Q-SYS Core 610

KEY FEATURES

- Q-SYS OS paired with enterprise-grade Dell server hardware

- 256 x 256 networked audio channels (Q-LAN / AES67); up to 384 x 384 with optional feature license

- 64 x AEC processors (up to 96 with optional feature license)

- 8 x 8 Dante audio channels (up to 128 x 128 with optional feature license; 256 x 256 license tier coming soon with Q-SYS Designer Software v9.8)

- Supports 14 Q-SYS NM-T1 network microphones (up to 21 with optional feature license)

- Up to 64 VoIP softphone instances

- 64 x 64 Media/WAN streaming capacity

- 16 multitrack playback channels (up to 128 with optional feature license)

- 4 multitrack record channels

- Q-SYS Core 610 scaling license enables increased processing power and expanded network audio I/O, Media/WAN streaming, AEC capacity, and Q-SYS microphone capacity (coming soon with the release of Q-SYS Designer Software v9.7)

- Deterministic and fixed analog audio input to output system latency of 3.167 ms

- Dual gigabit Ethernet ports for redundant networked audio

- Two (2) independent, gigabit auxiliary Ethernet ports for segregation of network services such as VoIP, SNMP, LLDP, LDAP and WAN Media streaming

- Onboard 480 GB media drive

- iDRAC monitoring for integration with IT monitoring systems

- 1RU form factor

Q-SYS Core 610

COTS Network I/O Processor

The Q-SYS Core 610 represents the next-generation of Q-SYS processing, pairing the Q-SYS OS with an enterprise-grade Dell COTS server to deliver a flexible and scalable audio, video and control solution for a vast range of larger scale applications. It is a fully networked AV&C processor, letting you centralize processing for multiple spaces or zones while distributing network I/O where it's most convenient.

Q-SYS + DELL

Through its partnership with Dell, Q-SYS deployed the full-featured, software-based foundation of the Q-SYS OS on an industry-tested Dell server to deliver a uniquely flexible and scalable audio, video, and control solution. Like the rest of the Q-SYS processing portfolio, the Core 610 offers a configurable audio DSP, full-featured control engine and network-based video switching in a single processor, greatly simplifying system design and deployment.

NETWORK-BASED AV&C SOLUTION

The Core 610 is a fully-networked AV&C processor, providing the flexibility to centralize the location of the processor and use it across multiple rooms, and then position your desired I/O (either native Q-SYS Products or third-party devices) closer to the endpoints, resulting in a more streamlined system topology. Additionally, leveraging the network makes deploying the same room type across a building or campus simpler and more cost-effective.

RIGHTSIZE FEATURE SETS AT THE SOFTWARE LEVEL

Q-SYS Scaling and Feature licenses let you tailor system capabilities to your specific application through simple firmware updates.

The *Q-SYS Core 610 Scaling license* increases the overall power of the processor, increasing capacity for total network channels, Media/WAN streaming channels, AEC channels and Q-SYS NM Series microphone capacity – all without the need for additional hardware. This license will be available with the release of Q-SYS Designer Software v9.8 in mid-2023.

The *Q-SYS Scripting Engine feature license* provides the tools for simple third-party device integration while the *Q-SYS UCI Deployment feature license* enables robust user control interfaces without complex programming.

DESIGNED FOR Q-SYS

The Q-SYS Core 610 is part of Q-SYS, a cloud-manageable audio, video, and control platform built to deliver flexible, scalable AV solutions into the future.

Q-SYS Core 610

Hardware

Platform	Dell PowerEdge R250
Power	1x universal input, 450 W PSU module
LAN	4x 1000 Mbps ports (2x Q-SYS Multimedia, 2x Q-SYS Aux)
iDRAC	1x dedicated 1000 Mbps iDRAC v9, basic license
RS232	1x DB-9 RS-232 port (rear panel), 16550-compliant
Ventilation	Forced air – front intake, rear exhaust
Additional info	Refer to Dell Specification Sheet and Technical Guide

Controls and Indicators

Front	Power button ID button and indicator (blinks when enabled from Q-SYS Designer Software) LCD display with navigation buttons (displays Q-SYS Core hostname or Core IP address)
Rear	ID button and indicator (blinks when enabled from Q-SYS Designer Software)

Q-SYS Capacities

Q-SYS Capacities	Base features	with optional Q-SYS Core 610 Scaling license
DSP processing power (relative to Q-SYS Core Nano)	16x	24x
Network audio I/O (Q-LAN / AES67)	256 x 256	384 x 384
AEC channels (at 200 ms tail length)	64	96
WAN / media streaming channels	64 x 64	96 x 96
Q-SYS NM-T1 capacity	14	21
Dante network I/O	8 x 8 included (up to 128 x 128 with Software-based Dante feature license; 256 x 256 license tier coming soon with Q-SYS Designer Software v9.8); Dante utilization subtracts from Q-LAN capacity	
VoIP softphones	64	
Audio recording / playback	4 channels recording / 16 channels playback, expandable up to 128 channels playback with optional license	
Media drive	480 GB (approximately 440 GB available for user media)	

Packaging and Accessories

Product dimensions (L x W x H)	23.56 x 18.98 x 1.69 in (598.4 x 482.1 x 42.9 mm)
Product weight	27.51 lb (12.48 kg)
Shipping carton dimensions (L x W x H)	36.31 x 23.38 x 9.5 in (922.3 x 593.9 x 241.3 mm)
Shipping weight	35 lbs (15.88 kg)
Included Accessories	Static rail kit for square hole racks, EIA-310-E compliant Dell standard OEM bezel Regulatory statements pamphlet 1x AC mains power cord Q-SYS Quick Start Guide

Q-SYS™

+1·800·854·4079 | +1·714·754·6175 | WWW.QSYS.COM