera zugreifen.

1. Bevor Sie auf eine Kamera im Breitband-Routernetzwerk zugreifen können, sollten Sie die Portbereichweiterleitung für den Breitband-Router eingestellt haben.
  2. Starten Sie den Internetbrowser auf dem entfernten Computer und geben Sie die DDNS-URL der Kamera oder die IP-Adresse des Breitband-Routers in die Adresszeile ein.  
bsp) <http://ddns.hanwha-security.com/ID>
-  ■ Zur Verwendung von Wisenet DDNS auf der Wisenet DDNS Homepage anmelden (<http://ddns.hanwha-security.com>) und das Produkt unter **[Mein DDNS]>[Produkt registrieren]** registrieren.

## VERBINDUNG MIT DER KAMERA

### Sie würden, normalerweise

1. Starten Sie den Internetbrowser.
2. Die IP-Adresse der Kamera in die Adresszeile eingeben.  
 bsp) • IP Adresse (IPv4) : 192.168.1.100 →  
 http://192.168.1.100  
 - Der Anmeldedialog sollte erscheinen.  
 • IP Adresse (IPv6) : 2001:230:abcd:ffff:0000:0000:ffff:1111  
 → http://[2001:230:abcd:ffff:0000:0000:ffff:1111] - Der  
 Anmeldedialog sollte erscheinen.



### Falls die Nummer des HTTP-Ports nicht 80 ist

1. Starten Sie den Internetbrowser.
2. Geben Sie in die Adressleiste des Browsers die IP-Adresse und die HTTP-Portnummer ein.  
 bsp) IP Adresse: 192.168.1.100:HTTP-Portnummer(8080)  
 → http://192.168.1.100:8080 - Der Anmeldedialog sollte erscheinen.

### URL Benutzen

1. Starten Sie den Internetbrowser.
2. Geben Sie in die Adressleiste des Browsers die DDNS-URL-Adresse der Kamera ein.  
 bsp) URL-Adresse: http://ddns.hanwha-security.com/ID  
 - Der Anmeldedialog sollte erscheinen.



- Die Netzwerkverbindung ist in der nur LAN-Umgebung deaktiviert.

### Verbindung über UPnP

1. Das Kunden- oder Betriebssystem zur Unterstützung des UPnP-Protokolls ausführen.
2. Für die Suche den Kameranamen anklicken.  
 Den Kameranamen, der aus dem Netzwerkmenü gesucht wurde, im Windows Betriebssystem anklicken.  
 - Das Fenster Anmelden wird angezeigt.

### Verbindung über Bonjour

1. Das Kunden- oder Betriebssystem zur Unterstützung des Bonjour- Protokolls ausführen.
2. Für die Suche den Kameranamen anklicken.  
 Beim Mac-Betriebssystem den Kameranamen anklicken, der von der Bonjour Registerkarte von Safari gesucht wurde.  
 - Das Fenster Anmelden wird angezeigt.

### So überprüfen Sie die DDNS-Adresse

Falls die Kamera direkt an ein DHCP-basiertes Kabelmodem oder DSL-Modem angeschlossen wird, ändert sich die IP-Adresse bei jedem Versuch, eine Verbindung mit dem ISP (der Firma, die Sie abonniert haben) herzustellen.

In diesem Fall werden Sie nicht über die durch DDNS geänderte IP-Adresse informiert.

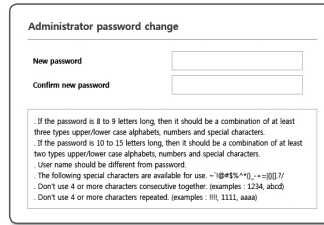
Sobald Sie ein auf dynamischer IP basierendes Gerät beim DDNS-Server registrieren, können Sie die geänderte IP-Adresse einfach überprüfen, wenn Sie versuchen auf das Gerät zuzugreifen.

Um das Gerät auf dem <DDNS> Server zu registrieren, besuchen Sie bitte <http://ddns.hanwha-security.com>, registrieren Sie zuerst Ihr Gerät stellen Sie anschließend im Net Viewer unter <Netzwerk> - <DDNS> auf <Wiset DDNS> und geben Sie ebenfalls die <Produkt-ID> ein, die Sie bei der DDNS-Registrierung verwendet haben.

## PASSWORTEINSTELLUNG

Beim ersten Zugriff auf das Produkt, müssen Sie das Anmelde-Passwort registrieren. Beim Erscheinen des Fensters **"Passwort ändern"**, ein neues Passwort eingeben.

- Für ein neues Passwort mit 8 bis 9 Ziffern müssen Sie mindestens drei der Folgenden verwenden: Groß-/Kleinbuchstaben, Zahlen und Sonderzeichen. Für ein Passwort mit 10 bis 15 Ziffern müssen Sie mindestens zwei dieser Zeichentypen verwenden.
  - Zulässige Sonderzeichen sind: ~!@#\$%^&\*^\*\_+={}|~.~/?
- Zur erhöhten Sicherheit wird empfohlen, nicht die gleichen Zeichen oder aufeinanderfolgende Eingaben der Tastatur zu wiederholen.
- Falls Sie Ihr Passwort vergessen haben, können Sie die Schaltfläche **[RESET]** drücken und das Produkt initialisieren. Verwenden Sie ein Memo-Pad oder merken Sie sich Ihr Passwort.

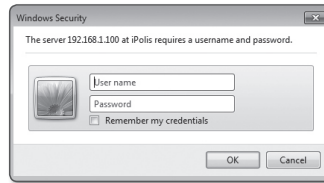


## ANMELDEN

Immer, wenn Sie auf die Kamera zugreifen, wird das Anmeldefenster angezeigt. Geben Sie den Benutzernamen und das Passwort ein, um auf die Kamera zuzugreifen.

1. Geben Sie „**admin**“ in das **<User name>** Eingabefeld ein. Die Administrator ID, „**admin**“, kann nicht verändert werden.
2. Geben Sie das Passwort in dem Eingabefeld **<Password>** ein.
3. Klicken Sie auf **[OK]**.  
Wenn Sie sich erfolgreich angemeldet haben, werden Sie den Live Viewer Bildschirm sehen.

- Achten Sie beim Zugriff auf den Kamera-Webviewer besonders auf die Sicherheit, indem Sie nachprüfen ob die Bilddaten verschlüsselt sind.
- Wenn Sie die Option **„Remember my credentials“** wählen, nachdem Ihre Eingabe beendet ist, werden Sie automatisch angemeldet ohne zukünftig aufgefordert zu werden, Ihre Anmeldeinformationen einzugeben.
- Die beste Bildqualität wird erreicht, wenn die Bildschirmgröße auf 100% eingestellt ist. Reduzierung des Bildseitenverhältnis kann das Bild an den Rändern abschneiden.



## EINRICHTUNG VON CAMERA WEB VIEWER

1. Klicken Sie auf das **[Einrichten (⚙️)]**-Symbol.
2. Das Fenster für die Einstellungen erscheint.
3. Sie können Einstellungen für die grundlegenden Informationen der Kamera, das Video, das Audio, das Netzwerk, das Ereignis, die Analyse sowie für das Kamerasystem über das Netzwerk konfigurieren.
4. Klicken Sie auf **<Hilfe (🔗)>** um detaillierte Beschreibungen jeder Funktion betrachten zu können.

**SPEZIFIKATIONEN (QND-6012R/6022R/6032R, QNV-6012R/6022R/6032R, QNO-6012R/6022R/6032R)**

Elemente	Beschreibung			
	QND-6012R/6022R/6032R	QNV-6012R/6022R/6032R	QNO-6012R/6022R/6032R	
Video	Bildaufnahmegesät	1/2.8" 2MP CMOS		
	Effektive Pixel	1920(H) x 1080(V)		
	Mindestbeleuchtung	QND-6012R/6032R/QNV-6012R/6032R/QNO-6012R/6032R Farbe : 0,1 Lux (F2.0, 1/30 Sek.), S/W : 0 Lux (IR-LED ein) QND-6022R/QNV-6022R/QNO-6022R Farbe : 0,1 Lux (F1.6, 1/30 Sek.), S/W : 0 Lux (IR-LED ein)		
	Videoausgang	CVBS : 1,0 Vp-p / 75Ω Composite, 720x480(N), 720x576(P), für die Installation		
	Brennweite (Zoomrate)	QND-6012R/QNV-6012R/QNO-6012R : 2,8 mm, fester Fokus QND-6022R/QNV-6022R/QNO-6022R : 4 mm, fester Fokus QND-6032R/QNV-6032R/QNO-6032R : 6 mm, fester Fokus		
Objektiv	Max. Blendenverhältnis	QND-6012R/6032R/QNV-6012R/6032R/QNO-6012R/6032R : F2.0 QND-6022R/QNV-6022R/QNO-6022R : F1.6		
	Sichtwinkelfeld	QND-6012R/QNV-6012R/QNO-6012R : H: 113,74° / V: 61,5° / D: 134,45° QND-6022R/QNV-6022R/QNO-6022R : H: 87,6° / V: 46,4° / D: 104,5° QND-6032R/QNV-6032R/QNO-6032R : H: 52,8° / V: 30,3° / D: 60,4°		
	Fokus-Steuerung	Fixiert		
	Schwenken / Neigen / Drehen	Schwenk-/Kipp-/Drehbereich	0°~350° / 0°~67° / 0°~355°	0°~350° / 0°~67° / 0°~355°
Funktionsweise	IR sichtbare Länge	20m(65,62 Fuß)	QNO-6012R/QNV-6012R : 20m(65,62 Fuß) QNO-6022R/QNV-6022R : 25m(82,02 Fuß) QNO-6032R/QNV-6032R : 30m(98,42 Fuß)	
	Kameratitel	Bis zu 85 Zeichen werden angezeigt		
	Tag und Nacht	Auto (ICR)		
	Gegenlichtkompensation	BLC, WDR, SDR		

Elemente	Beschreibung		
	QND-6012R/6022R/6032R	QNV-6012R/6022R/6032R	QNO-6012R/6022R/6032R
Funktionsweise	BREIT-Dynamischer Bereich	120dB	
	Digitale Rauschunterdrückung	SSNR	
	Bewegungserkennung	4 ea, polygonale Zonen	
	Privatsphärenausblendung	6 ea, rechteckige Zonen	
	Verstärkungssteuerung	Support	
	Weißabgleich	ATW / AWC / Manuell / Innenbereich / Außenbereich	
	LDC	Support	
	Elektronischer Blendenverschluss	Minimum / Maximum / Anti-Flimmern (1/5~1/12,000 Sek.)	
	Videodrehung	Umdrehen, Spiegeln, Hausflur (90° / 270°)	
	Analyse	Unschärfe-Ermittlung, Richtungserkennung, Bewegungserkennung, Betreten/ Verlassen, Herumstehen, Virtuelle Linie	
Netzwerk	Alarm-I/O	Eingang 1 ea / Ausgang 1 ea	
	Alarm Auslöser	Analyse, Netzwerk trennen, Alarmeingang	
	Alarmereignisse	<ul style="list-style-type: none"> <li>• Datei Hochladen über FTP, E-Mail</li> <li>• Benachrichtigung über E-Mail</li> <li>• SD-/SDHC-/SDXC- oder NAS-Aufnahme durch Ereignis auslösen</li> <li>• Alarmausgang</li> </ul>	
	Audio In	Integriertes Mikrofon	Auswählbar (Mic in/Line in) Versorgungsspannung: 2,5 V DC (4 mA), Eingangswiderstand: 2 kOhm
	Ethernet	RJ-45 (10/100BASE-T)	
	Videokomprimierungsformat	H.265/H.264 : Main/High, MJPEG	
	Auflösung	1920 x 1080, 1280 x 960, 1280 x 720, 800 x 600, 800 x 448, 720 x 576, 720 x 480, 640 x 480, 640 x 360	
Max. Framerate	H.265/H.264 : Max 30fps/25fps (60Hz/50Hz) MJPEG : Max 15fps/12fps (60Hz/50Hz)		
Smart Codec	WiseStreamII		
Video Qualität Anpassung	H.264/H.265 : Zielbitrate Pegelsteuerung MJPEG : Qualitätslevelsteuerung		

Elemente	Beschreibung			
	QND-6012R/6022R/6032R	QNV-6012R/6022R/6032R	QNO-6012R/6022R/6032R	
Netzwerk	<b>Bitrate Steuerungsmethode</b>	H.264/H.265 : CBR oder VBR Motion JPEG : VBR		
	<b>Streaming</b>	Unicast (6 Nutzer) / Multicast Multi-Streaming (bis zu 3 Profile)		
	<b>Audio-Kompression</b>	G.711 $\mu$ -law / G.726 auswählbar G.726 (ADPCM) 8kHz, G.711 8kHz G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps		
	<b>Protokoll</b>	IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTp, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP		
	<b>Sicherheit</b>	HTTPS (SSL) Authentifizierungsprotokoll Anmelde-Übersicht Authentifizierung IP-Adressfilter Benutzerzugriff Protokoll 802.1X Authentifizierungsmethode (EAP-TLS, EAP-LEAP)		
	<b>Randspeicher</b>	Micro SD/SDHC/SDXC 1slot 128GB		
	<b>Anwendungsprogrammierschnittstelle</b>	ONVIF Profile S/G/T SUNAPI(HTTP API) Offene Wisenet-Plattform		
	<b>Sprache der Webseite</b>	Englisch, Koreanisch, Französisch, Deutsch, Spanisch, Italienisch, Chinesisch, Russisch, Japanisch, Schwedisch, Portugiesisch, Tschechisch, Polnisch, Türkisch, Niederländisch, Ungarisch, Griechisch		
	<b>Web Viewer</b>	Unterstützte Betriebssystem : Windows 7, 8.1, 10, Mac OS X 10.12, 10.13, 10.14 Empfohlener Browser: Google Chrome Unterstützte Webbrowser: MS Explore11, MS Edge, Mozilla Firefox(Window 64bit unterstützt), Apple Safari(Mac OS X unterstützt)		
	<b>Speicher</b>	512 MB RAM, 256 MB Flash		

Elemente	Beschreibung			
	QND-6012R/6022R/6032R	QNV-6012R/6022R/6032R	QNO-6012R/6022R/6032R	
Betriebsbedingungen	<b>Betriebstemperatur / Feuchtigkeit</b>	-10°C ~ +55°C (14°F ~ +131°F) / Weniger als 90% rel. Luftfeuchtigkeit	-30°C ~ +55°C (-40°F ~ +131°F) / Weniger als 90% rel. Luftfeuchtigkeit * Die Inbetriebnahme sollte bei über -20 °C erfolgen	
	<b>Lagerungstemperatur / Feuchtigkeit</b>	-30°C ~ +60°C (-22°F ~ +140°F) / Weniger als 90% rel. Luftfeuchtigkeit		
	<b>Zertifizierung</b>	-	IP66, IK10	
Elektrisch	<b>Eingangsspannung</b>	PoE(IEEE802.3af, Class3), 12VDC		
	<b>Energieverbrauch</b>	PoE: Max 7,4 W, typisch 6 W 12VDC: Max 6,4 W, typisch 5,1 W	PoE: Max 7,4 W, typisch 6 W 12VDC: Max 6,4 W, typisch 5,1 W	PoE: Max 7 W, typisch 5,2 W 12VDC: Max 6,1 W, typisch 4,5 W
Mechanisch	<b>Farbe / Material</b>	Weiß/Plastik	Weiß/Aluminium	Dunkelgrau/Aluminium
	<b>RAL-Code</b>	RAL9003		
	<b>Produktabmessungen/Gewicht</b>	Ø110,0 x 86,0 mm (Ø4,33 x 3,39"), 255 g	Ø120,3 x 91,7 mm (Ø4,74 x 3,61"), 510 g	Ø70,0 x 246,0 mm (Ø4,33 x 3,39"), 700 g

**SPEZIFIKATIONEN (QND-6072R/6082R, QNV-6072R/6082R, QNO-6072R/6082R)**

Elemente	Beschreibung			
	QND-6072R/6082R	QNV-6072R/6082R	QNO-6072R/6082R	
Video	Bildaufnahmegesät	1/2.8" 2MP CMOS		
	Effektive Pixel	1920(H) x 1080(V)		
	Mindestbeleuchtung	Farbe : 0.095 Lux (F1.6, 1/30 Sek.) S/W : 0 Lux (IR-LED ein)		
	Videoausgang	CVBS : 1,0 Vp-p / 75Ω Composite, 720x480(N), 720x576(P), für die Installation		
Objektiv	Brennweite (Zoomrate)	QND-6072R/QNO-6072R/QNV-6072R : 3,2~10mm(3,1x) manueller Gleitfokus QND-6082R/QNO-6082R/QNV-6082R : 3,2~10mm(3,1x) motorisierter Gleitfokus		
	Max. Blendenverhältnis	F1.6(Breite) ~ F2.9(Tele)		
	Sichtwinkelfeld	H: 109,0° (Breite) ~ 33,2° (Tele) / V: 57,4° (Breite) ~ 18,7° (Tele) / D: 132,0° (Breite) ~ 38,0° (Tele)		
	Objektivart	QND-6072R/QNV-6072R/QNO-6072R : Manuell QND-6082R/QNV-6082R/QNO-6082R : Scharfeinstellung		
Schwenken / Neigen / Drehen	Schwenk-/Kipp-/Drehbereich	0°~350° / 0°~67° / 0°~355°	0°~350° / 0°~67° / 0°~355°	-
Funktionsweise	IR sichtbare Länge	20m(65,62 Fuß)	30m(98,42 Fuß)	
	Kameratitel	Bis zu 85 Zeichen werden angezeigt		
	Tag und Nacht	Auto (ICR)		
	Gegenlichtkompensation	BLC, WDR, SDR		

Elemente	Beschreibung		
	QND-6072R/6082R	QNV-6072R/6082R	QNO-6072R/6082R
Funktionsweise	BREIT-Dynamischer Bereich	120dB	
	Digitale Rauschunterdrückung	SSNR	
	Bewegungserkennung	4 ea, polygonale Zonen	
	Privatsphärenausblendung	6 ea, rechteckige Zonen	
	Verstärkungssteuerung	Gering / Mittel / Hoch	
	Weißabgleich	ATW / AWC / Manuell / Innenbereich / Außenbereich	
	LDC	Support	
	Elektronischer Blendenverschluss	Minimum / Maximum / Anti-Flimmern (1/5~1/12,000 Sek.)	
	Videodrehung	Umdrehen, Spiegeln, Hausflur (90° / 270°)	
	Analyse	Unschärfe-Ermittlung, Richtungserkennung, Bewegungserkennung, Betreten/ Verlassen, Herumstehen, Virtuelle Linie	
Alarm-I/O	Eingang 1 ea / Ausgang 1 ea		
Alarm Auslöser	Analyse, Netzwerk trennen, Alarmeingang		
Alarmereignisse	<ul style="list-style-type: none"> <li>• Datei Hochladen über FTP, E-Mail</li> <li>• Benachrichtigung über E-Mail</li> <li>• SD-/SDHC-/SDXC- oder NAS-Aufnahme durch Ereignis auslösen</li> <li>• Alarmausgang</li> </ul>		
Audio In	Integriertes Mikrofon	Auswählbar (Mic in/Line in) Versorgungsspannung: 2,5 V DC (4 mA), Eingangswiderstand: 2 kΩ	
Netzwerk	Ethernet	RJ-45 (10/100BASE-T)	
	Videokomprimierungsformat	H.265/H.264 : Main/High, MJPEG	
	Auflösung	1920 x 1080, 1280 x 960, 1280 x 720, 800 x 600, 800 x 448, 720 x 576, 720 x 480, 640 x 480, 640 x 360	
	Max. Framerate	H.265/H.264 : Max 30fps/25fps (60Hz/50Hz) MJPEG : Max 15fps/12fps (60Hz/50Hz)	
	Smart Codec	WiseStreamII	
	Video Qualität Anpassung	H.264/H.265 : Zielbitrate Pegelsteuerung MJPEG : Qualitätslevelsteuerung	



Elemente	Beschreibung		
	QND-6072R/6082R	QNV-6072R/6082R	QNO-6072R/6082R
<b>Bitrate Steuerungsmethode</b>	H.264/H.265 : CBR oder VBR Motion JPEG : VBR		
<b>Streaming</b>	Unicast (6 Nutzer) / Multicast Multi-Streaming (bis zu 3 Profile)		
<b>Audio-Kompression</b>	G.711 $\mu$ -law / G.726 auswählbar G.726 (ADPCM) 8kHz, G.711 8kHz G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps		
<b>Protokoll</b>	IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP		
<b>Sicherheit</b>	HTTPS (SSL) Authentifizierungsprotokoll Anmelde-Übersicht Authentifizierung IP-Adressfilter Benutzerzugriff Protokoll 802.1X Authentifizierungsmethode (EAP-TLS, EAP-LEAP)		
<b>Randspeicher</b>	Micro SD/SDHC/SDXC 1slot 128GB		
<b>Anwendungsprogrammierschnittstelle</b>	ONVIF Profile S/G/T SUNAPI(HTTP API) Offene Wisenet-Plattform		
<b>Sprache der Webseite</b>	Englisch, Koreanisch, Französisch, Deutsch, Spanisch, Italienisch, Chinesisch, Russisch, Japanisch, Schwedisch, Portugiesisch, Tschechisch, Polnisch, Türkisch, Niederländisch, Ungarisch, Griechisch		
<b>Web Viewer</b>	Unterstützte Betriebssystem : Windows 7, 8.1, 10, Mac OS X 10.12, 10.13, 10.14 Empfohlener Browser: Google Chrome Unterstützte Webbrowser: MS Explore11, MS Edge, Mozilla Firefox(Window 64bit unterstützt), Apple Safari(Mac OS X unterstützt)		
<b>Speicher</b>	512MB RAM, 256MB Flash		

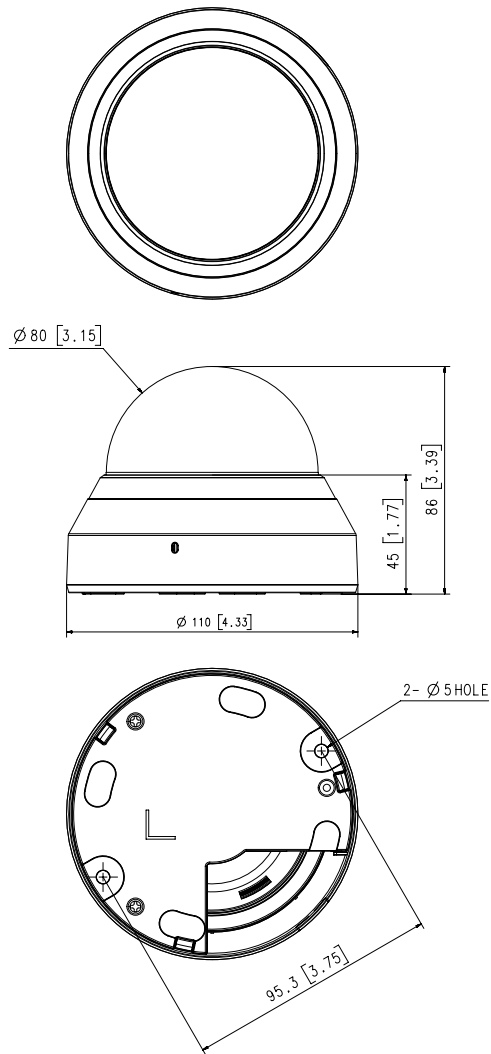
Netzwerk

Elemente	Beschreibung			
	QND-6072R/6082R	QNV-6072R/6082R	QNO-6072R/6082R	
<b>Betriebsbedingungen</b>	<b>Betriebstemperatur / Feuchtigkeit</b>	-10°C ~ +55°C (14°F ~ +131°F) / Weniger als 90% rel.Luftfeuchtigkeit	-30°C ~ +55°C (-40°F ~ +131°F) / Weniger als 90% rel.Luftfeuchtigkeit * Die Inbetriebnahme sollte bei über -20 °C erfolgen	
	<b>Lagerungstemperatur / Feuchtigkeit</b>	-30°C ~ +60°C (-22°F ~ +140°F) / Weniger als 90% rel.Luftfeuchtigkeit		
	<b>Zertifizierung</b>	-	IP66, IK10	
<b>Elektrisch</b>	<b>Eingangsspannung</b>	PoE(IEEE802.3af, Class3), 12VDC		
	<b>Energieverbrauch</b>	PoE: Max 7,5 W, typisch 6 W 12VDC: Max 6,5 W, typisch 5,1 W	PoE: Max 7,5 W, typisch 6 W 12VDC: Max 6,5 W, typisch 5,1 W	PoE: Max 7,4 W, typisch 5,4 W 12VDC: Max 6,5 W, typisch 4,8 W
<b>Mechanisch</b>	<b>Farbe / Materiell</b>	Weiß/Plastik	Weiß/Aluminium	Dunkelgrau/Aluminium
	<b>RAL-Code</b>	RAL9003	RAL9003	-
	<b>Produktabmessungen/Gewicht</b>	Ø119,8 x 98,8 mm (Ø4,72 x 3,89"), 320 g	Ø137,0 x 106,1 mm (Ø5,39 x 4,18"), 710 g	QNO-6072R: Ø70,0 x 246,0 mm (Ø4,33 x 3,39"), 730 g QNO-6082R: Ø78,0 x 259,8 mm (Ø3,07 x 10,2"), 900 g

PRODUKTANSICHT (QND-6012R/6022R/6032R/6072R/6082R)

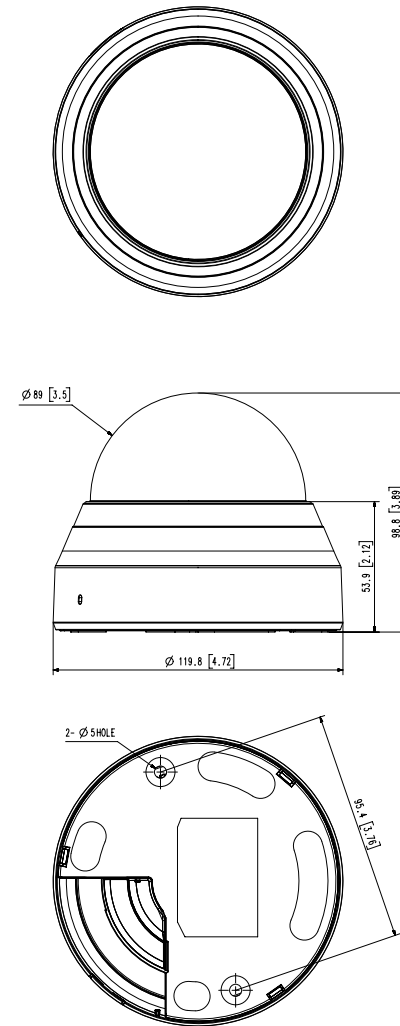
QND-6012R/6022R/6032R

Einheit: mm [inch]



QND-6072R/6082R

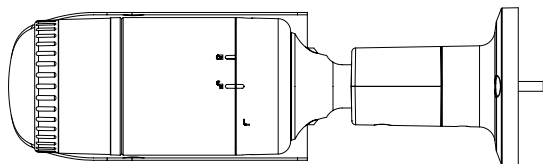
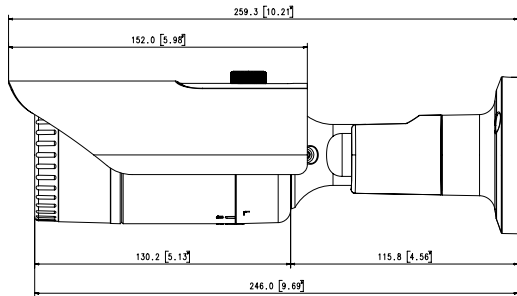
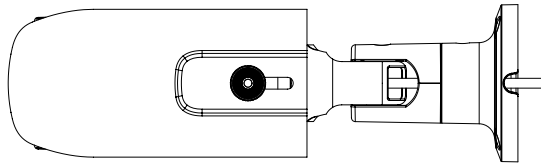
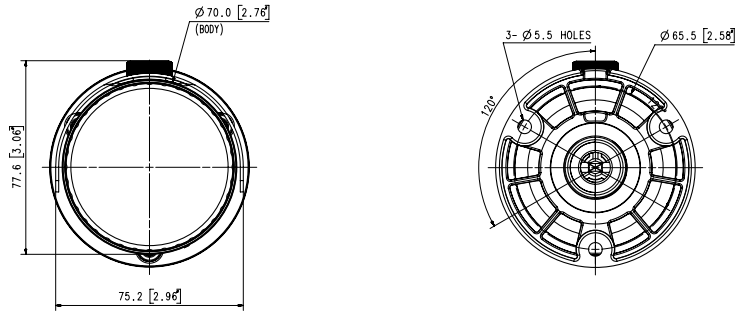
Einheit: mm [inch]



# PRODUKTANSICHT (QNO-6012R/6022R/6032R/6072R/6082R)

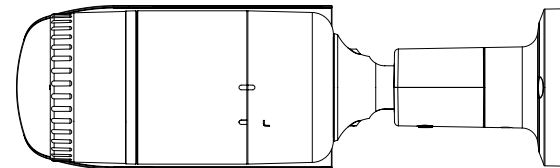
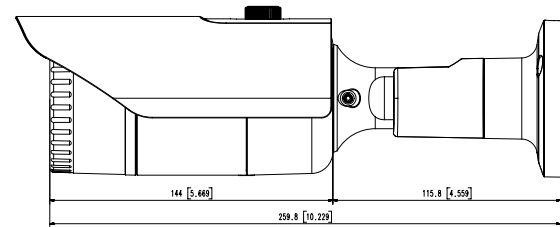
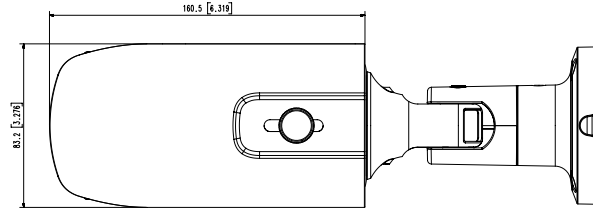
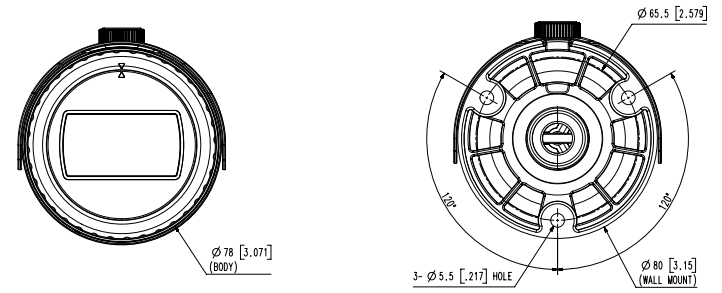
QNO-6012R/6022R/6032R/6072R

Einheit: mm [inch]



QNO-6082R

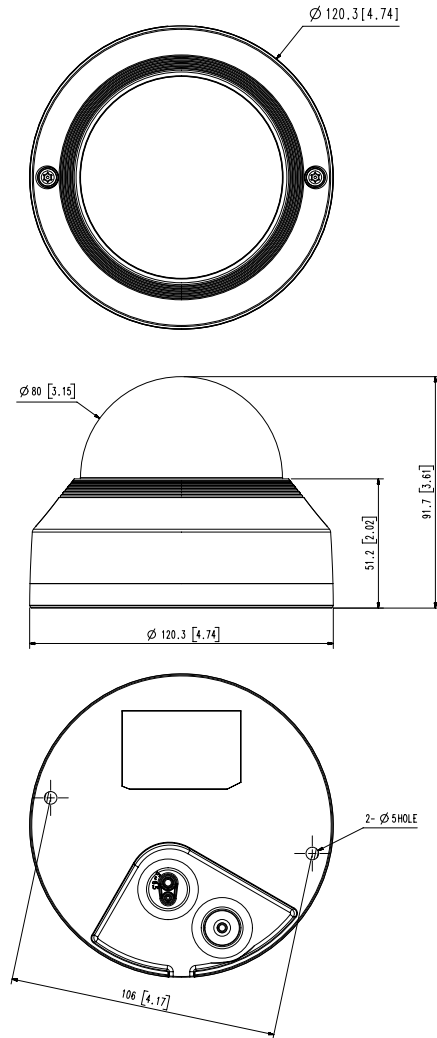
Einheit: mm [inch]



PRODUKTANSICHT (QNV-6012R/6022R/6032R/6072R/6082R)

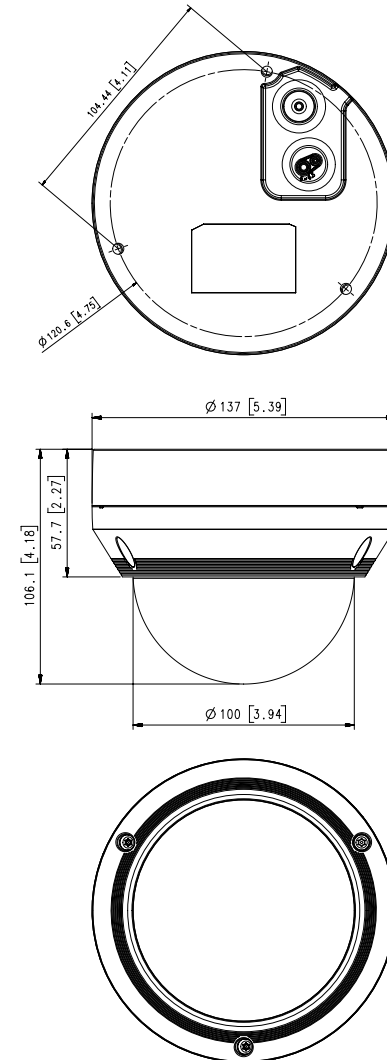
QNV-6012R/6022R/6032R

Einheit: mm [inch]



QNV-6072R/6082R

Einheit: mm [inch]



## FEHLERSUCHE

PROBLEM	LÖSUNG
Wenn ein Benutzer von Windows 10 über Chrome oder Firefox auf den Webviewer zugreift, ändert sich von Zeit zu Zeit die Lautstärke des Mikrofons.	<ul style="list-style-type: none"> <li>• Dies geschieht, wenn der Mikrofontreiber auf Realtek-Treiber festgelegt wurde. Installieren Sie das High Definition Audio-Gerät (Standardtreiber von Windows) oder den Dritttreiber als Mikrofontreiber.</li> </ul>
Wenn Sie unter Safari per HTML auf den Plug-in-freien Webviewer zugreifen, wird kein Video angezeigt.	<ul style="list-style-type: none"> <li>• Bei dem ersten Zugriff auf HTTPS klicken Sie im Pop-up-Fenster zu Authentifizierung auf "Authentifizierungszertifikat anzeigen" und wählen Sie das Feld "Beim Verbinden zur IP des designierten Webviewers immer vertrauen" aus.</li> <li>• Wenn im Webviewer weiterhin kein Video angezeigt wird, nachdem Sie im Nachrichtenfenster unten "Weiter" ausgewählt haben, klicken Sie auf die Befehlstaste + Q, um den Safari-Browser zu verlassen. Rufen Sie ihn dann erneut auf und folgen Sie den oben angegebenen Schritten.</li> </ul>
Ich kann von einem Webbrowser nicht auf die Kamera zugreifen.	<ul style="list-style-type: none"> <li>• Überprüfen Sie, ob die Netzwerkeinstellungen der Kamera entsprechend sind.</li> <li>• Kontrollieren Sie, ob alle Netzwerkkabel korrekt angeschlossen wurden.</li> <li>• Prüfen Sie bei einer Verbindung über DHCP, ob die Kamera dynamische IP-Adressen problemlos erhalten kann.</li> <li>• Prüfen Sie, wenn die Kamera mit einem Breitband-Router verbunden ist, ob die Portweiterleitung korrekt konfiguriert ist.</li> </ul>
Der Viewer wurde während der Überwachung getrennt.	<ul style="list-style-type: none"> <li>• Verbundene Viewer werden nach etwaigen Änderungen an der Kamera oder den Netzwerkkonfigurationen getrennt.</li> <li>• Prüfen Sie alle Netzwerkverbindungen.</li> </ul>
Es wird kein Video angezeigt, wenn ich auf den Webviewer neu zugreife oder zum Client streamen.	<ul style="list-style-type: none"> <li>• Die maximal verfügbare Profilanzahl ist 3. Die Verbindung kann unterbrochen werden, wenn Sie 4 oder mehr Profile nutzen. Beispiel) Wenn Sie auf MJPEG, H264 und H265 zugreifen und dann mit einem anderen Profil zugreifen, geht die Verbindung verloren.</li> </ul>
Die mit dem Netzwerk verbundene Kamera wird im Programm Device Manager nicht erkannt.	<ul style="list-style-type: none"> <li>• Schalten Sie die Firewall-Einstellungen an Ihrem PC aus und suchen Sie dann die Kamera erneut.</li> </ul>
Die Bilder überlappen.	<ul style="list-style-type: none"> <li>• Prüfen Sie, ob zwei oder mehr Kameras auf einer einzigen Multicast-Adresse anstelle verschiedener Adressen festgelegt sind. Wenn eine einzige Adresse für mehrere Kameras verwendet wird, können die Bilder überlappen.</li> </ul>
Es wird kein Bild eingeblendet.	<ul style="list-style-type: none"> <li>• Wenn die Übertragungsmethode auf Multicast festgelegt ist, müssen Sie überprüfen, ob ein Router vorhanden ist der Multicast im LAN, an das die Kamera verbunden ist, unterstützt.</li> </ul>
Stimme wird nicht aufgezeichnet, obwohl die Audio-Eingabeinstellungen konfiguriert wurden.	<ul style="list-style-type: none"> <li>• Sie müssen das &lt;Audio-Eingang&gt; - Kontrollkästchen im &lt;Basis&gt; - &lt;Video Profil&gt; aktivieren.</li> </ul>

PROBLEM	LÖSUNG
<Bewegungserkennung> des <Analyse> ist auf <Aktivieren> eingestellt, doch haben mich keine E-Mails mit Benachrichtigungen erreicht, selbst wenn ein Analyse-Ereignis eingetreten ist.	<ul style="list-style-type: none"> <li>• Überprüfen Sie die Einstellungen in der folgenden Reihenfolge: A. Prüfen Sie die Einstellungen unter &lt;Datum &amp; Uhrzeit&gt;. B. Die &lt;Bewegungserkennung&gt; muss auf &lt;Aktivieren&gt; gestellt sein. C. Prüfen Sie, ob die Option &lt;E-mail&gt; im &lt;Ereigniseinrichtung&gt; Menü markiert ist.</li> </ul>
Auf die Micro SD Speicherkarte kann nicht aufgenommen werden.	<ul style="list-style-type: none"> <li>• Auf die SD-Speicherkarte kann nicht aufgenommen werden.</li> </ul>
Die Micro SD Speicherkarte ist eingelegt, aber die Kamera funktioniert nicht richtig.	<ul style="list-style-type: none"> <li>• Überprüfen Sie, ob die Speicherkarte richtig herum eingelegt wurde. Für diese Kamera kann nicht garantiert werden, dass eine Speicherkarte, die mit einem anderen Gerät formatiert wurde, reibungslos funktioniert.</li> <li>• Formatieren Sie die Speicherkarte über das Menü &lt;Setup&gt; → &lt;Ereignis&gt; → &lt;Speicherkapazität&gt;.</li> </ul>
Kann nicht in NAS aufnehmen.	<ul style="list-style-type: none"> <li>• Bestätigen Sie, dass die in NAS registrierten Informationen richtig sind.</li> </ul>
Meldet, dass die NAS-Einstellung fehlgeschlagen ist.	<ul style="list-style-type: none"> <li>• Bestätigen Sie, dass die IP-Adresse des NAS gültig ist.</li> <li>• Bestätigen Sie, dass die ID/dass Passwort des NAS gültig ist.</li> <li>• Bestätigen Sie, dass Sie auf den als Basisordner bezeichneten Ordner mit der NAS-ID zugreifen können.</li> <li>• Bestätigen Sie, dass die NAS SMB/CIFS-Punkte nicht angekreuzt sind.</li> <li>• Bestätigen Sie, dass die NAS IP-Adresse und die Kamera-IP-Adresse dasselbe Format haben. Ex) Der Erstwert des NAS &amp; der Kamerasubnetzmaske ist 255.255.255.0. Ist die IP-Adresse 192.168.20.32, sollte sich die NAS IP-Adresse im Bereich von 192.168.20.1~192.168.20.255. befinden</li> <li>• Prüfen Sie, ob Sie als ein anderer Benutzer ohne Formatierung des gespeicherten oder benutzten Basisordners zugreifen wollten.</li> <li>• Bestätigen Sie, dass Sie empfohlene NAS-Ausrüstung benutzen.</li> </ul>

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Component Name	License	URL
Base Kernel	GPL 2.0	
Busybox	GPL 2.0	<a href="http://www.busybox.net/downloads/snapshots">http://www.busybox.net/downloads/snapshots</a>
iproute2-4.3.0	GPL 2.0	
iptables-1.4.21	GPL 2.0	<a href="http://ftp.netfilter.org/pub/iptables">http://ftp.netfilter.org/pub/iptables</a>
ethtool-4.2	GPL 2.0	
mt-d-1.5.2	GPL 2.0	<a href="ftp://ftp.infradead.org/pub/mt-d-utils">ftp://ftp.infradead.org/pub/mt-d-utils</a>
mi-diag-2.11	GPL 2.0	
rp-pppoe-3.11	GPL 2.0	<a href="http://www.roaringpenguin.com/pppoe/">http://www.roaringpenguin.com/pppoe/</a>
wpa_supplicant-2.5	GPL 2.0	
bash-4.3.30	GPL 3.0	
zeroconf	GPL 2.0	

## LGPL SW

Component Name	License	URL
glibc	LGPL 2.0	
inetutils	LGPL 3.0	
neon-0.29.6	LGPL 2.0	<a href="http://www.webdav.org/neon/">http://www.webdav.org/neon/</a>

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It appears that the arithmetic coding option of the JPEG spec is covered by patents owned by IBM, AT&T, and Mitsubishi. Hence arithmetic coding cannot legally be used without obtaining one or more licenses. For this reason, support for arithmetic coding has been removed from the free JPEG software. (Since arithmetic coding provides only a marginal gain over the unpatedented Huffman mode, it is unlikely that very many implementations will support it.) So far as we are aware, there are no patent restrictions on the remaining code.

The IJG distribution formerly included code to read and write GIF files. To avoid entanglement with the Unisys LZW patent, GIF reading support has been removed altogether, and the GIF writer has been simplified to produce "uncompressed GIFs". This technique does not use the LZW algorithm; the resulting GIF files are larger than usual, but are readable by all standard GIF decoders.

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### T-License [License Agreement for Source Code of T-Kernel]

established by T-Engine Forum  
on January 23, 2004  
revised on June 17, 2004  
revised on December 21, 2006  
revised on March 24, 2009

### Article 1. Scope of License Agreement

1. This License Agreement sets forth copyrights and the terms and conditions of use applicable to the source code of T-Kernel distributed by T-Engine Forum and any derivative work created therefrom.

### Article 2. Definition

1. "T-Kernel" means a real-time operating system controlled and distributed by T-Engine Forum on behalf of the copyright holder thereof.
2. "Source Code" means a source program, including related comments and documentations, for the T-Kernel and the Ported Source Code defined in Article 2.8 which is registered with T-Engine Forum.
3. "Hardware-dependent Part" means the part of the Source Code which depends on hardware and needs to be changed when the Source Code is ported and operated on the target hardware, and is designated and separated as such part.
4. "Compiler-dependent Part" means the part of the Source Code which depends on compiler and needs to be changed when the Source Code is ported and operated on the target hardware, and is designated and separated as such part.
5. "Header File" means the part of the Source Code which contains definitions necessary to develop application programs.
6. "T-Engine Hardware" means the hardware which is manufactured in accordance with the T-Engine Hardware specifications or the  $\mu$ T-Engine Hardware specifications issued by T-Engine Forum, and registered with T-Engine Forum.
7. "Similar Hardware to T-Engine Hardware" means any hardware (including software which emulates hardware) other than that defined in Article 2.6 above, on which the T-Kernel can be operated.
8. "Ported Source Code" means a source program produced from the Source Code by modifying only its Hardwaredependent Part and/or Compiler-dependent Part to enable it to be operated on the T-Engine Hardware or the Similar Hardware to T-Engine Hardware. The Ported Source Code which is registered with T-Engine Forum shall be included in the Source Code.
9. "Modified Source Code" means a source program modified from the Source Code for the purpose of improving its performance, increasing or decreasing its function, and the like. The Ported Source Code shall not be included in the Modified Source Code.
10. "Binary Code" means an executable code form which is created by compiling programs, which include all or part of the Source Code or the Modified Source Code.
11. "Derivative Work" means the Modified Source Code or the Binary Code.
12. "Embedded Product" means any product which operates with executable code form of the Source Code, the Modified Source Code or the Binary Code loaded on its hardware.
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14. "System Developer" means any person who develops the Embedded Product by itself or has a third party develop the same, and provides, whether with or without payment, the End User with the Embedded Product.
15. "Distributor of Modification" means any person who produces the Modified Source Code and, whether with or without payment, distributes the same to any third party.

**16.** "Patch for Modification" means a difference, program, system, or the like in order to create the Modified Source Code from the Source Code or the Binary Code thereof.

**17.** "Vicarious Execution of Patch Processing" means vicarious execution service to create the Modified Source Code applying the Patch for Modification to the Source Code or the Binary Code thereof.

**18.** "Source Code User" means a person who uses the Source Code.

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2. to transmit a work to the general public through the Internet communication, broadcasting, and the like automatically in response to a request from the public; and
3. to distribute a copy of a work to the general public or a large number of specific persons.

#### **Article 3. Copyright**

1. The copyrights of the Source Code shall be owned by Ken Sakamura.

#### **Article 4. License of Source Code**

1. As provided for in this Article, T-Engine Forum shall provide, and grant a license to use, the Source Code free of charge to any person who has taken the necessary procedure for registration as prescribed by T-Engine Forum and agreed to the T-License.

2. The Source Code shall be distributed exclusively by T-Engine Forum. Any person who obtains the Source Code under Article 4.1 above shall not make any re-Distribution of the Source Code.

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  2. to run the Source Code provided by T-Engine Forum hereunder for its own research, development and the like.
  3. to run the Source Code modified in accordance with the provision of Article 4.3 (1) above for its own research, development and the like.
  4. to distribute the Binary Code created from the Source Code provided by T-Engine Forum hereunder or from the Source Code modified in accordance with the provision of Article 4.3 (1) above.
4. In accordance with the license granted under Article 4.1 above, the System Developer may perform the following acts:

1. to perform any and all acts set forth in the Article 4.3 above.
2. to develop and manufacture the Embedded Product containing the Binary Code, and, whether with or without payment, provide the End User with the same and make the Binary Code available to the End User on the Embedded Product.

5. The Source Code User and the System Developer shall be obligated to give a notice that the Source Code is used, in such a way as separately specified by T-Engine Forum, when they use the Source Code or the Binary Code, or make the Binary Code available for the End User on the Embedded Product.

#### **Article 5. Distribution of Modified Source Code**

1. Any of A- members of T-Engine Forum may become the Distributor of Modification by obtaining the approval of T-Engine Forum through the registration procedure as prescribed by the Forum provided that only the department of the A- member which has taken the registration procedure may distribute the Modified Source Code in such a way as provided for in this Article as long as it holds the Amembership.

2. The Distributor of Modification may create the Modified Source Code based on the Source Code provided by T-Engine Forum and the Patch for Modification to be applied to create such Modified Source Code from the Source Code.

3. The Distributor of Modification shall, prior to the distribution, inform T-Engine Forum of and register a name and description of the Modified Source Code in such a way as specified by T-Engine Forum.

4. The Distributor of Modification shall determine the name of the Modified Source Code subject to the rules separately established by T-Engine Forum and publish an appropriate notice as required by the rules on the Patch for Modification and the Modified Source Code.

5. The Distributor of Modification may distribute the Modified Source Code to a third party, whether with or without payment, provided that the Distributor of Modification shall take the necessary measures to prohibit the third party from making the re-Distribution of the Modified Source Code.

6. Developer with the Patch for Modification. Provided, however, that the Distributor of Modification shall be obligated to confirm that the System Developer is the Source Code User duly licensed under Article 4.1.

7. The Distributor of Modification may perform the Vicarious Execution of Patch Processing for the System Developer.

8. The System Developer shall not distribute the Modified Source Code in further modified form to any third party as a stand-alone software product.

9. The System Developer may, under the same obligation as imposed in Article 4.5, make the Embedded Product available for the End User through use of the Patch for Modification distributed by the Distributor of Modification or the Derivative Works obtained through the Vicarious Execution of Patch Processing.

#### **Article 6. Distribution and Registration of the Ported Source Code**

1. The Source Code User and the System Developer may, whether with or without charge, distribute to any third party only the following parts of the Ported

Source Code on the T-Engine Hardware or the Similar Hardware to T-Engine Hardware:

1. The Hardware-dependent Part and/or Compiler-dependent Part; provided that the Source Code User and the System Developer shall inform T-Engine Forum of, and T-Engine Forum may publish, a method for distributing said Part(s) to third parties.

2. The Header File; provided that the Header File shall be distributed together with the Binary Code of the Ported Source Code.

2. Any member of T-Engine Forum may request T-Engine Forum to register and distribute, as an original source code for T-Kernel, the Ported Source Code on the T-Engine Hardware or the Similar Hardware to T-Engine Hardware.

3. Any member of T-Engine Forum who requests the distribution mentioned in the preceding paragraph shall accede to the following conditions:

1. The member shall confirm that the object hardware is the T-Engine Hardware or the Similar Hardware to T-Engine Hardware.
2. The member shall provide T-Engine Forum with a complete set of operational environment for the object hardware and T-Kernel free of charge when requesting the distribution.
3. The member shall submit test results of the Ported Source Code to T-Engine Forum when requesting the distribution.

4. In the event that T-Engine Forum accepts the request mentioned in Article 6.2, T-Engine Forum shall register and distribute the Ported Source Code as the Source Code for T-Kernel. Provided, however, that the Ported Source Code may be treated in the same way as the Modified Source Code until the time of registration hereunder.

5. The provision set forth in Article 3 shall apply to the Ported Source Code registered in accordance with this Article.

#### **Article 7. Use for Other Purpose**

1. Any use of the Source Code, the Modified Source Code or the Ported Source Code other than those stipulated in Articles 4, 5 and 6 shall be subject to the prior approval of T-Engine Forum.

#### **Article 8. Limited Warranty**

1. T-Engine Forum and the copyright holder of the Source Code warrant that the Source Code does not infringe third party's copyrights. Provided, however, that T-Engine Forum and the copyright holder of the Source Code make no warranty as to the Hardware-dependent Part and/or Compiler-dependent Part set forth in Article 6.2 in the Ported Source Code by any third party.

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2. In case of breach of this License Agreement by a member of T-Engine Forum, T-Engine Forum may take appropriate measures against the member; for example, the member is disqualified from membership, depending on what kind of breach has been committed by it.

3. Any legal dispute which may arise in relation to any breach of this License Agreement shall be subject to the exclusive jurisdiction of the Tokyo District Court.

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2. This License Agreement is executed in both Japanese text and English text provided that the Japanese text shall govern the interpretation and performance of this License Agreement.

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Julian Seward, [jseward@bzip.org](mailto:jseward@bzip.org)

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Component Name	License	URL
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Component Name	License	URL
zlib-1.2.8	zlib / libpng	<a href="http://zlib.net/">http://zlib.net/</a>

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The data format used by the zlib library is described by RFCs (Request for Comments) 1950 to 1952 in the files <http://www.ietf.org/rfc/rfc1950.txt> (zlib format), [rfc1951.txt](http://www.ietf.org/rfc/rfc1951.txt) (deflate format) and [rfc1952.txt](http://www.ietf.org/rfc/rfc1952.txt) (gzip format).



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