

## PERC3000 Ethernet Router Control System

PESA's PERC3000 is a server based, high speed, high capacity system controller for PESA routing system installations. The hardware is housed in a stand-alone 1RU chassis, and all connections with frame controllers and other peripheral devices are made through Ethernet ports. The PERC3000 is directly compatible with PESA's Ethernet-based frame controllers, and "Smart" programmable control panels (Touch 72, Smart 32 and MultiBus XY). Using the available Panel Server and RS232/RS422 Interface devices, PERC3000 maintains compatibility with legacy PESA routing components using the proprietary PESA Routing Control (PRC) bus and the Remote Control Panel (RCP) bus.

PERC3000 offers enhanced processing power and speed over other earlier PESA system controllers; and is specifically designed for large routing installations with multiple high capacity router frames and large numbers of control panels that require maximum computing and processing power. PERC3000 supports up to 17 levels of control, 64 matrices, 256 tieline interconnects, 256 salvos and up to 4800 source and destination names. When used in conjunction with a software control application such as PESA's Catrax, the PERC3000 provides diagnostics, matrix segmentation, virtual matrix mapping and field-updates via Ethernet. PESA's Catrax software control application is used for setup and configuration of the PERC3000.

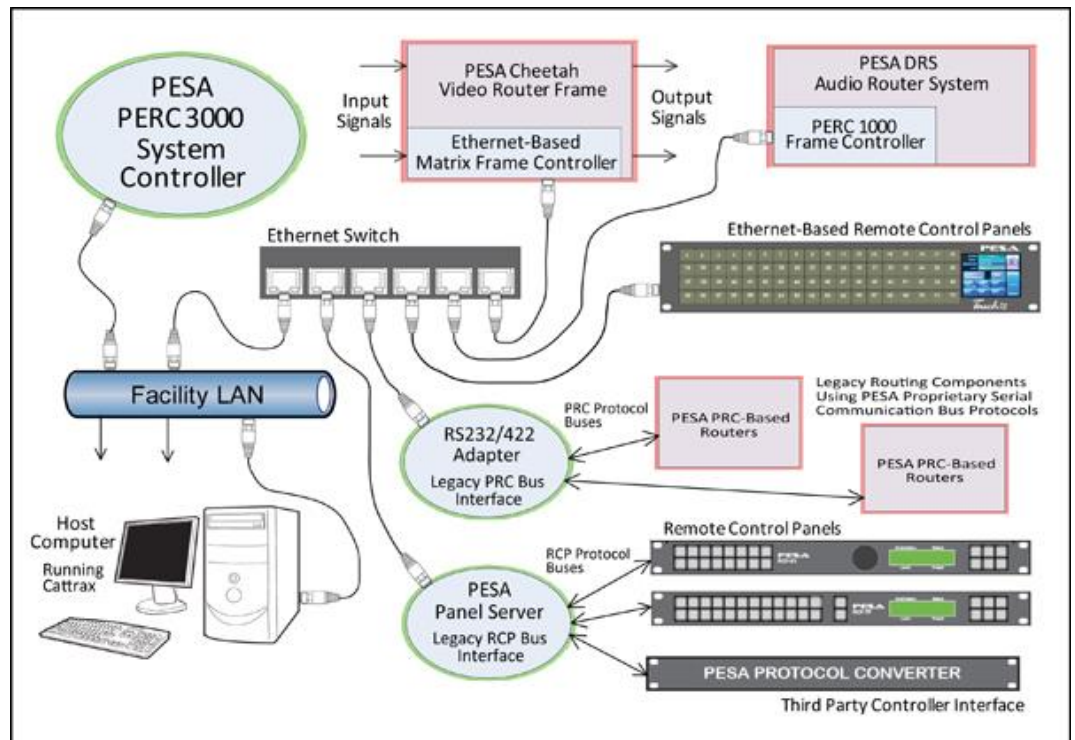
When used with PESA's DRS distributed audio routing system, PERC3000 provides a wide range of configuration options including control of audio delay on input channels and/or output channels, audio phase inversion, or dual channel summing. Built-in test functions allow assignment of audio silence, white noise, 1 kHz tone, or a discrete tone sweep, to any DRS output channel.

### HARDWARE FEATURES

- Server-based system controller with enhanced computing power, speed and capabilities over earlier controllers such as the PERC2000
- Full 10/100 TCP/IP Ethernet connectivity and support
- Operates directly with PESA's Ethernet-based, programmable "Smart" control panels (Touch 72, Smart 32, & MultiBus XY)
- Available Panel Server device allows PERC3000 to control PESA legacy remote control panels using the proprietary RCP bus
- Available RS232/422 interface adapter device allows PERC3000 to communicate with legacy router products using the proprietary PRC bus, plus RS232/422 CPU-Link protocol for third-party control systems

### SOFTWARE FEATURES

- Up to 17 switching levels
- Up to 64 matrixes
- Tieline support for 256 interconnects
- Up to 256 salvos
- Up to 4800 source and destination names
- GUI interface through PESA's Catrax
- Off-line configuration capabilities
- Virtual matrix mapping
- Software re-entry
- Full on-line diagnostics
- Matrix breakup/segmentation



# PERC3000 Ethernet Router Control System

PERC3000 SYSTEM CONTROLLER	
Mechanical	
Form Factor	1 RU
Dimensions	1.67in (H) X 15.5in (D) X 17.1in (W) 42.4mm (H) X 393.7mm (D) X 434mm (W)
Weight	18 lb
Power Requirements	
Power Input	100 – 240 VAC, 50/60/Hz
Power Consumption	250 W (Max.)
Environmental	
Operating Temperature	10°C - 35°C NOTE: For altitudes above 2950 feet, the maximum operating temperature is derated 1 °F/550 ft
Storage Temperature	-40°C - 65°C
Operating Humidity	20% - 80% Non-Condensing
Storage Humidity	5% - 95% Non-Condensing

PERC3000 PANEL SERVER PERIPHERAL	
Mechanical	
Form Factor	10/100 Mbps, RJ45
Dimensions	1.75in (H) X 1.25in (D) X 19in (W) 44.5mm (H) X 31.75mm (D) X 482.6mm (W)
Power Requirements	
Power Input	100 – 240 VAC, 47/63/Hz
Power Consumption	2 W
Environmental	
Operating Temperature	0°C - 40°C
Operating Humidity	90% Non-Condensing

PERC3000 SERIAL INTERFACE PERIPHERAL	
LAN	
Ethernet	10/100 Mbps, RJ45
Serial Interface	
Interface	RS-232/RS-422/RS-485
Number of Ports	8
Port Connector Type	RJ45 8-pin
Signals	
RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
RS-422	Tx+, Tx-, Rx+, Rx-, GND
RS-485 (2-wire)	Data+, Data-, GND
RS-422 (4-wire)	Tx+, Tx-, Rx+, Rx-, GND
Serial Line Protection	15 KV ESD for all signals
Mechanical	
Form Factor	1 RU
Dimensions	1.75in (H) X 7.48in (D) X 18.8in (W) 44.5mm (H) X 190mm (D) X 478mm (W)
Power Requirements	
Power Input	100 – 240 VAC, 47/63/Hz Power
Consumption	20 W
Environmental	
Operating Temperature	0°C - 55°C
Storage Temperature	-40°C - 75°C
Operating Humidity	5% - 95% Non-Condensing
Storage Humidity	5% - 95% Non-Condensing



ORDERING INFORMATION	
PK3K SW Part Number	Description
P3KVM5W	PERC3000 VM Base Software - PERC3000 SW including VM
IPCS-[XXXX]; (XXXX = 0010, 0025, 0100, 0500, 1000)	Connection licenses where [XXXX] is [0010] for up to 10 devices, [0025] for up to 25 devices, [0100] for up to 100 devices, [0500] for up to 500 devices, and [1000] for up to 1000. Over 1000 needs Enterprise (IPCSS-ENT)
IPCS-ENT	Enterprise System Level Connections
PK3K HW Part Number	Description
PERC3000-IP-S	IP VM SMALL - 1RU Up to 250
PERC3000-IP-M	IP VM MEDIUM 2RU Up to 500
PERC3000-IP-L	IP VM LARGE - 2RU Up to 1000

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