Endura® UDI5000-MTRX Universal Device Interface

INTEGRATION PLATFORM FOR THIRD-PARTY SYSTEMS AND MATRIX KEYBOARDS

Product Features

- User-Friendly Web-Based Administration

- Supports Three Operation Modes: ASCII, Matrix Digital Decoder, and Virtual Matrix

- Diagnostics Available Through Self-Contained Endura® Diagnostics and Simple Network Management Protocol (SNMP)
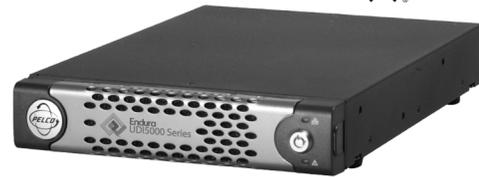
The **UDI5000-MTRX** provides users with a powerful means by which to leverage investments in legacy analog systems and integrations, while affording customers the benefits of today's IP and megapixel camera technologies. The **UDI5000-MTRX** supports three operating modes: ASCII mode, Matrix Digital Decoder mode (MDD), and Virtual Matrix mode (V9700). In ASCII mode, third-party systems interface with Endura® utilizing the Pelco ASCII protocol. MDD mode processes commands from Pelco's CM9700 matrix to access and pull live and recorded Endura video onto matrix monitors through a network decoder and a third-party video down converter. V9700 mode makes use of familiar CM9760 keyboards to control Endura devices and monitors, and takes full advantage of megapixel and HD camera technology advancements.

ASCII Protocol Management

When operating in ASCII mode, the **UDI5000-MTRX** allows third-party systems that integrated with the analog matrix through the Pelco ASCII protocol to work with Endura. The **UDI5000-MTRX** in ASCII mode presents 1,024 virtual alarms that can be configured in Endura for scripted responses to alarms or to convert ASCII switching commands to Endura software commands, allowing ASCII-driven switching of cameras onto Endura monitors.

V9700 Virtual Matrix Mode

In V9700 mode, the **UDI5000-MTRX** partially simulates a Pelco CM9780 analog matrix. A traditional PSM file is loaded onto the **UDI5000-MTRX,** which also processes Pelco P protocol commands from CM9760 keyboards and CM9760 alarm interface units connected through third-party serial to ethernet converters. While operating in V9700 mode, security administrators can continue leveraging most standard security operating procedures developed around analog matrix switches but in a virtual matrix environment. In addition, operators with previous experience using the CM9760-KBD keyboard can leverage their past experience and training when switching to a virtual matrix implementation. The V9700 mode supports Satellite Matrix Functionality (SMF) through the CM9700-NIU, thus allowing the Endura system to extend the useful life of existing analog matrix installations. When configured for V9700-SMF, CM9700 analog video can be converted and displayed on Endura digital monitors, and digital video from the Endura system can be converted and displayed on V9700 analog monitors. Matrix operators can have access to Endura

cameras on matrix monitors, and the ability to call up and switch matrix cameras and IP cameras onto Endura decoder monitors through the CM9760-KBD.

Matrix Digital Decoder Mode

In MDD mode, the **UDI5000-MTRX** bridges Endura products to the CM9700 Series matrix system (using 9.03.012 software or later versions). Adding the **UDI5000-MTRX** with a NET5402R-HD to a matrix system allows security professionals to leverage the digital advantages of Endura with their tried and true CM9700 Series matrix system. This allows users to continue viewing live analog video through the matrix while viewing digital live or recorded video from the Endura system through the NET5402R-HD high definition digital decoder connected as an input on the matrix through a third-party video down converter.

Convenient Scalability and Packaging

The **UDI5000-MTRX** supports Endura's unlimited scalability by providing a deterministic way to manage the processing load introduced with keyboard integration. Each **UDI5000-MTRX** can accommodate up to 10 connections, such as CM9760 Series keyboards and CM9760 alarm interface units. To provide unrestricted scalability, each **UDI5000-MTRX** is an independent server that can run multiple concurrent connections that are each running multiple routines. This capacity virtually eliminates undue load on other Endura servers and system components. **UDI5000-MTRX** servers can also act in a hot standby mode where the mission-critical nature of the installation demands redundancy.

The **UDI5000-MTRX** server is a half-width, 1 RU server. The compact size allows for two units to be rack mounted next to each other in just 1 RU of space using the optional rack mount kit. No additional software licensing is required.

Network Administration and Upgradeability

The **UDI5000-MTRX** supports Simple Network Management Protocol (SNMP) monitoring and traps along with Endura diagnostic monitoring. As such, health status information is available through the Endura WS5200 advanced system management software or an external SNMP monitoring application. The **UDI5000-MTRX** complies with Endura's firmware upgrade scheme, allowing administrators to easily push out updated drivers and other utilities over the network as they become available from Pelco.

MODEL

Use the following table to create a model number to specify your **UDI5000-MTRX**. For example, the model number for a unit that includes a European power cord is UDI5000-MTRX-EU.

Model	Country Code
UDI5000-MTRX	-US = North America -EU = Europe -UK = United Kingdom -CN = China -AU = Australia -AR = Argentina

SUPPLIED ACCESSORIES

Power Cord	1 power cord (based on country designation) **Note:** Units shipped to China do not include power cords.

OPTIONAL ACCESSORIES

RK-UDI5000	UDI5000 Series rack mount kit: 1 RU rack mount assembly, hardware, and power supply support bracket

USER-SUPPLIED ACCESSORIES

In V9700 mode, third-party serial-to-Ethernet converters are required to connect the CM9760-KBD or CM9760-ALM products to the UDI5000-MTRX. In MDD mode, both serial-to-Ethernet and Video Down Converters are required. ASCII mode can use a serial-to-ethernet converter if needed.

SYSTEM

Operating System	Embedded Linux™

NETWORK

Interface	1 Gigabit Ethernet RJ-45 (10/100/1000Base-T)

FRONT PANEL

Power Button	On/off
Indicators	
Power	Blue if power
Network Activity	Green, amber, red
Unit Status	Green, amber, red
Auxiliary Interface	1 USB 2.0 port

REAR PANEL

Serial Port	RS-232 DB-9 connector
Network Port	1 Gigabit Ethernet RJ-45
Other Ports (not used)	2 USB 2.0 ports, 1 parallel port, 1 S-Video port, 1 VGA port, audio input/output

POWER

Power Consumption	31.2 W, 107 BTU/H
Power Input	12 VDC ±10%

ENVIRONMENTAL

Operating Temperature	10° to 35°C (50° to 95°F) at unit air intake
Storage Temperature	−40° to 65°C (−40° to 149°F)
Operating Humidity	20% to 80%, noncondensing
Maximum Humidity Gradient	10% per hour
Operating Altitude	−15 to 3,048 m (−50 to 10,000 ft)
Operating Vibration	0.25 G at 3 Hz to 200 Hz at a sweep rate of 9.5 octave/minute

Note: The temperature at the unit air intake can be significantly higher than room temperature. Temperature is affected by rack configuration, floor layout, air conditioning strategy, and other issues. To prevent performance failure and unit damage, make sure the temperature at the unit is continuously within the operating temperature range.

PHYSICAL

Construction	Steel cabinet
Finish	
Front Panel	Gray metallic with black end caps
Chassis	Black matte finish
Mounting	
Desktop (feet) or rack	1 RU per unit, requires optional rack mount kit
Unit Weight	3.0 kg (6.6 lb)
Shipping Weight	3.6 kg (8.0 lb)

RECOMMENDED PC REQUIREMENTS

|	
Web Browser	Microsoft® Internet Explorer® 7 or later
Media Player	Adobe® Flash® Player 3.0

SYSTEM COMPATIBILITY REQUIREMENTS

WS5200 v2.3 or later

VCD5202 v2.3.2.0017 or later

NET5402R v2.3.2.0017 or later

CM9700 Series matrix and components (in MDD mode) v9.03.032 or later

CM9760-KBD (in V9700 mode) v8.45 or later

CM9760-ALM

CERTIFICATIONS/RATINGS/PATENTS*

- CE, Class A
- FCC, Class A
- UL/cUL Listed
- C-Tick
- CCC

*At the time of this publication, this certification is pending. Please consult the factory, our Web site *(www.pelco.com),* or the most recent B.O.S.S.® update for the current status of certifications.

NOTE: VALUES IN PARENTHESES ARE INCHES; ALL OTHERS ARE CENTIMETERS.
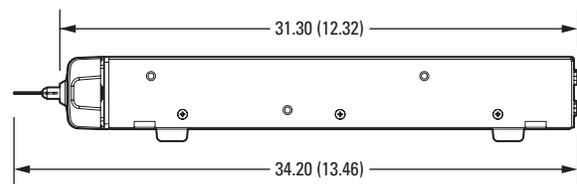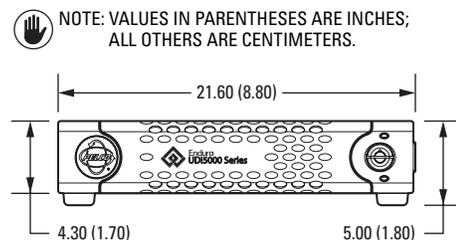
NOTICE: *Judgment as to the suitability of the products for users' purposes is solely the users' responsibility. Users should refer to the Operation manuals for cautionary statements regarding user selected options and how they might affect video quality. Users shall determine the suitability of the products for their own intended application, picture rate and picture quality. In the event users intend to use the video for evidentiary purposes in a judicial proceeding or otherwise, users should consult with their attorney regarding any particular requirements for such use.*