

Platinum VX

Small to Midsize Router

Platinum™ VX is a line of affordable, small-to-midsized utility video routers.

With its four frame sizes, the Platinum VX supports matrices from 16x16 up to 288x288. Featuring a highly robust and fault-tolerant architecture, the routers deliver the flexibility to handle all types of video signals reliably. An exceptionally dense and powerful series of 3G/HD/SD routers, the Platinum VX comes standard with built-in Magellan™ set-up and configuration utilities. When implemented as part of a larger routing system in a hybrid environment, Platinum VX can seamlessly operate under the overarching management of the , which provides a seamless path to IP while maintaining standard routing and broadcast workflows.

Benefits

- Four frame sizes – Supports a variety of matrix requirements (from 16x16 up to 288x288)
- Built-in Magellan control – Eliminates need for external controller in system set up and configuration, simplifying and speeding up the process
- Fiber and electrical connectivity – Uses SFP and HD-BNC modules for complete configuration flexibility
- Industry-proven – Optimizes widely deployed, state-of-the-art Platinum router technology, delivering high quality and reliability
- Unmatched density – Offers the highest density per rack unit of any SDI video routing system
- Clean and Quiet – Provides this capability in a 1RU version, eliminating downstream signal interruption
- Future-proof flexibility – Enables upgrade of the 4RU and 8RU frames in the field as routing demands change

Features

The Platinum VX video router line supports matrix sizes from 16x16 to 288x288 in four different frame sizes:

- 1RU (16x16 HD-BNC as standard with SFP cages for expansion to 32x32)
- 1RU Clean & Quiet
- 2RU (48x48 and 72x72 HD-BNC)
- 4RU (144x144 modular I/O with optional SFP connectivity)
- 8RU (288x288 modular I/O with optional SFP connectivity)

Clean and Quiet Processing

Two channels of clean and quiet output each with access to all inputs on the device. Each channel is independent and supports a variety of transition types including, V-fade, Cut-fade, fade-cut, and cross fade, in addition to an immediate cut transition.

True Preview Capability

The operation is similar to a master control switcher. The preview output shows sources immediately as they are selected on the program bus. This allows the operator to visually check what sources they are preparing to bring to the program output. Once the proper source has been identified on the preview bus, simply pressing Take initiates the transition to the program output.

Density

Using HD-BNC and SFP connectivity, Platinum VX offers unmatched density for an SDI video routing system.

Wide range of supported signal types from 3Mb/s to over 3Gb/s

- SD-SDI & HD-SDI to 1080p (3Gb/s)
- ASI, SMPTE 310, SMPTE 305, etc.

- 4K and graphic routing beyond 3Gb/s supported via multiple paths
- Legacy analog video supported via conversion to/from SD-SDI on SFP I/O

Control Panels

The full line of Magellan control surfaces can be used with the Platinum VX. Multiple panels can be used on a single frame, as required, for individual routing needs. Magellan control panels are ultra-thin, less than 2" in depth. This allows them to be placed anywhere that is convenient for the operational need of the router. They can be mounted in the rack with the Platinum VX or placed in a remote location.

Control System

Platinum VX leverages the Magellan Controller software developed for the larger Platinum IP3. All set up and configuration functions are available through the web interface housed within each of the four frames. Simple database programming is achieved when in standalone mode. The Platinum VX router can also be programmed to be part of a larger system under the Magellan Controller, along with larger routers.

Applications

With four different physical sizes, the Platinum VX can be used for practically any application. The 1RU and 2RU sizes are ideal for space-restricted, small matrix requirements, while the 4RU and 8RU versions are future-proofed and ideal for larger matrix requirements

The Platinum VX can also coexist in a system along with Platinum MX or Platinum IP3. Under the Magellan control system, tie-lines can be created to connect Platinum VX, Platinum MX and Platinum IP3 frames into a single system.

1RU Frame

The Platinum VX 1RU frame has a single electrical back module offering a standard 16 inputs and 16 outputs. Optional SFP modules can be added to the SFP cages, offering up to an additional 16 inputs and outputs, providing up to 32x32 I/O in a single rack unit. Supported SFP modules include optical (dual CWDM or dual 1310), dual HDBNC, analog conversion and HDMI. The power supplies for the 1RU Platinum VX are external to the frame and can support full redundancy.

1RU Frame with Clean & Quiet Capability

The Platinum VX 1RU Clean and Quiet router supports video switching of a 16x2 matrix with an additional 12 outputs of unprocessed video routing. Using the SFP card cages that are included with the product, the input capability can be expanded to support a total of 32 inputs. The output side of the router can also be expanded to support a total of 28 unprocessed outputs in addition to the two clean and quiet (processed) outputs. SFP expansion can support a mixture of additional HD BNC, optical fiber, analog video, and HDMI connections.

2RU Frame

The Platinum VX 2RU frame can be ordered in two configurations. The power supplies for the 2RU Platinum VX are external to the frame and can support full redundancy.

Orderable configurations:

48 x 48 HDBNC I/O

72 x 72 HDBNC I/O

4RU Frame

The Platinum VX 4RU frame is a modular design that enables it to be configured to order and expanded in the field as needed. Each I/O module supports 24x24 HDBNC or SFP connectivity. Supported SFP modules include optical, HDBNC, analog conversion and HDMI. When fully populated, the Platinum VX 4RU frame supports a 144X144 matrix. The power supplies for the 4RU Platinum VX are housed inside the frame and can support full redundancy.

8RU Frame

The Platinum VX 8RU frame supports a modular design that enables it to be configured to order and expanded in the field as needed. Each I/O module supports 24 x 24 HDBNC or SFP connectivity. Supported SFP modules include optical, HDBNC, analog conversion and HDMI. When fully populated, the Platinum VX 8RU frame supports a 288X288 matrix. The power supplies for the 8RU Platinum VX are housed inside the frame and can support full redundancy.

Specifications

INPUT	
Input Connector	75 ohms HD-BNC
Impedance	75 ohms (HD-BNC)
Signal Type	SMPTE 424M, SMPTE 292M, SMPTE 259M SMPTE 344M, DVB-ASI

INPUT	
Return Loss (HD-BNC)	>15 dB, up to 1.485 GHz >10 dB, 1.485 to 2.97 GHz
Equalization (HD-BNC)	Automatic 550 m Belden 1694A for 270 Mb/s data rate 250 m Belden 1694A for 1.485 Gb/s data rate 150 m Belden 1694A for 2.97 Gb/s data rate

OUTPUT	
Output Connector	75 ohms HD-BNC
Impedance	75 ohms (HD-BNC)
Signal Type	SMPTE 424M, SMPTE 292M, SMPTE 259M SMPTE 344M, DVB-ASI
Return Loss (BNC, HD-BNC)	>15 dB, up to 1.485 GHz >10 dB, 1.485 to 2.97 GHz
Amplitude	800 mV ± 10%
Overshoot	<10%
DC Offset	0V ± 0.5V
Rise Time	270 Mb/s: 400-800 pS 1.485 Gb/s: <135 pS 2.97 Gb/s: <135 pS
Fall Time	270 Mb/s: 400-800 pS 1.485 Gb/s: <135 pS 2.97 Gb/s: <135 pS
Jitter	270 Mb/s, 1.485 Gb/s: <0.2UI reclocked 2.97Gb/s: <0.3UI reclocked

Physical Specifications

	1 RU	2 RU	4 RU	8 RU
Dimensions (H x W x D)	1.75 x 17.5 x 10.75 in.	3.5 x 17.5 x 10.75 in.	7.0 x 17.5 x 18.5 in	14 x 17.5 x 18.5 in.
Weight (approx, fully loaded)	2.5 kg	5 kg	7 kg	15 kg
Matrix Size	16×16 + 16x16SFP	48×48 or 72×72	144×144	288×288

MATRIX MODULE CAPACITY				
Back Modules	–	–	6	12
Resource/Crosspoint Modules	–	–	2	2

STANDARD EQUIPMENT				
Power Supplies	2	2	2	2

STANDARD EQUIPMENT				
Fan Module	–	–	2	4
Resource/Crosspoint Module	–	–	1	1

UPGRADE OPTIONS				
Redundant Resource/Crosspoint Module	No	No	Yes	Yes

Ordering Information

PV-16X16-FR-1	Platinum VX 1RU 16X16 Video Only Router with Additional 16X16 SFP Option
PV-CQ16-FR-1	Platinum VX 1 RU 16X16 Dual Clean & Quiet Router with Additional 16X12 SFP Option. Includes redundant PSU.
PV-48X48-FR-2	Platinum VX 2RU 48X48 Video Only Router
PV-72X72-FR-2	Platinum VX 2RU 72X72 Video Only Router
PV-FR-4	Platinum VX 4RU Up to 144X144 Modular Video Only Router (includes one video crosspoint and control card module)
PV-FR-8	Platinum VX 8RU Up to 288X288 Modular Video Only Router (includes one video crosspoint and control card module)
PV-PSO	Platinum VX Spare 1RU/2RU External Power Supply
PV-PSI	Platinum VX Spare 4RU/8RU Internal Power Supply
PV-144X144-3G4	Platinum VX SD/HD/3G 144X144 Video Crosspoint and Control Card
PV-288X288-3G8	Platinum VX SD/HD/3G 288X288 Video Crosspoint and Control Card
PV-24C-IOG	Platinum VX SD/HD/3G Modular 24 input and 24 output Coax Video I/O Module
PV-24O-IOG	Platinum VX SD/HD/3G Modular 24 input and 24 output SFP Cage Video I/O Module
OP+SFP+RR	Small Form Factor (SFP) for Imagine Communications Fiber Optic Products. Dual PIN receiver with pathological support for baseband video
OP+SFP+TT+13+13	Small Form Factor (SFP) for Imagine Communications Fiber Optic Products. 1310 nm and 1310 nm wavelength dual transmitter with pathological support for baseband video
SFP+2ERX+NR	SFP Series, Dual-channel HD BNC inputs of SD/HD/3G (Non-relocked output)
SFP+2ETX+NR	SFP Series, Dual-channel HD BNC outputs of SD/HD/3G (Non-relocked output)

SFP+HDMI+IN	SFP Series, HDMI Input Module
SFP+HDMI+OUT	SFP Series, HDMI Output Module