# Camera-1

# DSLR Camera with EF-S18-135mm f/3.5-5.6 IS USM lens

32.5MP APS-C CMOS Sensor + DIGIC 8
Dual Pixel CMOS AF
45 cross-type AF (Optical Viewfinder)
Face detection (Optical Viewfinder & Live View)
5,481 selectable focus positions (Live View)
Eye Detection AF (One-Shot & Servo AF – Live View)
4K Video (Uncropped/Cropped)

## Specifications

AF Modes	OVF: One-Shot AF, AI Servo AF, AI Focus AF   Live View: One-Shot AF, Servo AF, AI Focus AF	
AF Point Selection	Automatic selection, Manual selection	
AF System Points	OVF: 45 AF Points   Live View: 5,481 selectable focus positions	
Built-in Flash	YES	
Closest Focusing Distance (cm)	39	
Continuous Shooting Speed (Shots Per Sec)	OVF: 10fps (One-Shot AF & Al Servo AF)   Live View: 11fps	
(Up To)	(One-Shot AF), 7fps (Servo AF)	
Dimensions (Excl. Protrusions) (mm)	140.7 x 104.8 x 76.8	
(Approx.)		
Drive System	Nano USM	
Effective ISO	100 - 25,600 (H:51,200)	
Effective Pixels (Megapixels)	32.5	
Exposure Compensation	OVF: ±5* stops in 1/3- or 1/2-stop increments   Live View: ±3 stops in 1/3- or 1/2-stop increments   AEB: ±3 stops in 1/3- or 1/2-stop increments	
Eye Detection AF	Live View: One-Shot AF & Servo AF	

Flash Modes	E-TTL II Autoflash, FE Lock, Manual pop-up, Retractable, Built-in	
Focal Length (35mm Equivalent)	28.8-216.0mm (7.5x)	
Guide Number ISO 100 metres	12	
Image Resolution	6960 x 4640 (L) 4800 x 3200 (M) 3472 x 2320 (S1) 2400 x 1600 (S2) 6960 x 4640 (RAW/C-RAW)	
Image Stabilizer	Lens-shift type & In-body 5-axis electronic image stabilisation	
LCD Monitor (Size) (Inch)	3.0	
LCD Monitor Resolutions (dots)	1,040,000	
Manual Focus	YES	
Memory Card Type	SD, SDHC*, SDXC*, *UHS-I & UHS-II cards compatible	
Metering Mode	Evaluative, Partial, Spot, Centre-weighted average	
Movie Format	MP4	
Optical Zoom	7.5x	
Optional Power	AC Power (AC Adapter AC-E6N and DC Coupler DR-E6)	
Peripheral Connections	Hi-Speed USB, HDMI (Type C) / Microphone / Headphone / Remote	
Processor Type	DIGIC 8	
Sensor Size	APS-C	
Shooting Modes	Scene Intelligent Auto, Special scene modes (Portrait, Group Photo, Landscape, Sports, Kids, Panning, Close-up, Food, Candlelight, Night Portrait, Handheld Night Scene, HDR Backlight Control), Creative filters (Grainy B/W, Soft focus, Fish-eye effect, Water painting effect, Toy camera effect, Miniature effect, HDR art standard, HDR art vivid, HDR art bold, HDR art embossed), Program AE, Shutter-priority AE, Aperture-priority AE, Manual exposure, Bulb, Custom mode 1, Custom mode 2	
Shutter Speed Range (Sec.)	OVF: 30 - 1/8000, Bulb   Live View: 30 – 1/16000, (1/16000 1/10000, electronic shutter), Bulb	
Silent Shutter	Available in Live View: Single Shot	
Standard Power Supply	Battery Pack LP-E6/LP-E6N	
Still Image Format	JPEG, RAW, C-RAW, RAW + JPEG, C-RAW + JPEG	
Viewfinder Coverage (Approx.)	100%	
Viewfinder Type	Eye-level pentaprism	
Weight (g) (Including the battery and memory card) (Approx.) *For camera kits, weight includes kit lens(es).	1216g	

White Balance	Auto (Ambience priority), Auto (White priority), Preset (Daylight, Shade, Cloudy, Tungsten light, White fluorescent light, Flash), Custom White balance correction, Color temperature White balance bracketing provided * Flash color temperature information transmission possible
X-sync (sec.)	1/250

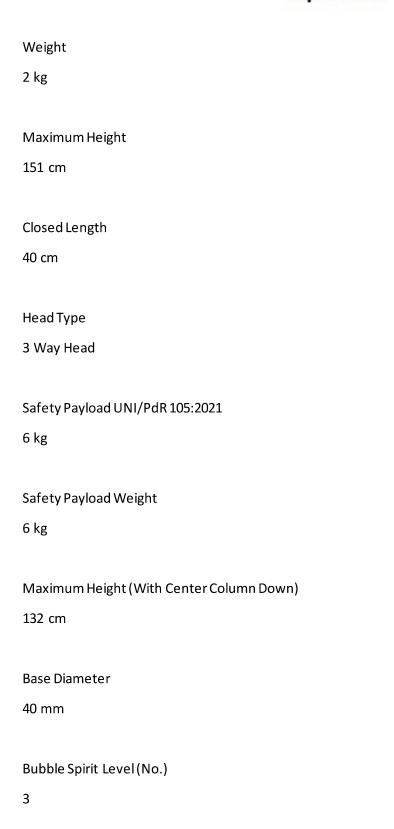
# Flash Unit

Specifications	
Power: Guide No (ISO 100)	154' / 47m (at 105mm)
Angle of Flash Coverage	
Auto	24-105mm
Manual	
With Diffuser	14mm
AF Assist Beam	
AF Assist Beam Type	Infrared AF-assist beam
AF Assist Beam Points	1 to 16
AF Assist Beam Min Focal Length	28mm
AF Assist Beam Range – Center	2.3-32.8'/0.7-10.0m
AF Assist Beam Range – Periphery	3.3–16.4 <sup>1</sup> /1.0–5.0m
Flash Exposure Modes	
Auto Exposure Standards Supported	E-TTL II/E-TTL
External Auto Flash Exposure Sensor	N
Manual Flash Exposure	Υ
Features Controllable from Flash	
High Speed Sync	Υ
Flash Exposure Lock (FEL)	Υ
Flash Exposure Compensation (FEC)	Υ
Flash Exposure Bracketing (FEB)	Υ
Second Curtain Flash Sync	Υ
Modelling Flash	Υ
Color Temperature Info Communication	Υ

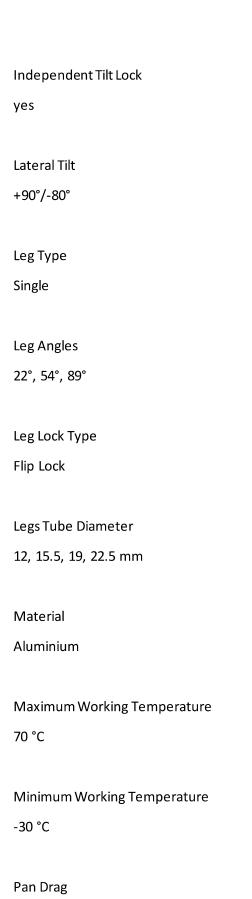
Supports Flash Settings by Camera Menu (Enables many options not available directly on the flash)	Υ
Custom Functions	10
Personal Functions	9
Wireless Flash Capabilities	
Wireless Flash Transmitter Capability	N
Wireless Transmission Type	
Transmitter Max Range – Indoors	32.8' (10m)
Transmitter Max Range – Outdoors	19.7 - 32.8' (6m / 10m)
Wireless Flash Slave Capability	Optical
Wireless Flash Groups	3
Wireless Flash Channels	4
Remote Shutter Release Capability	N
Flash Head Movement Range	
Flash Head Movement Up	0°-120°
Flash Head Movement Down	
Flash Head Movement Left	0°-180°
Flash Head Movement Right	0°-180°
Flash Features	
Dust and Water Resistance	N
PC Terminal	N
Power Source	
Power Source	4x AA
Number of Flashes (approx)	140–966
Recycling Time – NiMH (approx)	0.1 to 3.5 sec.
Recycling Time – Alkaline (approx)	0.1 - 5.5 sec.
External Power Source	

Size	
Size (WxHxD)	2.94 x 5.13 x 4.14 " (74.6 x 130.4 x 105.1mm)
Weight	13.6 oz (385g)

## Tripod stand



Center Column
rapid
Colour
Black
Leg Sections
4
Top Attachment
1/4" screw
7
Base Type
44 mm
Easy Link
Yes
Front Tilt
+90°/-45°
Min Height
42 cm
Independent Pan Lock
yes
D. II.
Ball Locking
No



fluid cartridge with fixed drag
Panoramic Rotation
300
Plate Type
200PL PRO
Quick Release
Yes
Tilt Drag
fluid cartridge with fixed drag

# Camera-2

4K UHD YCC 4:2:0 8-bit 25P/30P\* internal recording;
MP4 format supported
20x 4K zoom lens (29.3 - 601mm^)
Optical image stabilization with Dynamic IS (5-axis image stabilization)
SD card slots x 2; HDMI output

## Specifications

## Standard Definition or High Definition

4K Ultra High Definition

## Power Supply (rated)

7.4V DC (Battery Pack), 8.4V DC (DC IN)

## **Television System**

NTSC

## Video Recording system

Compression: MPEG-4 File Format: MP4

## Audio Recording system

MP4: MPEG-2 AAC-LC (2ch)

LPCM (4ch), not available during 1280x720 recording)

## Image Sensor

1/2.3-inch CMOS, RGB Primary Color Filter

#### **Total Pixels**

Approx. 21.14 megapixels

## **Effective Pixels**

Approx. 8.29 megapixels (3840 x 2160)

#### Lens

Zoom Ratio: 20x Optical / 400x Digital

Focal Length: 3.67-73.4mm (35mm equivalent: 29.3-601mm with Standard IS/IS Off, 30.6-612mm

with Dynamic IS)

Zoom Speed: Variable speed / Constant speed (16 levels); Fast, Normal or Slow

Max. F/Stop: f/1.8-2.8

### **Focusing System**

Hybrid AF (TTL-video signal detection system and external phase difference metering system),

Normal AF (TTL-video signal selection system), Face Only AF, Manual Focus

Hybrid AF Controls: Instant AF, Medium AF

## Manual Exposure

Available

#### **Programmed AE**

Auto Mode: Smart Auto

Manual Mode: P, Tv, Av, M (Manual Exposure), SCN (Portrait, Sports, Snow, Beach, Sunset, Night,

Low Light, Spotlight, Fireworks)

## **Max Shutter Speed**

1/2000 sec.

## **Minimum Focusing Distance**

10mm (at wide end), 60cm (from lens front) across zooming range

#### White Balance

Auto, Preset (Daylight, Shade, Cloudy, Tungsten, Fluorescent H, Fluorescent), Color Temperature Settings (2,000-15,000K), Set (1/2)

#### Frame Rate

4K UHD: 30p, 24p FHD: 60p, 30p, 24p

#### Minimum Illumination

P Mode: Approx. 1.2 lux (shutter speed 1/30 sec., with auto slow shutter on)

Low Light Mode: Approx. 0.1 lux (shutter speed 1/2 sec.)

#### **Image Stabilization**

Optical system (lens shift) + electronic stabilization

Control Modes: Dynamic IS, Powered IS\*, Macro IS, Tripod Mode

IS Modes other than Intelligent IS: Standard IS, IS Off

#### Filter Diameter

58mm

#### Viewfinder

0.24-inch TFT wide color LCD screen, approx. 1.56 million dots, 100% field of view

#### LCD Screen

3.0-inch LCD panel with AR surface treatment, approx. 460,000 dots, 100% field of view

## Microphone

Stereo (using electret condenser microphone)

## **Recording Media**

2 SD/SDHC/SDXC memory card slots

#### **USB Terminal**

mini-B receptacle and Hi-Speed USB supported (output only)

#### Video Terminal

3.5mm diameter 4-pole mini-jack (video/audio output only)

## **Accessory Shoe**

Cold shoe

#### **HDMI Terminal**

HDMI™ mini connector

## Microphone Terminal

3.5mm diameter stereo mini-jack, MIC/LINE switching possible

## AV Mini Terminal/Headphone Terminal

3.5mm stereo mini-jack

## Headphone Terminal

3.5mm stereo mini-jack

#### Remote Control Terminal

2.5mm stereo mini jack (input only)

#### **Operating Temperature range**

For Performance: Approx. 0-40°C, 85% (relative humidity) For Operation: Approx. -5-45°C, 60% (relative humidity)

#### **Dimensions**

Approx. 4.3 x 3.3 x 7.2 in. / 109 x 84 x 182mm (excluding lens hood, mic holder unit and handle unit)

Approx. 4.5 x 3.3 x 9.1 in. / 115 x 84 x 231mm (including lens hood; excluding mic holder unit and handle unit)

Approx. 5.2 x 7.1 x 9.1 in. / 131 x 180 x 231mm (including lens hood, mic holder unit and handle unit) All dimensions exclude the grip belt.

#### Weight (not including lens hood and eyecup)

Approx. 1.6 lbs. (730g) (body only)

#### Weight

Approx. 2.5 lbs. (1120g)