

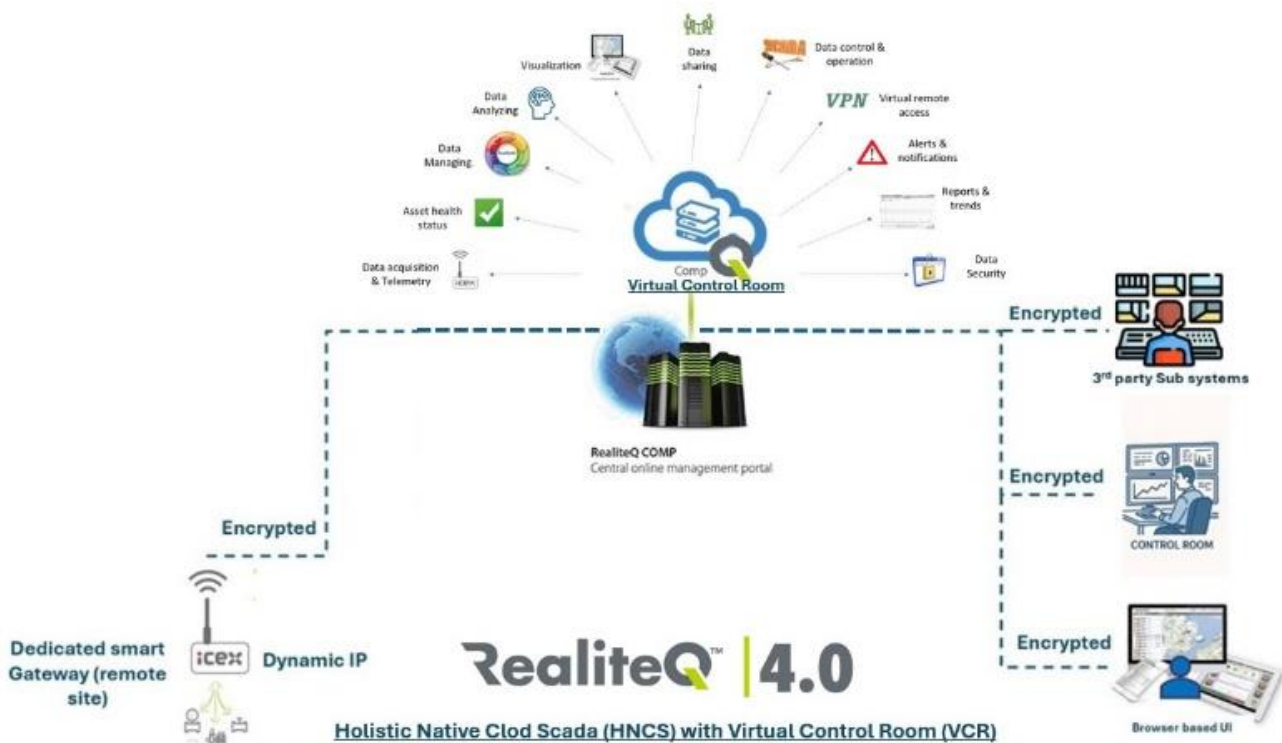
RealiteQ - Frequent asked questions

Q. What is RealiteQ?

A. RealiteQ is a cutting-edge Holistic cloud-native SCADA and IIoT solutions developed by Reali Technologies Ltd. It's a Holistic solution designed to provide real-time, cloud-based Remote control & operational data management of devices, facilities and entire networks.

RealiteQ is a **fully integrated SCADA and IIoT platform** that combines cutting-edge software with embedded hardware gateways in a single, cloud-native solution. This unique approach allows for seamless, real-time remote control and comprehensive data management without the complexities of on-premises servers or extensive infrastructure.

But RealiteQ is much more than “Just” a Scada **RealiteQ the new generation of Scada** is a **comprehensive single-source platform** that combines hardware, cloud software, secure communications, telemetry, SCADA, cybersecurity, HMI, BI, and data analytics – all in one integrated and scalable solution from the infrastructure level (Smart gateway) through the ICT, SCADA level and up to the Cybersecurity & data analytics level for real time, remote-control operation & Data management, enabling smart, simple, and cost-effective management of distributed assets and systems.



Q. What are the most Common SCADA architectures today?

A. Today, four main SCADA architectures are commonly used, each with distinct characteristics:

1. On-Premises SCADA

All system components—servers, HMIs, databases, and control logic—are installed and maintained locally. This offers full control and deep customization but depends heavily on local IT resources. Security and scalability are tied to on-site infrastructure quality.

2. Cloud-Hosted Traditional SCADA

Traditional SCADA software originally designed for on-premises deployment is moved (“lifted and shifted”) to cloud servers. This provides remote access and some scalability benefits but retains the legacy architecture, licensing, and complexity, making it a transitional solution.

3. Native Cloud SCADA

Built specifically for cloud environments as scalable, multi-tenant SaaS platforms with web-native interfaces. These eliminate the need for traditional IT infrastructure, offering greater flexibility, easier management, and strong field device integration via modern APIs and protocols.

4. Holistic Native Cloud SCADA

An advanced evolution of Native Cloud SCADA that fully integrates dedicated edge devices (e.g., IIoT dedicated gateways) into a cloud-managed ecosystem. It covers the entire workflow from data acquisition through secure communication to analytics and alerts. This architecture maximizes security, modularity, and remote management, delivering seamless edge-to-cloud synergy.

Choosing the right architecture depends on factors like security requirements, operational scale, available IT expertise, and digital transformation goals.

Q. Is RealiteQ software or hardware?

A. Both. RealiteQ is a holistic solution, technology which includes gateways (iCex), which are installed in the field and communicate – in one side with practically any industrial instrumentation and in other – with RealiteQ software in the field.

RealiteQ is “one stop shop”. You don’t need any special hardware, software or application to run RealiteQ project.

Q. How is RealiteQ different from conventional SCADA.

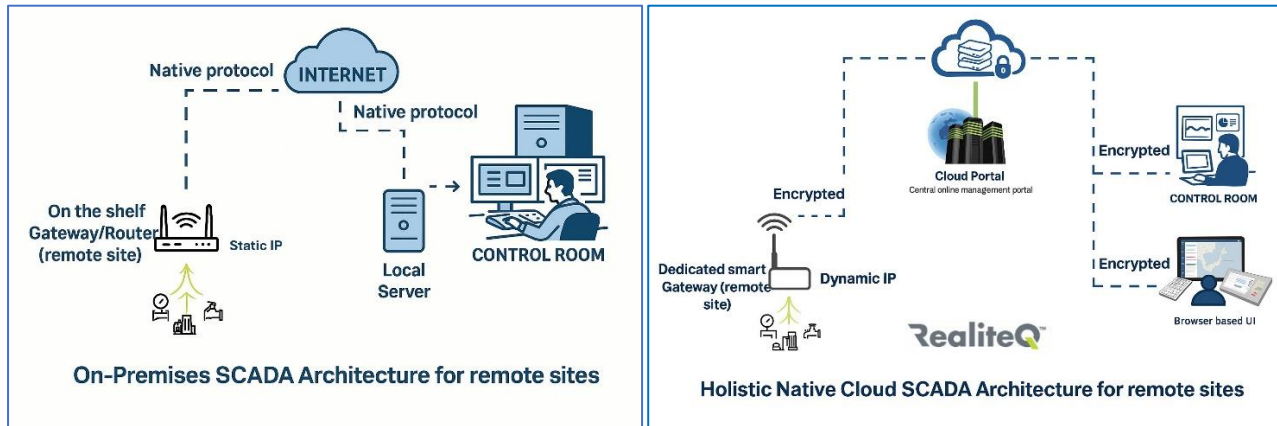
A. RealiteQ is a new (4th) generation of Scada offers a modern, flexible, and cost-effective solution compared to traditional SCADA systems, making it particularly suitable for utilities looking to embrace digital transformation and remote management.

While conventional Scada is usually only a HMI runs on a local server and RTUs (Remote Terminal Units) that use standard protocols to communicate with it, RealiteQ is an integrated bundle of IoT & cloud computing, productivity programs & tools for real-time remote control & operational data management including: iCex Gateway - Telemetry using secured encrypted protocol - SCADA HMI/UI – VPN- GPS -Developer/editor - Cloud - Backups - Cybersecurity - Notifications & Alarms - Historian Reports - Trends – BI Dashboard Statistics & basic AI algorithm.

RealiteQ is a Holistic solution for digital transformation - single-source solution of IIoT hardware and Cloud software from the infrastructure level through the ICT & SCADA level and up to the Cybersecurity & data

analytics level, providing a comprehensive solution for real-time, Secured, remote-control operation & Data management from "A" to "Z" (Data acquisition, telemetry, real-time & historian data management, Alert & Notification, data analytics & BI, cybersecurity, remote control & visualization) of devices, sites, facilities, and the entire networks

By leveraging IIoT and cloud technology, RealiteQ redefines how SCADA systems operate, making them more accessible, cost-effective, and adaptable to the needs of modern utilities and industrial operations.



Q. What is the Service level output of RealiteQ

A. RealiteQ provides a comprehensive service level output that includes several key features:

- SLA of RealiteQ is more than 99.99%.
- **Data acquisition:** collecting data from various sensors, analyzers, and controllers over I/O, Ethernet, or serial protocols. It enables control of remote devices such as PLCs, inverters, and controllers through the Internet using multiple communication methods, including cellular (GPRS, 2G, 3G, 4G), satellite, and wired connections
- **Real-Time Monitoring and Control:** RealiteQ allows for real-time monitoring and control of remote systems from any device, anywhere, by authorized personnel.
- **Data Sharing and Visibility:** It enables data sharing and control among different sites, providing visibility of all utility facilities.
- **Operational Alerts:** The system generates operational alerts for system failures and security alerts for unauthorized operations.
- **Historical Data Management:** RealiteQ manages historical data, providing tables, trend charts, statistics, basic AI, BI dashboards and customized reports.
- **User-Friendly Interface:** The system features browser-based UI/HMI with screens, dashboards, and full alarm management.
- **Integration Capabilities:** It can be connected to almost any existing equipment (sensors, analyzers, PLCs) and third-party software.
- **Security:** RealiteQ includes advanced cybersecurity features to ensure safe and secure operations.

These features make RealiteQ a robust and efficient solution for managing and controlling water, wastewater, energy, and more.

Q. What is the basic hardware/instrumentation required for RealiteQ

A. RealiteQ has a smart gateway called iCex that is installed in the field in the control panel of the facility and connects to the end units on site (sensors, meters, controllers etc). The installation of the ICEx is simple and

fast, when the ICEx is installed, the only thing left is to wire between the ICEx and the various devices. Either by connecting to a switch using Ethernet cable or directly by using serial communication or I/O. The design of the graphics, screens, reports, trends, alerts and all other functions of the system is done remotely from the office and without the need to stay on field. That's make installation and commissioning of many sites in a very short time.

Q. Which is the third-party equipment/instruments required for RealiteQ to be successful

A. No need to any Third party, RealiteQ is an end-to-end solution, (from the smart gateway and up to the user interface (UI/HMI). providing all is needed for optimal use. However, different vendor's equipment may be connected to the iCex as it supports most of the industry protocol (Modbus RTU, Mdbus/TCP, EIP, Profinet and more). In addition, iCex gateways have several I/O (Analog & Digital) so pulses from water and energy meters and other signals (in or out) may be connected as well. But at the same time, RealiteQ can easily interface with client's 3rd party software as required.

Q. What are the advantages of implementing RealiteQ.

A. RealiteQ is the most advanced end-to-end real-time remote control and data management solution. It is smart, Simple (to install, use & maintain), secured, affordable, almost maintenance free and includes fast DR (disaster recovery) capabilities. RealiteQ is 100% modular, scalable and flexible.

Q. What are the inputs required for preparing a techno commercial offer of RealiteQ

A. It is also very simple as we are not limiting the amount of data and number of users. In order to make a technical proposal you need to know how many iCex you need to install (usually it is one ices to control panel) and to make sure that all the devices on site have supported communication protocols (ICEx supports most of the industry used protocols).

Q. What are the cost economics for implementing RealiteQ.

A. RealiteQ costs are usually based on one-time payment for the iCex and for the project allocation and yearly SaaS (software as a service) fee for using the cloud platform (including license and technical support).

Q. Is it more suitable for Urban or Rural Water Supply Scheme.

A. RealiteQ is used and suitable for both urban and rural applications and not only water & sewage. it is used also in Industrial application, Energy, agriculture, gas and more. As RealiteQ is very simple to use and install and it requires no local maintenance or skilled team, it is the perfect solution to Rural and remote areas. Also, as much as there are more sites in the projects, more devices and large distances among sites, RealiteQ becomes even more attractive.

Q. Is RealiteQ cybersecure?

A. RealiteQ employs a comprehensive set of cybersecurity measures to ensure the safety and integrity of its cloud-based SCADA and telemetry solutions. RealiteQ's architecture is designed to provide secure, scalable, and reliable remote monitoring and control while adhering to recognized cybersecurity frameworks, ensuring robust cybersecurity requires compliance with industry standards and the integration of advanced protective measures. RealiteQ's cybersecurity features align with key standards and guidelines, including those established by the Cybersecurity and Infrastructure Security Agency (CISA), the Environmental Protection Agency (EPA), and the International Electrotechnical Commission (IEC) 62443.

Q. What IS MCP protocol and why it is more secured from Native protocols?

A. MCP stands for Message Control Protocol. It is a proprietary communication protocol designed for efficient, secure data exchange in industrial systems, especially SCADA. MCP enables reliable real-time communication between field devices (like PLCs and sensors) and control centers. Compared to native protocols such as Modbus, MQTT, or OPC UA, MCP offers enhanced built-in cybersecurity features like stronger encryption, authentication, and data integrity checks. These features make MCP preferable for cloud-native SCADA systems by reducing attack surfaces and improving secure remote control and data management in the cloud.

Q. What do I need to start a project with RealiteQ?

A. You need to purchase at least one iCex (contact your local distributor or RealiteQ support) and to ask RealiteQ to open URL for your project. You can get also 4 hours free training.

Q. Is RealiteQ UI compatible with Windows, Android, Linux, Apple O/S... Which versions?

A. This question is not relevant. The only things you need to access RealiteQ UI are connection of your device to internet and standard browser (Chrome, Edge...).

Q. Which software do I need to install on my device? Where can I find it?

A. There is no need to install any software or application on your device to access the RealiteQ project. You need only access to internet and standard browser (Chrome, Edge...).

Q. Which device can I use to access RealiteQ project?

A. Any device with access to internet and installed standard browser. It can be desktop, laptop, tablet, smartphone and even Smart TV.

Q. How many iCex can I connect to my project?

A. No limit. It is 100% flexible & scalable. You can make a project with one iCex only or you can add hundreds. It is also 100% scalable.

Q. How many tags(nodes) can I define in my RealiteQ project?

A. There is no limit to the number of tags/nodes per project.

Q. How many tags/nodes can I define in one iCex?

A. There is no limit on the number of tags/nodes per iCex. Usually, SI defines up to about 1000, but this is not technical limitation.

Q. Can I write/change values with RealiteQ, or is it only for monitoring?

A. You can change the value of any node, defined as Writable. The change is in Real-time, and you will get the new value after confirmation from field iCex ("Read back"). There is no "fake data" with RealiteQ. You can also define permitted range for written value and RealiteQ can send messages to predefined user/supervisor with information about changed value.

Q. How many users can define in my RealiteQ project?

A. There is no limit to the number of users in a RealiteQ project. There is also no limit of number of users which can access the project at the same time.

Q. Can I make dashboard with RealiteQ?

A. Yes, you can define as many dashboards as you need. Each dashboard can include real time values, historical data or results of statistics. Parameters can be taken from multiple devices within the project, even from

different iCex. Values can be presented as numbers, gauges, icons, calendar, pie, animated gifs, trends and tables. Users have the freedom and large number of tools to design powerful dashboards according to their needs and taste.

Q. What is the amount of historical data I can keep in my project?

A. There is no limit to the quantity of historical data. It's kept by default for one year back (last 12 months). Users can ask to increase this period.

Q. Can I add my own images to RealiteQ dashboard?

A. Yes you can add multiple images in your project. Supported formats are JPEG, PNG, GIF and even animated GIF. There is no limit of images you can add to your project and even to single draw/display.

Q. Which devices can be connected to iCex?

A. Practically any device with standard industrial interface. iCex has built in Ethernet, RS232 and RS485 (4 wires) ports. They all can be used simultaneously. It supports the most popular industrial communication protocols, like Modbus RTU, Modbus TCP, Siemens TCP, Rockwell's Ethernet/IP (for selected AB models only), GE's SNMP. More protocols can be added upon special customers' request. There are also built in 3 digital I/O and one analog input.

Q. What happens with data, if iCex is disconnected from COMP?

A. RealiteQ is a real-time SCADA. Anyway, you can set specific nodes to log data in iCex itself during failing of communication with COMP. Data is logged in iCex RAM memory and is sent to COMP automatically when communication will return. For more details how to set a node for logging see RealiteQ help → Appendixes → Filter chapter (p. 52).