

# Platinum™ VX Router

## Small to Midsize Routing

### Compact Power, Seamless Video Routing

Unsurpassed value for your mid-scale video routing needs.

**Platinum™ VX** is a line of affordable, small-to-midsize 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, Platinum VX can seamlessly operate under overarching Magellan Control System.



*Group of the hardware sizes for the Platinum VX*

### 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
- 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

### Sizes and Configuration Flexibility

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

- 1RU (16×16 HD-BNC as standard with SFP cages for expansion to 32×32)
- 1RU Clean & Quiet
- 2RU (48×48 and 72×72 HD-BNC)
- 4RU (144×144 modular I/O with optional SFP connectivity)
- 8RU (288×288 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 is similar to that of a master control switcher. The preview output shows sources immediately as they are selected on the program bus, allowing 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. Managed via Magellan Control Panels.

### 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

### 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 System 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.

## SCALABLE SOLUTIONS

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 futureproofed and ideal for larger matrix requirements

The Platinum VX can seamlessly integrate with Platinum MX and Platinum IP3 systems. Using the Magellan Control System, tie-lines can be created to connect Platinum VX, Platinum MX, and Platinum IP3 frames into a unified 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 32×32 I/O in a single rack unit. 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 enables video switching for a 16×2 matrix, along with an additional 12 unprocessed video outputs. The included SFP card cages allow for expansion to a total of 32 inputs. On the output side, the router can support up to 28 unprocessed outputs, in addition to the two clean and quiet (processed) outputs. SFP expansion can support a mixture of connections, including HD BNC, optical fiber, and HDMI.

### 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 features a modular design that enables custom configurations and field expansion. Each I/O module supports 24×24 HD-BNC or SFP connectivity, with compatible SFP modules including optical, HD-BNC, analog conversion, and HDMI. When fully populated, the Platinum VX 4RU frame supports a 144×144 matrix. The power supplies are integrated within the frame and 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, and HDMI. When fully populated, the Platinum VX 8RU frame supports a 288X288 matrix. The power supplies for the 8RU Platinum VX are integrated within the frame and support full redundancy.

## SPECIFICATIONS

### INPUT

<b>Input Connector</b>	75 ohms HD-BNC
<b>Impedance</b>	75 ohms (HD-BNC)
<b>Signal Type</b>	SMPTE 424M, SMPTE 292M, SMPTE 259M SMPTE 344M, DVB-ASI
<b>Return Loss (HD-BNC)</b>	>15 dB, up to 1.485 GHz >10 dB, 1.485 to 2.97 GHz
<b>Equalization (HD-BNC)</b>	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

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

## SPECIFICATIONS

PHYSICAL SPECIFICATIONS	1RU	2RU	4RU	8RU
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	16x16 + 16x16SFP	48x48 or 72x72	144x144	288x288

### MATRIX MODULE CAPACITY

Back Modules	na	na	6	12
Resource/Crosspoint Modules	na	na	2	2

### STANDARD EQUIPMENT

Power Supply	2	2	2	2
Fan Module	na	na	2	4
Resource/Crosspoint Module	na	na	1	1

### UPGRADE OPTIONS

Redundant Resource/Crosspoint Module	No	No	Yes	Yes
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## 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
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 (Nonreclocked output)
SFP+2ETX+NR	SFP Series, Dual-channel HD BNC outputs of SD/HD/3G (Nonreclocked output)
SFP+HDMI+OUT	SFP Series, HDMI Output Module