

Specifications

Quantum® Connect 82, 84 and 126

TRUE 4K

Max. 4K Capabilities		
Resolution and Refresh Rate	Chroma Sampling	Max. Bit Depth per Color
3840 x 2160 at 60 Hz	4:4:4	8 bit

Frame rate	50, or 60 fps
Chroma sampling ¹	4:4:4 or 4:2:2
Color bit depth ¹	8 bits per color
Signal type	DVI 1.0, HDMI 1.4, and HDCP 1.3
Max. video data rate	4.95 Gbps (1.65 Gbps per color) per connection

NOTE: ¹Subject to the maximum data rate limit. Use our calculator at www.extron.com/4Kdata to determine video parameters supported by this data rate.

NOTE: This product requires four parallel connections to achieve 4K at 50 or 60 fps.

Video input

Number/signal type	
Quantum Connect 82 and 84 ..	8 HDMI (HDCP compliant)
Quantum Connect 126	12 HDMI (HDCP compliant)
Connectors	
Quantum Connect 82 and 84 ..	8 female HDMI
Quantum Connect 126	12 female HDMI
Horizontal frequency	31 kHz to 100 kHz
Vertical frequency	24 Hz to 85 Hz
Resolution range	640x480 to 1920x1200, 480p, 576p, 720p, 1080i, or 1080p
Formats	RGB and YCbCr digital video
Standards	DVI 1.0, HDMI 1.4, HDCP 1.3

Video processing

Maximum data rate	4.95 Gbps (1.65 Gbps per color)
Digital sampling	24 bit, 8 bits per color, 165 MHz pixel clock
Colors	16.78 million (8 bit processing)

Video output

Number/signal type	
Quantum Connect 82	2 HDMI (HDCP compliant)
Quantum Connect 84	4 HDMI (HDCP compliant)
Quantum Connect 126	6 HDMI (HDCP compliant)
Connectors	
Quantum Connect 82	2 female HDMI
Quantum Connect 84	4 female HDMI
Quantum Connect 126	6 female HDMI
Vertical frequency	50 Hz, 60 Hz

Scaled resolutions.....	640x480 ^{1,2} , 800x600 ^{1,2} , 848x480 ^{1,2} , 1024x768 ^{1,2} , 1152x870 ^{1,2} , 1280x768 ^{1,2} , 1280x800 ^{1,2} , 1280x1024 ^{1,2} , 1360x768 ^{1,2} , 1366x768 ^{1,2} , 1440x900 ^{1,2} , 1400x1050 ^{1,2} , 1408x1050 ^{1,2} , 1600x1200 ^{1,2} , 1680x1050 ^{1,2} , 1920x1200 ^{1,2} HDTV: 720p ^{1,2} , 1080p ^{1,2} ¹ = at 50 Hz, ² = at 60 Hz
Standards	DVI 1.0, HDMI 1.4, HDCP 1.3

Communications – processor/decoder/scaler

Ethernet ports.....	1 female RJ-45 connector for control, networked
Ethernet data rate	10/100Base-T, half/full duplex with autodetect
Ethernet protocol	IP, TCP
Ethernet default settings	Link speed and duplex level = autodetected IP address = 192.168.254.254 Subnet mask = 255.255.0.0 Gateway = 0.0.0.0 DHCP = not supported

Storage

Quantum Connect 82 and 84 ..	80 GB (1 IDE drive)
Quantum Connect 126.....	C drive: 512 MB (1 solid state drive) D drive: 256 MB (1 solid state drive)
Internal operating system.....	Microsoft® Windows® XP® embedded
Program control.....	Extron Quantum Connect control/configuration software for Windows

NOTE: The operating system is hard-coded into the Quantum Connect and Windows updates are not required. The C drive, which contains the operating system, is write protected to prevent unauthorized access.

Communications – setup and troubleshooting

Number/signal type.....	1 analog VGA-UXGA RGBHV local monitor 2 USB 1 PS/2 mouse and keyboard
Connectors.....	1 female 15-pin HD 2 USB type A 1 female PS/2 (6-pin mini DIN) (Breakout cable to 2 PS/2 connectors is included.)
USB standards	USB 2.0, low speed

General

Power supply	
Quantum Connect 82 and 84 ..	Internal Input: (1) 100-240 VAC, 50-60 Hz
Quantum Connect 126.....	Internal Input: (2*) 100-240 VAC, 50-60 Hz *A redundant power supply is standard
Power consumption.....	300-500 watts (varies with configuration)
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 85%, noncondensing Operating: +35 to +95 °F (5 to +35 °C) / 10% to 85%, noncondensing
Cooling	Fans, front to rear
Thermal dissipation.....	300-900 BTU/hr (varies with configuration)
Mounting	
Rack mount.....	Yes
Enclosure type	Metal

Enclosure dimensions

Quantum Connect 82 and 84 ..	7.0" H x 17.1" W x 19.3" D (4U high, full rack wide) (17.8 cm H x 43.3 cm W x 49.0 cm D) (Depth excludes connectors and handles. Width excludes built-in rack ears.)
Quantum Connect 126	10.5" H x 17.1" W x 19.3" D (6U high, full rack wide) (26.67 cm H x 43.3 cm W x 49.0 cm D) (Depth excludes connectors and handles. Width excludes built-in rack ears.)

Product weight

Quantum Connect 82 and 84 ..	41 lbs (18.6 kg)
Quantum Connect 126	51 lbs (23.1 kg)

Vibration ISTA 1A in carton (International Safe Transit Association)

Regulatory compliance

Safety	CE, c-UL, UL
EMI/EMC.....	CE, FCC Class A
Environmental.....	Complies with the appropriate requirements of RoHS, WEEE.

Warranty 3 years parts and labor

NOTE: All nominal levels are at $\pm 10\%$.

NOTE: Specifications are subject to change without notice.

NOTE: Shipping weights and dimensions are available at www.extron.com.

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