

## Q-SYS SPA-Q Series Network Amplifiers

### KEY FEATURES

- Two or four output channel models at 60 W per channel
- Two onboard software-definable flex channels (as mic/line inputs with 48V phantom power, or as line level outputs)
- Four bi-directional GPIO connections
- Discrete half-rack, 1RU footprint and included mounting hardware
- Network operability enables close proximity installation to connected loudspeakers and other in-room endpoints



### Q-SYS SPA-Q Series Network Amplifiers

Small-format network amplifier with onboard Flex I/O

The Q-SYS SPA-Q Series network amplifiers continue the Q-SYS Platform evolution of pairing centralized Core OS processing with expanding network endpoint utility, delivering rightsized amplification as well as flexible Q-SYS system configuration and control to a wide variety of space-types.

### BENEFITS

**Rightsized for Smaller Spaces:** With two or four output channel models at 60 W per channel, the Q-SYS SPA-Q network amplifiers bring the audio quality you've come to expect into compact high-impact spaces. The half-rack, 1RU footprint and included hardware for multiple mounting options allows for flexible placement within your rooms, including within podiums or behind monitors, and its convection-cooled design means that you can rely on quiet, continuous performance.

### Feature-Focused System Design and Scalability:

The Q-SYS SPA-Q Series network amplifiers operate on your network, so you can install your amplifier closer to its connected loudspeakers and other in-room endpoints, freeing you to choose between placing your Q-SYS Core processor in-room, OR centralizing it to serve multiple spaces around the building.

Q-SYS SPA-Q Series network amplifiers join a host of other Q-SYS products (like QIO Series as well as Q-SYS Feature and Scaling Licenses) that pair perfectly with smaller Q-SYS Cores (like the Q-SYS Core Nano processor) to decouple the physical I/O from the processor and allow for an unmatched degree of system customization and scalability without over investing in unused onboard I/O channels or processing power.

### Untethered Processing Through Flexible

**Network I/O Endpoints:** SPA-Q models feature convenient additional audio and control integration points into your Q-SYS system. Two onboard software-definable flex channels (as mic/line inputs with 48V phantom power, or as line level outputs) route legacy analog microphones anywhere on the network or provide signal to an external recorder. Leverage the available onboard GPIO to power/control microphone LEDs or any required sensors or buttons using four bi-directional GPIO pins.

**Designed for Q-SYS:** The Q-SYS SPA-Q Series network amplifiers are native to Q-SYS, a cloud-manageable audio, video and control platform, built to deliver scalable, flexible AV solutions well into the future. At its foundation, the **Q-SYS OS** serves as the software foundation that manages your Q-SYS SPA-Q network amplifiers, along with a multitude of other native **Q-SYS Products** in the platform. Additionally, the modern IT architecture and development tools of the Q-SYS Platform enable an entire Ecosystem of third-party devices developed by approved **Q-SYS Partners**, as well as a worldwide community of Q-SYS developers using the available tools found in **Q-SYS Open**.

## SPA-Q Network Amplifiers

	Q-SYS SPA-Qf 60x2	Q-SYS SPA-Qf 60x4
<b>POWER MATRIX</b>		
<b>Amplifier Channels</b>	2	4
<b>Single Ended*</b>		
8 $\Omega$	60 W	60 W
4 $\Omega$	60 W	60 W
16 $\Omega$	60 W	60 W
<b>BTL Power</b>		
4 $\Omega$	100 W	100 W
8 $\Omega$	120 W	120 W
16 $\Omega$	120 W	120 W
70 Vrms	120 W	120 W
100 Vrms	120 W	120 W
<b>Frequency Response (8 <math>\Omega</math>)</b>	20 Hz - 20 kHz (+0.2/-0.8 dB)	
<b>Voltage Peak Rating</b>	75 Vpk	
<b>Current Peak Rating</b>	12 Apk	
<b>Signal to Noise (20 Hz – 20 kHz)</b>	>100 dB	
Output Circuitry	Class D	
<b>Voltage Gain (Lo-Z/70 V/100 V)</b>	29/36/39 dB(Vrms/FS)	
High-Z setting (software setting)	70V RMS or 100 V RMS	
Low-Z operation range	2 - 16 $\Omega$	
<b>Controls &amp; Indicators (front)</b>	Signal (Blue), Limit (Yellow) / Protect (Red), Power (Blue), Fault (Yellow)	
<b>Flex IO Connector</b>	2 x 3.5 mm 3 position Euro (blue)	
<b>Output Connectors</b>	1 x 5 mm 4 position Euro (green) with screw locks	2 x 5 mm 4 position Euro (green) with screw locks
<b>GPIO</b>	1 x 3.5 mm 6 position Euro (Black) 4x bi-direction pins, 1 x Power Pin (3.3 V, 100 mA), 1x Ground Pin	
<b>FLEX INPUTS/OUTPUTS</b>		
Audio flex channel capacity	2	
Audio flex channel assignments	Each channel can be configured as a mic / line input or as a line output (configured through Q-SYS Designer Software)	
Input frequency response (20 Hz- 20 kHz)	+0.5 dB / -0.5 dB	
Input THD+N @1 kHz	<0.006% @ 0 dB gain (+4 dBu Input)	
Input dynamic range (analog input to amplifier output)	>109 dB	
Input impedance (balanced) @1 kHz	10.5 K $\Omega$	
Input sensitivity range (1 dB steps)	-30 dBu to +20 dBu	
Phantom power	48 V	
Mic preamp EIN (typical)	< -123 dBu	

## SPA-Q Network Amplifiers

	Q-SYS SPA-Qf 60x2	Q-SYS SPA-Qf 60x4
Output frequency response (20 Hz – 20 kHz)	+0.5 dB / -0.5 dB	
Output THD	<0.005%	
Output impedance (balanced)	100 Ω @1 kHz	
Output level range (1 dB steps)	-40 dBu to +21 dBu	
Output dynamic range	>109 dB	
Sample rate	48 kHz	
A/D – D/A converters	24-bit	
<b>MISCELLANEOUS</b>		
<b>Amplifier and load protection</b>	Short circuit, open circuit, over current, over voltage, thermal, RF, DC fault shutdown, active inrush limiting, on/off muting	
<b>AC Power Input</b>	Universal Power Supply 100 – 240 VAC + / -10%, 50 – 60 Hz with PFC	
<b>Operating Temperature Range</b>	32° - 104° F (0° - 40° C)	
<b>Storage Temperature</b>	-4° - 158° F (-20° - 70° C)	
<b>Cooling</b>	Convection	
<b>Product Dimensions (HWD)</b>	1.75 x 8.7 x 11.25 in (44 x 221 x 286 mm)	
<b>Shipping Dimensions (HWD)</b>	3.54 x 13.5 x 15 in (89.9 x 342.9 x 381 mm)	
<b>Shipping Weight</b>	6.2 lb (2.81 kg)	6.4 lb (2.90 kg)
<b>Agency Approvals (tentative)</b>	UL, CE, RoHS / WEEE compliant, FCC Class B (conducted and radiated emissions), CCC, NOM	
<b>Included Accessories</b>	Rack / wall mounting kit and power cord	

\*Power rating is after 100 mS, all channels driven



Q-SYS SPA-Qf 60x2



Q-SYS SPA-Qf 60x4



Included rack and mounting hardware