

Q-Series

Q-4300 Modular Chassis

*High Reliability - Rack Space Saving
Video and Audio Extension Solution*

Q-4300 Chassis Quad Interface Modules

Module Options (sold separately):

Velocitydvi Module 3: One single-link DVI display
 Velocitydvi Module 3 A/V+: One single-link DVI display, audio and serial
 Velocitydvi Module 3 A/N+: One single-link DVI display, audio and network
 Velocitydvi Module 6: One dual-link DVI display
 Velocitydvi Module 6 A/V+: One dual-link DVI display, audio and serial
 Velocitydvi Module 6 A/N+: One dual-link DVI display, audio and network
 SDI Xtreme 3G+ Module: Two SD/HD signals or one 3G/dual-link signal and RS-422

Fiber Options Include:
 Single-Mode
 Multi-Mode



The Logical Solution - Modular Video, Audio and Network Extension

The Q-4300 chassis allows users to locate DVI and SDI monitors (via fiber) from just a few meters up to 40 kilometers away from the controlling computer, securely and without the loss of resolution. The Q-4300 is a rack space saving, high reliability solution providing a rack mount for up to 4 modules of DVI or SDI in a compact 1U chassis. DVI and dual-link DVI modules are available with options for audio and networking. Each SDI module supports two SD/HD signals or one 3G signal (as well as dual-link HD-SDI). DVI modules are powered by Thinklogical's cutting edge, patent-pending MRTS (Multi Rate Transmission System) technology, this enables the module to transport every frame of a DVI video stream seamlessly, with no compression, or dropped frames. Ready for the challenges of demanding applications, the Q-4300 can combine any variety of DVI or SDI modules in transmit/receive units for a space saving and cost effective solution.

The Q-4300 is a total system solution providing industry leading performance and full compatibility with Thinklogical's entire line of VelocityDVI extenders, SDI Xtreme 3G+ extenders, as well as the VX and HDX Router line of products. Providing reliable media conversion for a wide variety of applications, it is an ideal solution for commercial A/V, command and control centers, universities, large scale digital signage, broadcast, corporate studio applications including video production and editing, sports tele-production, field production, cross-town fiber links, cross on-campus production, pre-fibered venues, courtesy feeds and many more.

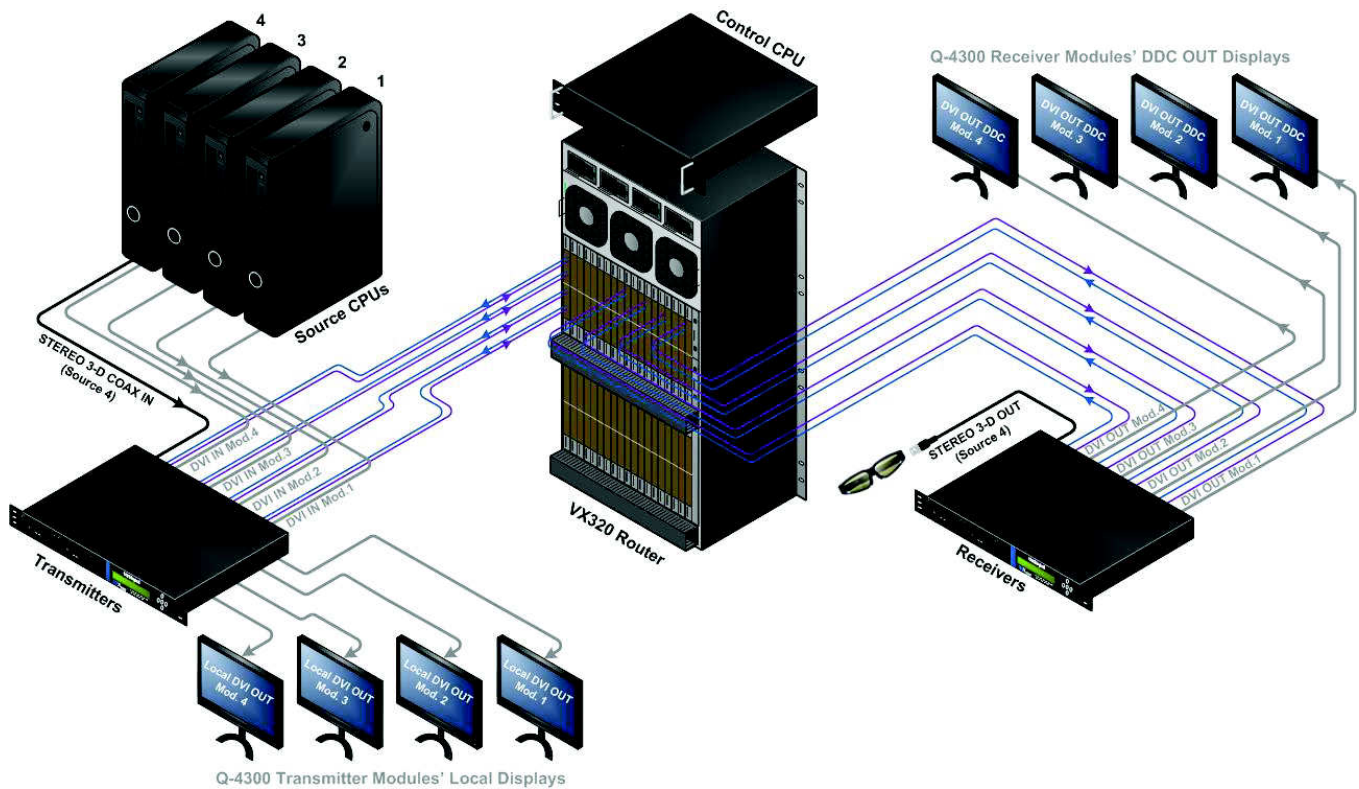
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High Reliability System Architecture Saves Rack Space

The Q-4300 is the only extension product in the marketplace that provides high reliability with all of the essential features and functions necessary in mission critical environments. System architecture provides hot-swappable, current sharing power supply modules, a critical component in high up-time environments which typically are supported by more than one power grid as a failover option. In the unlikely event that a power module fails, there is no interruption to the component because they are both functioning. In addition, a dry contact annunciator provides an alarm warning in the event of a power failure or a unit overheating, this allows for replacement installation with minimal downtime. A front panel LCD is also available to provide status monitoring and link activity.

The Q-4300 has a versatile modular design which allows the unit to be used in a variety of applications, as either a transmitter, receiver, or even a transceiver. In addition, the Q-4300 chassis is designed with quad, hot-swappable interface modules. Interfaces can support single-link or dual-Link DVI display connections, along with full duplex stereo audio, stereo emitter, and serial RS-232 or network, as well as SD/HD or 3G signals and RS-422.

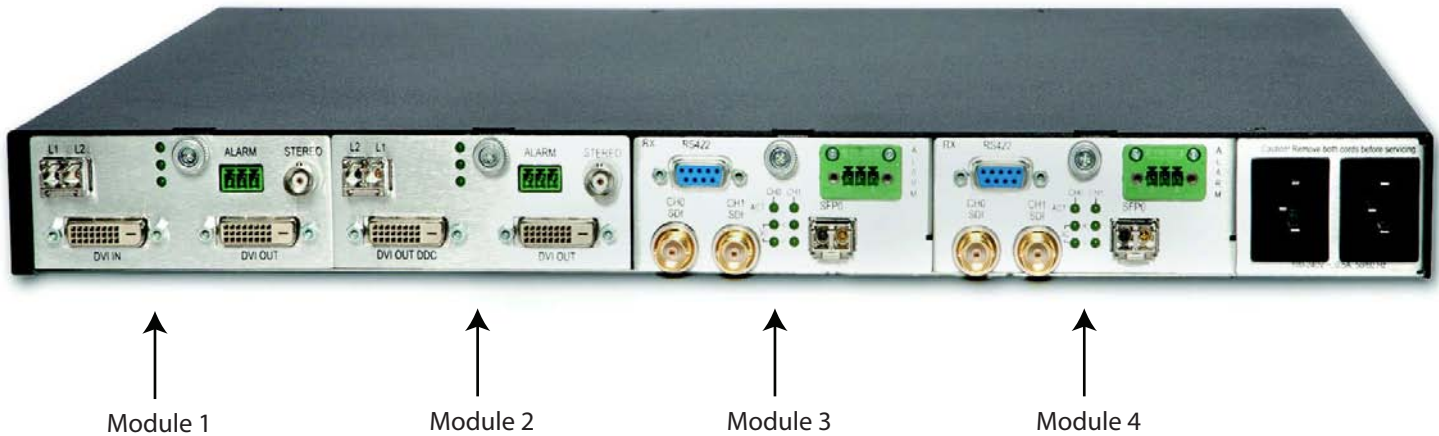
Q-4300 Transmitter and Receiver Chassis Equipped with Four Interface Modules System Application Example



Application Description: Four functional source computers each connected to a Q-4300 chassis equipped with four Velocitydvi Module 3 transmitter interface components, which extends dvi video signals to one Q-4300 receiver chassis equipped with four Velocitydvi Module 3 receiver interface components. Signals are routed through the Thinklogical VX 320 router.

Installation possibilities are expanded with built-in support for either multi-mode or single mode fiber, making this a convenient and cost effective solution to combat the restrictions involved with the distribution of uncompressed broadcast quality video signals over long distances. In addition, the standard SFP+ optics (with LC connectors) are hot swappable/pluggable.

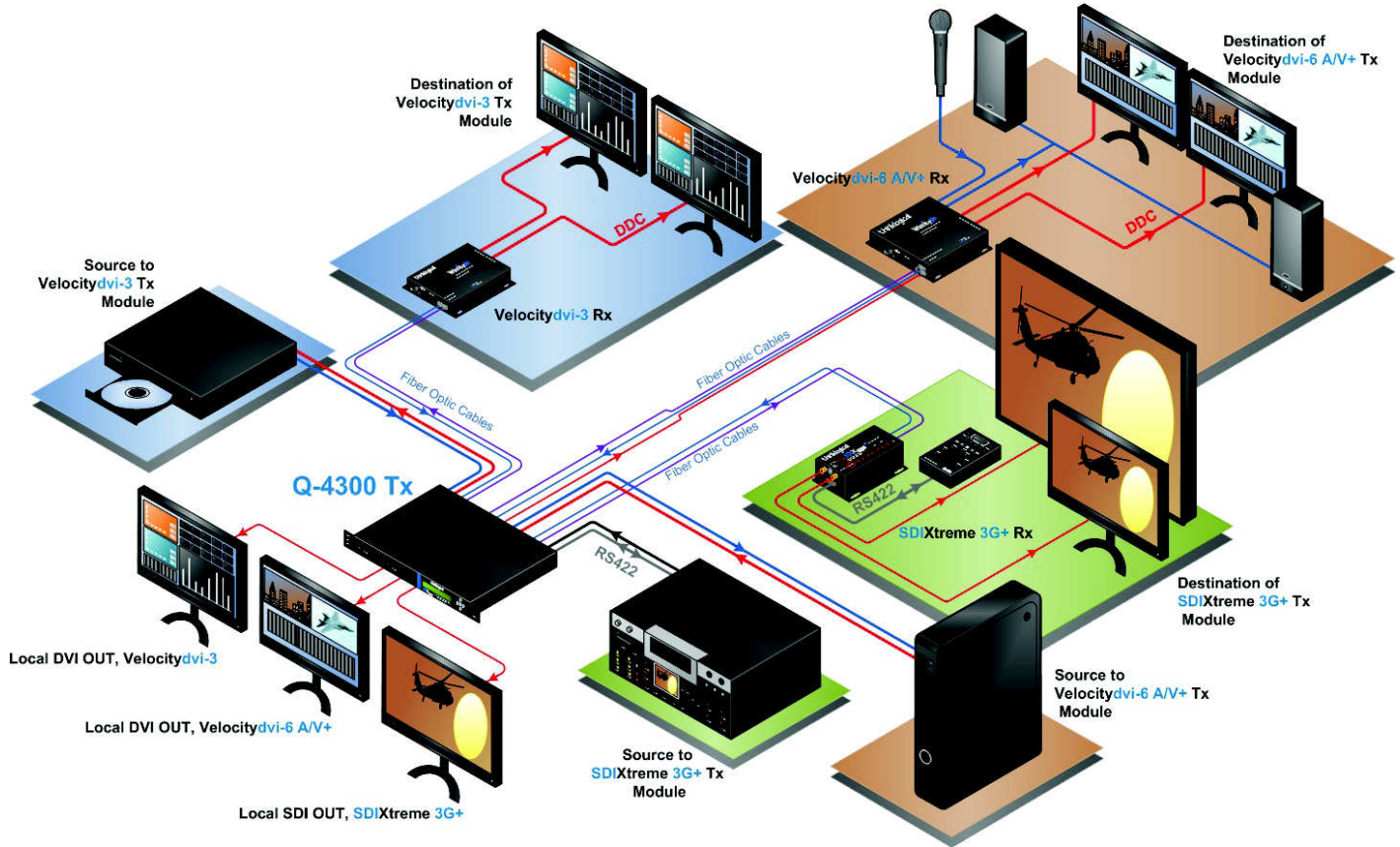
Q-4300 Chassis Back View - Configured with DVI and SDI Interface Modules



Key Features

- Quad, hot-swappable interfaces interface module options (sold separately):
 - Velocitydvi Module 3: One single-link DVI display
 - Velocitydvi Module 3 A/V+: One single-link DVI display, audio and serial
 - Velocitydvi Module 3 A/N+: One single-link DVI display, audio and network
 - Velocitydvi Module 6: One dual-link DVI display
 - Velocitydvi Module 6 A/V+: One dual-link DVI display, audio and serial
 - Velocitydvi Module 6 A/N+: One dual-link DVI display, audio and network
 - SDI Xtreme 3G+ Module: Two SD/HD signals or one 3G/dual-link signal and RS-422
- Dual, current sharing, hot-swappable power supplies
- MRTS technology 6.25Gbps allows for full frame rate transmission of uncompressed DVI
- All models are available with standard LC type fiber connectors
- Supported SDI Standards - SMPTE 424M, 292M, 259M, 372M and 425 level A and B compliant
- Single-mode or multi-mode fiber options extend signals up to:
 - 350 meters using multi-mode fiber type OM2
 - 750 meters using multi-mode fiber type OM3
 - 1000 meters using multi-mode fiber type OM4
 - 40 kilometers (24 miles) using single-mode fiber
- Stereo emitter for active 3D applications
- Simple plug and play
- A dry contact annunciator provides an alarm warning in the event of a power failure or a unit overheating
- Front panel status monitoring and control
- Fully compatible with Thinklogical's Velocitydvi and SDI Xtreme 3G+ Extension Systems
- Fully compatible with Thinklogical's VX and HDX Router lines

Q-4300 Transmitter and Receiver Chassis Equipped with Three Interface Modules System Application Example



Application Description: Three sources each connected to a Q-4300 chassis transmitter which extends DVI and SDI video, audio and serial signals to three destinations at separate workstation locations. Thinklogical receiver components used: one Velocitydvi-3 receiver, one Velocitydvi-6 A/V+ receiver, and one SDI Xtreme 3G+ receiver.

DESIGN NOTE: Modules with audio and network capability (Velocitydvi Module 3 A/V+, 3 A/N, 6 A/V+, and 6 A/N+) will reside in two interface modules slots.

Specifications

Video Resolution	Velocitydvi Module 3: DVI-D all single-link DVI resolutions Velocitydvi Module 6: DVI-D all single and dual-link DVI resolutions SDI Xtreme 3G+ Module: SMPTE 259, 292, 424, 372, 425 Level A and B
Operating Temp.	0°-50°C; (32°-122°F)
Humidity	5-95% RH, non-condensing
Dimensions	Rack Size: EIA 19" Height: 1U-1.79" (45 mm) Depth: 14.02" (356 mm) Width: 17.49" (444 mm) (Tolerance: ± .039"; .100cm)
Weights	Weight: 15 lbs (4.99 kg) per unit Shipping Weight: 30 lbs (12.25 kg) pair
Power Consumption	50 watts per unit (with 4 modules installed)
Optical Cable	Single-mode and multi-mode over eight to twelve fibers - CWDM available over single fiber Fiber is available, not supplied
Optical Distance	Up to 50 meters using 62.5/125um, type OM1; Up to 350 meters using 50/125um, type OM2 Up to 750 meters using 50/125um, type OM3; Up to 1000 meters using 50/125um, type OM4; Up to 40 kilometers using 9/125um, type OS2 (single-mode)
Compliance	Approvals for US, Canada, and European Union
Warranty	12 months from date of shipment - extended warranties available

Connectors

Transmitter		Receiver	
Video	Velocitydvi Module 3 and 6 DVI-D (2) SDI Xtreme 3G+ BNC (2)	Video	Velocitydvi Module 3 and 6 DVI-D (2) SDI Xtreme 3G+ BNC (2)
Audio MIC	3.5mm Jack	Audio MIC	3.5mm Jack
Audio LINE	3.5mm Jack	Audio LINE	3.5mm Jack
Serial Port - Velocitydvi	DB9 Female	Serial Port	DB9 Male
Serial Port - SDI Xtreme 3G+	DB9 Female	Serial Port	DB9 Female
Network	RJ45 Female	Network	RJ45 Female
Fiber Connectors	LC for Multi-Mode and Single-Mode	Fiber Connectors	LC for Multi-Mode and Single-Mode

Cables Included: USB A to USB B cable, 1.8 meters

Cables Included: USB A to USB B cable, 1.8 meters

Module 3 Models:

Single-link DVI-D, 2 meters (1)

Module 6 Models:

Dual-link DVI-D, 2 meters (1)

A/V+ Models:

Single-link DVI-D, 2 meters (1) or Dual-link DVI-D, 2 meters (1)

3.5 mm male to male, 1.8 meters (2)

RJ45 cable, 2 meters (2)

DB9M-RJ45 (ADP-000019-R) (1)

DB9F-RJ45 (ADP-000025-R) (1)

A/N+ Models:

Single-link DVI-D, 2 meters (1) or Dual-link DVI-D, 2 meters (1)

3.5 mm male to male 1.8 meters (2)

RJ45 cable, 2 meters (2)

Q-Series Ordering Information

VQS-004300 Q-4300 QUAD MODULE RACK MOUNT CHASSIS

Q-Series Compatible Modules:

VQM-000003-LCTX Q-4300 MODULE, SINGLE LINK DVI, DDC, TX, LC
 VQM-000003-LCRX Q-4300 MODULE, SINGLE LINK DVI, DDC, RX, LC
 VQM-000006-LCTX Q-4300 MODULE, DUAL LINK DVI, DDC, TX, LC
 VQM-000006-LCRX Q-4300 MODULE, DUAL LINK DVI, DDC, RX, LC
 VQM-AV0003-LCTX Q-4300 MODULE, SINGLE LINK DVI, DDC, AUDIO, SERIAL, TX, LC
 VQM-AV0003-LCRX Q-4300 MODULE, SINGLE LINK DVI, DDC, AUDIO, SERIAL, RX, LC
 VQM-AV0006-LCTX Q-4300 MODULE, DUAL LINK DVI, DDC, AUDIO, SERIAL, TX, LC
 VQM-AV0006-LCRX Q-4300 MODULE, DUAL LINK DVI, DDC, AUDIO, SERIAL, RX, LC
 VQM-AN0003-LCTX Q-4300 MODULE, SINGLE LINK DVI, DDC, AUDIO, NETWORK, TX, LC
 VQM-AN0003-LCRX Q-4300 MODULE, SINGLE LINK DVI, DDC, AUDIO, NETWORK, RX, LC
 VQM-AN0006-LCTX Q-4300 MODULE, DUAL LINK DVI, DDC, AUDIO, NETWORK, TX, LC
 VQM-AN0006-LCRX Q-4300 MODULE, DUAL LINK DVI, DDC, AUDIO, NETWORK, RX, LC

SDM-M100X1-LCTX SDI XTREME 3G+ with RS422 RACK MOUNT MODULE, TWO INPUT MULTIPLEXER, ONE SFP, TX, LC
 SDM-M100X1-LCRX SDI XTREME 3G+ w/ RS422 RACK MOUNT MODULE, TWO INDIVIDUAL DE-MULTIPLEXED SDI OUTPUTS,
 ONE SFP, RX, LC

SDM-L100X1-LCTX SDI XTREME 3G+ with RS422 RACK MOUNT MODULE, ONE INPUT WITH LOOPOUT, ONE SFP, TX, LC
 SDM-C100X1-LCRX SDI XTREME 3G+ with RS422 RACK MOUNT MODULE, TWO SDI OUTPUTS, ONE SFP, RX, LC
 SDM-000MX1-LCTX SDI XTREME 3G+ RACK MOUNT MODULE, MULTIMODE, TX, LC
 SDM-000MX1-LCRX SDI XTREME 3G+ RACK MOUNT MODULE, MULTIMODE, RX, LC

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100 Washington Street
 Milford, CT 06460 USA

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Contact a Thinklogical Sales Representative at
sales@thinklogical.com or (203) 647-8700