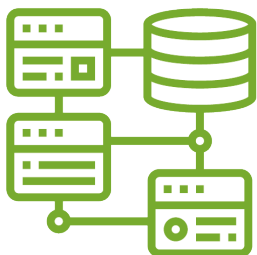




Q8 edge™ RDS and Web Thin Client Operating System



In the context of industrial SCADA systems, Remote Desktop Services (RDS) is commonly used to provide remote access to the Human Machine Interface (HMI) for monitoring and control of equipment. RDS allows operators to connect to a server running the SCADA HMI remotely. Today's Web Server technology has enabled web browser to be used to access machine interface screens for PLC, RTU, controllers and to view SCADA systems. Newer PLC's and RTU's frequently incorporate web servers that allow diagnostics and monitoring via user web browsers. Web-enabled SCADA hosts enable users to remotely monitor, control remote sites via a web browser. Arista's Q8 edge™ OS brings both Software-Based via RDS and Web-Based HMI/SCADA via web browser to operators' display and fingertips.

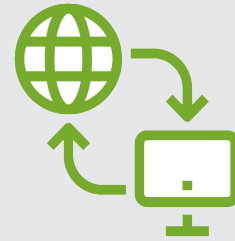


Product Features



Initial Setup as easy as counting 1234

The initial setup of Q8 edge™ is easy as counting 1234, setup IP address (DHCP or Static), create RDS or Web link, setup monitor resolutions and screen layout, assign RDS or Web link to the screen. It is ready to connect to assigned applications and will display the assigned applications automatically after the terminal is powered cycle.



Hybrid RDS and Web-based applications

Hybrid RDS and Web-based applications provisions can be created. It can launch Remote Desktop and Web based applications simultaneously. Arista's Q8 edge™ OS has a built-in interface for assigning RDS and Web link to connect. The Remote Desktop Services will be displayed, the built-in browser will be launched with assigned Web link automatically after power on or reboot.



Remote Management

Q8 edge™ provides a secured remote management via browser. It allows remote mirror interactively. Administrator can login with password, to view and do just like mirror the Q8 edge™ to other unit.



SSL/TLS Certificate Installation

Q8 edge™ allows an SSL/TLS certificate installation and to be verified by browsers to prevent "not secure" warnings. SSL/TLS certificate installation is a digital document that binds a cryptographic key to an organization's details, enabling HTTPS encryption and authentication for websites. It secures data transmission, boosts visitor trust, and is verified by browsers.



Active Directory

Q8 edge™ provides a channel to authenticate users' login via Active Directory or Remote Desktop Server. An authenticated user's credential can be entered in Q8 edge™ settings and Q8 edge™ terminal automatically login to the Remote Desktop Server when it boots up.



ID card

Near-field communication (**NFC**) and Radio Frequency Identification (**RFID**) cards can be used as authenticators to login Remote Desktop Services. With RFID or NFC reader, you can use ID card or tag to swiped or tapped for RDS login. An UUID can be established and linked with users' credential in Active Directory or Remote Desk Server.

Product Features



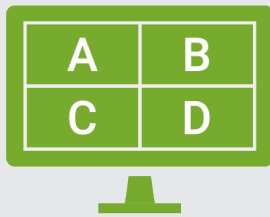
Multi-Monitor

With multiple-monitors capable hardware, Q8 edge™ can significantly boost productivity and improve workflow efficiency. Dual monitor setups, in particular, allow users to have multiple applications open simultaneously, making multi-tasks much easier.



Clone / Duplicate Screens

Cloning (or duplicating) screens on two (multiple) monitors means both screens display the same content. This is useful for one operator operating at multiple locations.



Split Screens Multi-View

Q8 edge™ allows multiple applications to be displayed on a single screen. Multiple RDS and Web-based applications provisions can be assigned to one single screen. The applications can be displayed one by one by toggling hot key or all applications will be displayed by split screen.



Touch Screen

Q8 edge™ OS has pre-installed touch screen drivers to support ELO and eGalaxTouch. Multiple touch screens are supported as well. Both 5-wire resistive touch and Projected Capacitive Touch are supported.



Virtual Keyboard

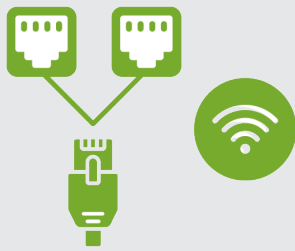
Q8 edge™ provides a software-based virtual keyboard that allows you to input text or commands using touch screen instead of a physical keyboard. It is useful for a terminal with only touch screen equipped. The size of virtual keyboard can be adjusted in settings. The position of virtual keyboard to be displayed on the screen can be adjusted in the settings as well.



Applications Redundancy

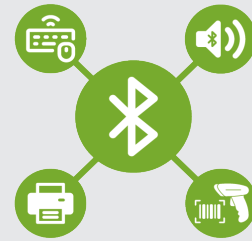
Application redundancy ensures that if a primary application or system component fails, a backup / secondary application can immediately take over, allowing for uninterrupted operations. It improves reliability, ensure continuous availability, and prevents single points of failure.

Supported Optional Hardware



Wired and WiFi Network

Q8 edge™ supports dual Ethernet ports to be configured as redundant LAN ports or two independent LAN ports connecting two different networks. It supports 802.11ax WiFi 6E hardware as well when WiFi hardware is installed. **Wi-Fi 6**, or **IEEE 802.11ax**, is an IEEE standard from the Wi-Fi Alliance, for wireless networks (WLANs). It operates in the 2.4 GHz and 5 GHz bands,[3] with an extended version, **Wi-Fi 6E**, that adds the 6 GHz band.[4] It is an upgrade from Wi-Fi 5 (802.11ac), with improvements for better performance in crowded places.



Bluetooth

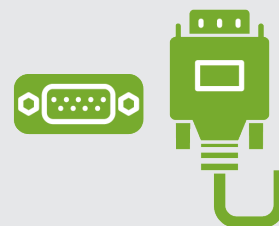
Q8 edge™ supports Bluetooth 5.3 hardware and theoretically allows for a maximum of seven simultaneous connections. However, the practical limit is often lower, typically around three or four devices.

Bluetooth 5.3 introduces a multitude of enhancements, enhancing its speed, security, and reliability compared to its predecessors. An outstanding improvement in Bluetooth 5.3 lies in its expanded range, now capable of covering distances of up to **240 meters**. Bluetooth 5.3 also showcases a significant upgrade in data transfer rates, reaching a theoretical maximum speed of **2 Mbps**. This represents a doubling in speed compared to the previous version.



Audio Redirection

Audio redirection in the context of remote desktop services refers to the ability for applications running on a remote desktop server to play sounds or record audio through devices on the Q8 edge™ terminal. This allows remote alarm applications to send audio alarm to the speakers attached to Q8 edge™ terminals.



RS-232 Redirection

RS-232 redirection allows a remote desktop service to communicate with devices connected to Q8 edge™ terminal's RS-232 serial ports. Q8 edge™ supports up to 4x RS-232 ports redirection.



USB Drive Redirection

The USB drive function is disabled automatically after the system boot up. The USB drive will be enabled when USB drive redirection is enabled. USB disk redirection allows a Remote Desktop Services to access and utilize USB drives connected to Q8 edge™ terminal's USB ports. This enables users to transfer and work with files on the remote session as if the USB drive was directly connected to the remote desktop server.

