



Q-SYS™

Integrated System
Platform

Core 250i | Core 500i

Features

- Centralized processing architecture using Intel® processing
- Eight on board slots accommodate all Q-Sys I/O cards
- Abundant DSP capacity
- Uses standard Gigabit Ethernet hardware and protocols for audio transport and control
- Control and interface to external devices using TCP/IP, GPIO and RS-232
- Powerful and intuitive design GUI
- System seamlessly integrates with QSC amplifiers and loudspeakers
- Supports multiple levels of system redundancy
- Q-Sys technical support is available 24/7 – worldwide



The Integrated Core 250i and 500i bring the power and elegance of the larger Q-Sys Integrated Cores to applications requiring fewer channels. Integrated Cores have the capability of directly accommodating eight Q-Sys input and/or output cards for a total onboard channel capacity of 32 channels (more if AES or CobraNet™ cards are used – see chart below for more details). Channel count may be further expanded by the addition of Q-Sys I/O Frames and other peripheral devices.

Applications – The Integrated Q-Sys Cores are an ideal choice for boardrooms, conferencing, convention centers, entertainment venues, hospitality, houses of worship, legislative installations, performing arts, sports bars, stadiums and arenas, theme parks and transportation facilities.

Platform – Using a customized Linux OS and running on Intel® microprocessors, the Core 250i and 500i are amazingly powerful. Because Q-Sys doesn't depend on proprietary DSP hardware, it directly benefits from advancements driven by the entire global Computing / IT industry, and software improvements don't require new hardware. New capabilities are added on a regular basis. Visit www.qscaudio.com or contact your QSC representative for the latest updates.

Network – Q-Sys utilizes our IT-friendly Layer-3 Gigabit Ethernet implementation. The audio transport is low-latency (fixed at 2.5 ms from any input to any output) and based on accepted IP standards. Q-Sys will operate using a variety of available, off-the-

shelf Gigabit switches (see the QSC website for a list of qualified switches). Because it is standards based it can easily run on a shared network without segregating audio traffic via tedious VLAN configuration.

Design GUI – Q-Sys cores are configured using an intuitive object-based drag and drop user interface that provides for the creation of nearly any imaginable signal flow. Control logic objects are provided and custom scripting may also be used to accomplish a wide range of interface or control tasks. The design GUI is capable of quickly and easily generating graphical control screens that may be run on network-connected computers, tablet devices or QSC touch-screen controllers.

Scalable Redundancy – While QSC is known for and dedicated to building the most reliable products, some applications call for additional assurance. Any element of a Q-Sys system – Cores, networks, I/O Frames and even amplifiers may be deployed in a redundant configuration. The system designer has the choice of making one or all system elements redundant.

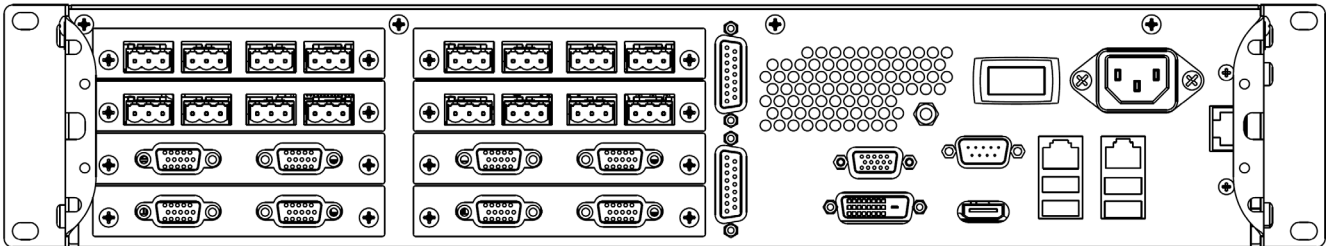
Peripherals – Q-Sys capabilities are further enhanced by a growing suite of peripheral devices including page stations, touch screen controllers and specialized I/O cards.

Q-Sys is a suite of powerful tools that make any project's requirements simple to achieve. It provides rock-solid performance backed by the unrivaled service and support QSC has built its reputation on. For more information please visit: www.qscaudio.com/products/network/QSys.

| Channel Capacity: | Core 250i | Core 500i |
|---|---|--------------|
| Maximum Realtime Channel Processing (24bit / 48kHz) | 128 Ch | 256 Ch |
| Simultaneous local channels (using any combination of analog input / output cards) | Up to 32 Ch | Up to 32 Ch |
| Simultaneous local channels (using digital CobraNet / AES cards) | Up to 128 Ch | Up to 256 Ch |
| Simultaneous network channels (using any combination of input & output) | Up to 64 Ch | Up to 128 Ch |
| Simultaneous AEC channels (routeable) | Up to 16 Ch | Up to 48 Ch |
| Additional Input channels available from WAN Rx, VoIP Softphone Rx, or Media Stream Rx components | Channel count Limited only by network bandwidth | |
| Additional Output channels available to WAN Tx, or VoIP Softphone Tx components | Channel count Limited only by network bandwidth | |

Core 250i | Core 500i | Specifications

| System Hardware | Core 250i | Core 500i |
|---------------------------|--|---------------------|
| Description | System processor and control engine | |
| Front Panel Controls | LCD page forward momentary switch Unit ID button momentary switch Clear settings momentary switch | |
| Front Panel Indicators | Power On: Blue LED; Device Status: Tri-color LED Audio Signal: 32 Tri-color LEDs Card Status: 8 tri-color LEDs 240 x 64 monochrome LCD graphics display | |
| Rear Panel Controls | Power Switch | |
| Rear Panel Connectors | RS-232: DE-9 (male 9-pin D shell connector) Video Out: HD-15 (female 15-pin D shell connector); DVI-D, HDMI (500i only) Aux USB ports: USB host (type A) x4 Aux Network Port: RJ45 10/100/1000 Mbps (switchable between Q-Sys LAN B or Aux Network Port on 250i model) GPIO ports: DA-15 (female 15-pin D shell connector) x2 Q-Sys Network LAN A: RJ45 1000 Mbps only Q-Sys Network LAN B: RJ45 1000 Mbps only (switchable between Q-Sys LAN B or Aux Network Port 10/100/1000 Mbps on 250i model) IEC inlet: AC mains power connector | |
| Available peripherals | Page Station (H)&(G), I/O Frame, I/O-22, TSC-8, TSC-3 | |
| Network Channel Capacity | 64 Flex Channels | 128 Flex Channels |
| Audio I/O Capacity | 8 card slots, up to 32 channels; Requires purchase of Q-Sys Type 2 audio I/O cards: CB, CIML4, CIML4-HP, COL4, CODP4, CAES4, CCN32 | |
| Line Voltage Requirements | 100 VAC - 240 VAC, 50 - 60 Hz | |
| Current Draw | 1.5A (120V mains) | 1.7A (120V mains) |
| Thermal | 500 BTU/h (typical) | 650 BTU/h (typical) |
| Dimensions (HWD) | 3.5" x 19" x 15" (89 mm x 482.6 mm x 381 mm) | |
| Included Accessories | 6 ft UL/CSA/IEC line cord, User Manual, Software CD | |



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Core 250i/500i Spec Sheet 02/22/13



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