



IOLAN MDC Hardware Installation Guide

CD_Version 3.7
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Introduction

The IOLAN MDC is a medical unit that can interface with hospital bedside devices intended for use in data collection clinical information management. The MDC is offered as a 4-port or 8-port unit. This medical unit is compliant with IEC-60601-1 and has galvanically isolated EIA-232 serial ports.

If you are using the MDC to connect to a "Philips DeviceLink II System", please refer to the sheet entitled "IOLAN MDC & Philips DeviceLink II System Integration Guide" for instructions on how to install the MDC unit.

Please review the section "Updating the Firmware on a New MDC unit" before attempting to use the MDC unit.

IOLAN MDC Components

Before you install the MDC, ensure that the following components have been included in the package. If any of the components are missing or damaged, please contact your Perle distributor or Perle directly.

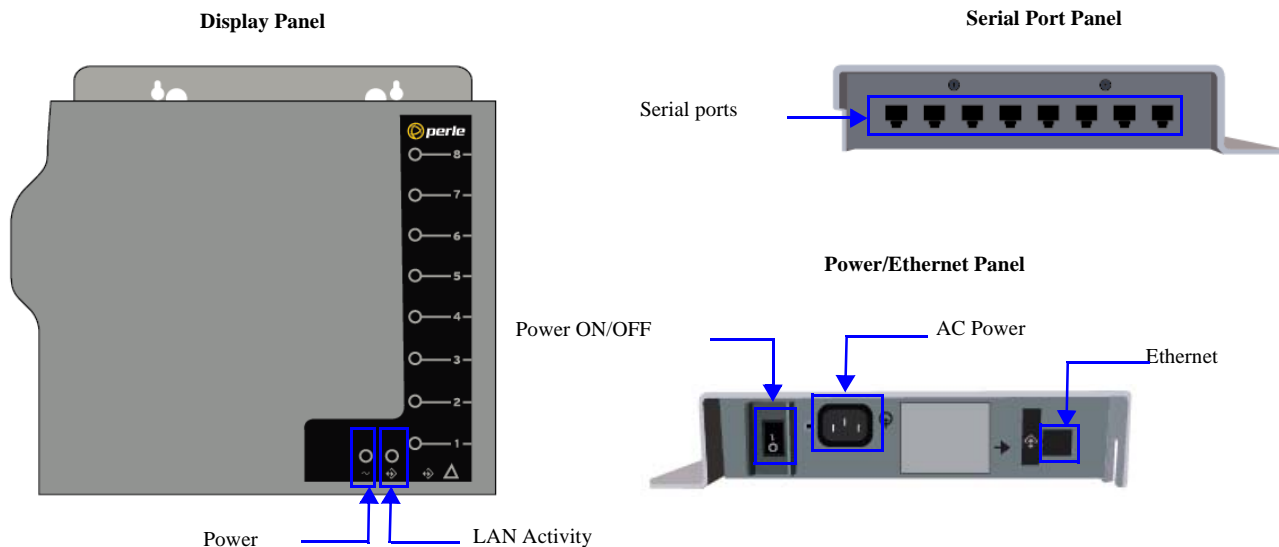
- IOLAN MDC unit
- warranty card
- CD-ROM containing documentation, firmware, configuration software, etc.
- multi-function wall plate
- mounting kit which consists of:
 - two (2) M4x10 mm screws
 - two (2) M6x55 mm wall fixings
- *IOLAN MDC Hardware Installation Guide*

Before you install the MDC, you need to supply the following:

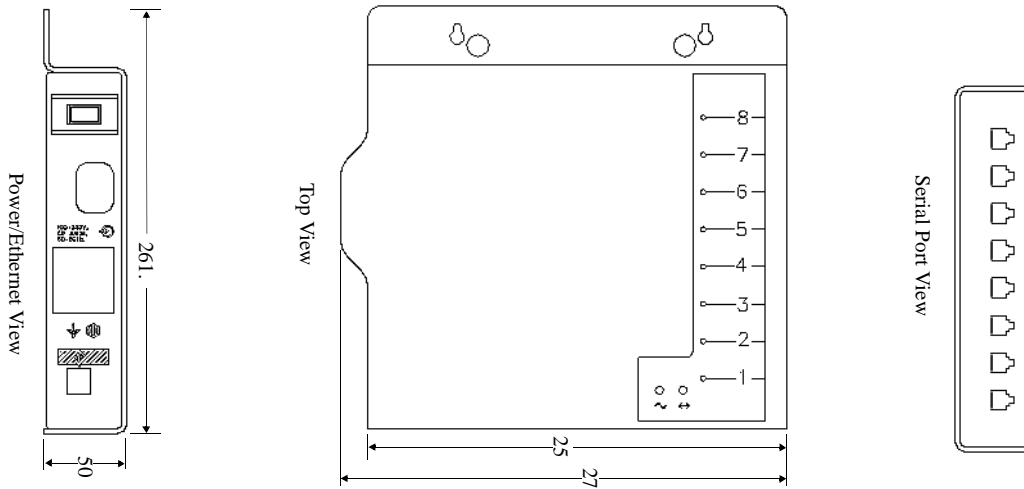
- A serial cable(s) to connect serial devices to your IOLAN unit. (port pin-out can be found in User's Guide)
- An Ethernet CAT5 10/100BASE-T cable to connect the IOLAN unit to the network

Panel Descriptions

This section describes the three panels (display, power/Ethernet, and serial port) of the MDC:



Dimensions (unit = mm)



Installing the MDC

This section contains important information on how to prepare for the installation of the MDC, as well as how to mount and power up the unit.

Mounting the MDC

The MDC has been designed to be easily mounted on either a flat wall or hospital head-wall system. It includes a universal mounting plate which can be adapted to various headwall systems.

To mount the MDC:

1. Attach the multi-function wall plate to a wall or vertical surface using the two screws and two cavity fixings. The screws and cavity fixings should protrude 0.25 in (0.6 cm) from the surface of the wall or vertical surface.
2. Hang the MDC unit on the screws and cavity fixings.



Powering Up the MDC

After you mount the MDC, plug a power cable into the left side (power/Ethernet panel) of the IOLAN unit and then into the electrical outlet. Plug in the Ethernet cable and turn the power switch ON. You will see the LEDs blink for several seconds and then remain a solid green, indicating that it is ready to configure/use.

LED Indicators

The display panel (top view) of the MDC contains several LED indicators, as outlined in the table below

LED	Color	Description
Power	Off	The MDC is not powered up.
	Green (solid)	The MDC has completed the power up cycle.
	Amber (blinking)	The MDC is accessing the FLASH (do not power of the unit while LED is blinking amber).
	Red (solid)	There is a hardware problem that might require factory service of the MDC unit.
	Red (blinking)	If the power LED blinks red for a short duration before turning solid green, this indicates a non-critical error (e.g., a bad port) occurred during the power up test cycle.
LAN Activity	Off	There is no LAN activity.
	Green (blinking)	Data is being received (Rx).
	Amber (blinking)	Data is being transmitted (Tx).

Updating the Firmware on a new MDC unit.

To use the full functionality available with the MDC units, you must update the firmware which comes loaded on the unit. You only need to follow this procedure the first time you download the image to the unit. Once the firmware has been updated, future updates follow the standard update procedure documented in the User's Guide.

To update the units firmware, please insert the CD into you PC and follow these steps.

1. When the CD launches, click on "Product Files"
2. Under "Product Files" select "MDC".
3. Next, pick the option "Easy Update.exe" under "Udating a New Unit's Firmware To V3.7" and follow the instructions provided.

Technical Specifications

	MDC04	MDC08
Power Requirements		
Input voltage range	100 to 240 VAC	
Input frequency	47 to 63 Hz	
Input current	Max. 0.21A @ 100 VAC Max. 0.13A @ 240 VAC	Max. 0.25A @100 VAC Max. 0.14A @ 240 VAC
Power consumption	12 W	15.5 W
Serial Port		
Interface	EIA-232	
Connector	RJ45	
Speed	50bps to 230Kbp	
Protection	Galvanic isolation - basic insulation of 1500 VAC	
Ethernet Port		
Isolation	1500 Vrms	
Data rate	10Mbps and 100Mbps	
Environmental Limits		
Storage temperature	-40 to 185°F (-40 to 85°C)	
Operating temperature	32 to 131°F (0 to 55°C)	
Operating and storage humidity	5 to 95% (non-condensing)	
Physical Dimensions		
Weight	3.09 lbs (1.4 kg)	
Dimensions (W x H x D)	273 x 50 x 261.5 mm (10.75 x 1.97 x 10.3 in)	
Regulatory Approvals		
North American Emissions	FCC Part 15, Subpart B, Class A	
European Emissions	EN55022:1998 Class A	
Immunity	EN55024: 1998	
Safety	IEC 60950-1, First Edition (2001-10) and EN60950-1:2001, CB scheme CAN/CSA-C22.2 No. 60950-1-03 and ANSI/UL 60950-1, First Edition April 1st 2003 (Recognized Component)	
Medical Safety	IEC 60601-1: 3rd Edition, EN60601-1:1990, + A1:1993, A2:1995, + A11:1994, + A12:1994, + A13:1996: Medical electrical equipment - General requirements for safety UL 60601-1:2003: Medical electrical equipment - General requirements for safety CSA C22.2-601.1-M90 with S1-94 and B-90 (R2001) AS/NZS 3200.1.0:1998 Medical electrical equipment - General requirements for safety	
Warranty	Perle Lifetime Warranty	