ConnectPort™ Display

Using Windows™ CE v5.0

User Manual

www.digi.com

Digi Contact Information

Product information is available on the Digi website, **www.digi.com**, including:

Support Forums
Knowledge Base
Data sheets/product briefs
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1 Introduction

This chapter provides a brief overview of the ConnectPort Display features.

Product Overview

Digi's ConnectPort Display uses the Windows CE v5.0 operating system. Together, they create an environment which supports the following features:

- Internet Explorer 6
- Media Player 9
- Remote Desktop Connection
- Microsoft .NET Compact Framework 2.0
- WordPad
- PowerPoint Viewer

The unit provides a total of eight ports enabling the use of additional peripherals such as a monitor, USB keyboard, USB mouse, USB Flashdrive, microphone, headphones, Serial devices, and speakers.

The ConnectPort Display uses an AU1200 MIPS-II based processor with 128MB of RAM of which about 40MB is available for user programs.

Details of the ConnectPort Display Front Panel

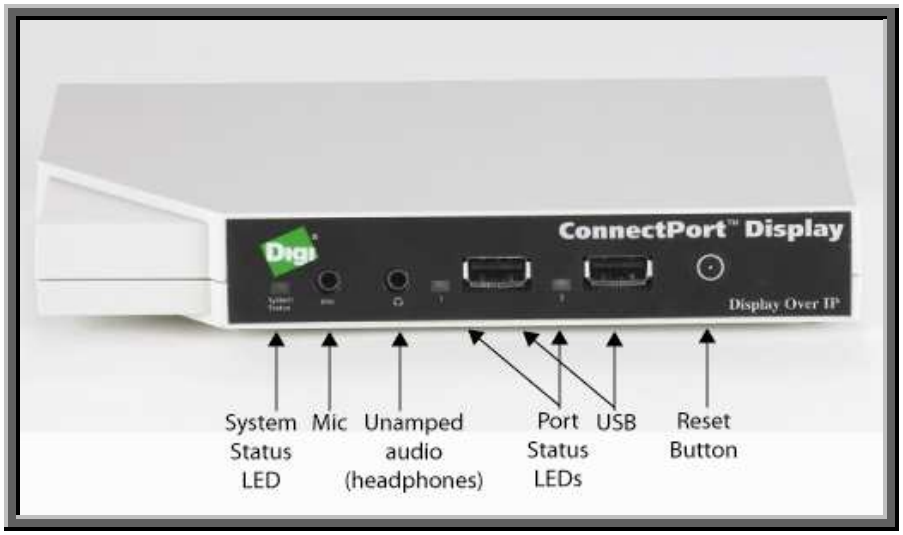

Figure 1-ConnectPort Front Panel

System Status LED: Blinks green during normal operation.

Microphone: Not available at this time.

Unamplified Audio Port: Headphone or amplified speaker connection.

Port Status LEDs: Not available at this time.

USB Ports: The two USB 2.0 ports are used for PC peripherals like a keyboard, mouse, and USB Flash Drive.

Reset Button: Is used to either reboot or factory reset the ConnectPort Display.

To reboot the ConnectPort Display, press and hold the Reset Button until the System Status LED blinks amber. Then, release the Reset Button. While the System Status LED is still blinking amber, press and hold the Reset Button until the ConnectPort Display reboots.

To factory reset the ConnectPort Display, push and hold the Reset Button while powering on the unit.

Details of the ConnectPort Display Back Panel

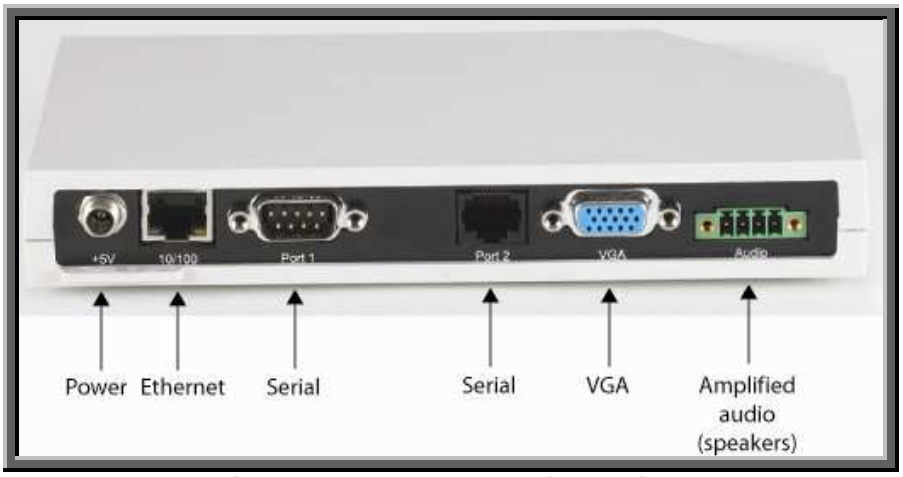

Figure 2-ConnectPort Back Pamel

Power: Power on ConnectPort Display by connecting the power supply provided.

Ethernet: To connect to a 10bT/100bT network.

Serial Ports: For attaching serial devices (Refer to Section 5 for pinout information).

VGA: Connector for the VGA monitor (Refer to Section 5 for pinout information).

Amplified Audio Port: Connector for unamplified speakers (Refer to Section 5 for pinout information).

2 Getting Started

This section provides the preliminary stages of setting up the ConnectPort Display.

Initial Set Up

First, connect the monitor. Next, connect the Ethernet cable, USB devices, Serial devices, and speakers as needed. Then, insert power connector. After approximately 5 seconds, the System Status LED on the front panel will blink green. Once the LED begins blinking green, the Windows CE desktop will then display approximately 10 seconds later (Refer to Figure 3).

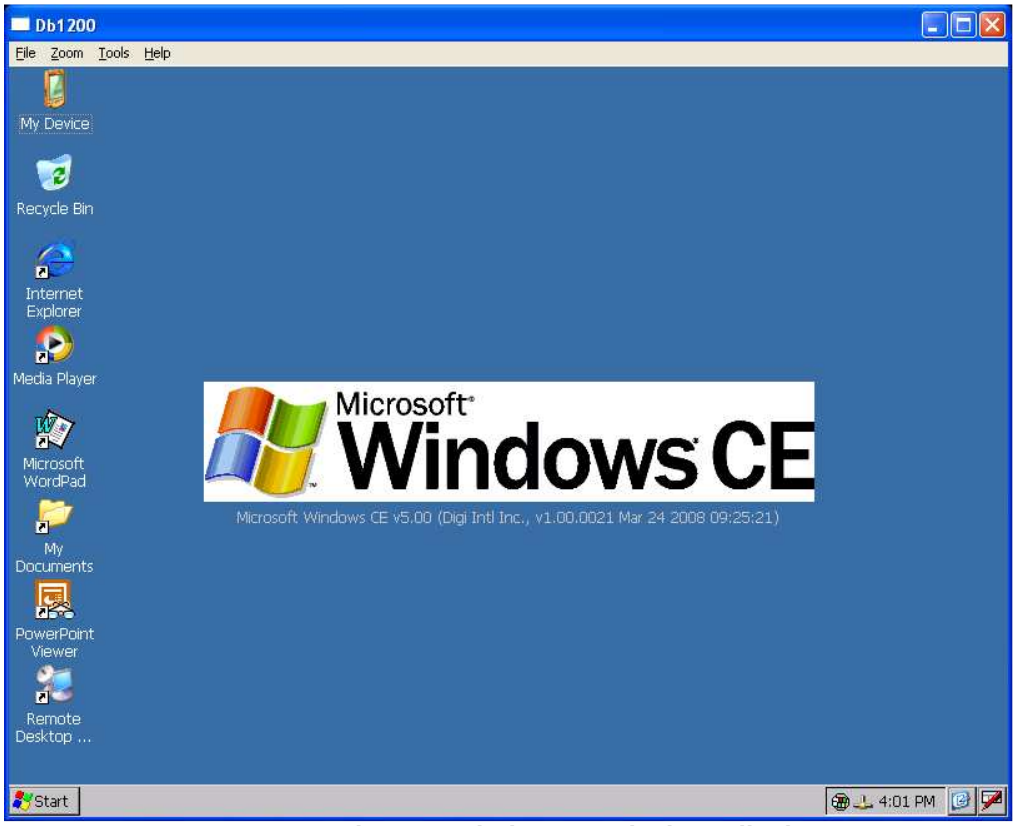

Figure 3-Windows CE desktop display

3 Configuring the ConnectPort Display

This chapter provides the information necessary to configure the ConnectPort Display.

Viewing Control Panel Options

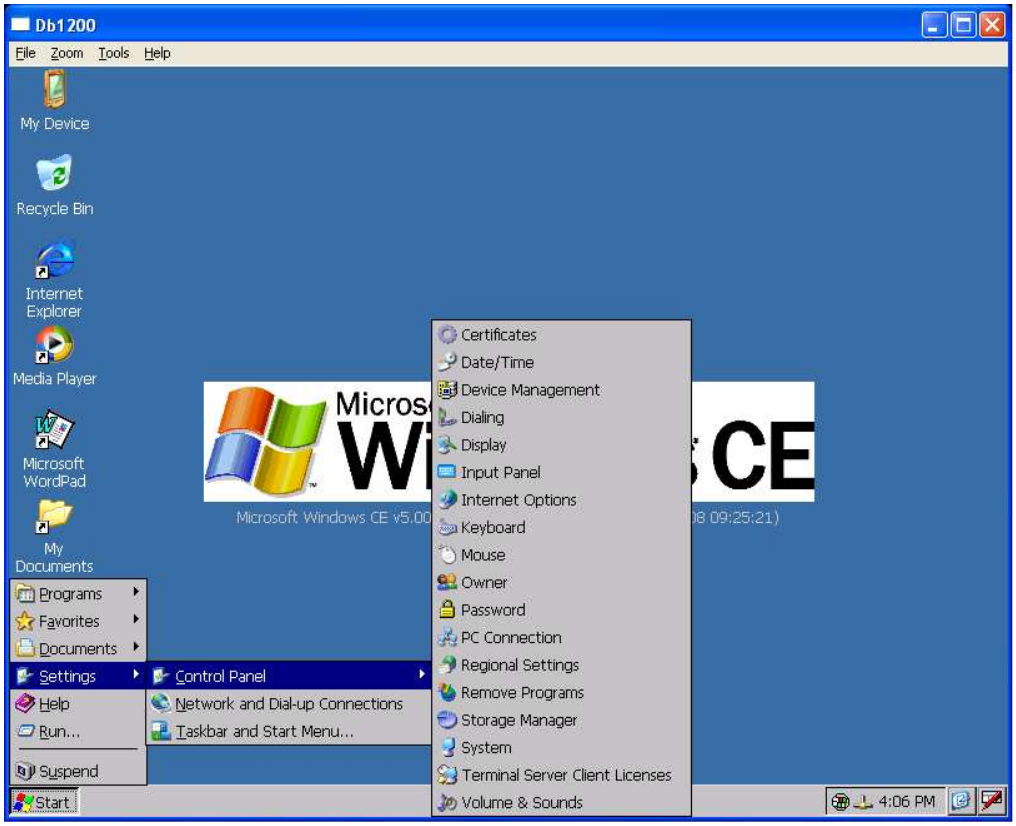

Figure 4-Control Panel

Configuring a Password

From the Start menu select Settings → Control Panel→ Password. This brings up the Password Properties dialog box. Type in a password and then confirm by re-typing the password. If the passwords match, the Enable Password Protection will enable, allowing the user to check At Power On. Check the At Power On box and then click OK. The password is now saved and required every time the unit powers on.

Setting the Date and Time

From the Start menu select Settings → Control Panel → Date/Time. This brings up the Date/Time Properties dialog box. From here, select the desired calendar date by clicking on the corresponding date. The Current Time field requires both time and AM/PM entries to be manually typed in. Next, the Time Zone provides multiple selections for the specific area desired. Finally, click Apply to update the time and date.

Configuring the System (Storage Memory and Program Memory)

From the Start menu select Settings → Control Panel → System. This brings up the System Properties dialog box. The Memory tab is used when determining how much of the ConnectPort Display's memory will be allocated for storage and running programs.

Configuring a Device Name

From the Start menu select Settings → Control Panel → System. This brings up the System Properties dialog box. Next, select the Device Name tab. These settings are used to identify the ConnectPort Display to other computers.

Configuring Network Connections

From the Start menu select Settings → Control Panel → Network and Dial-up Connections. Then select the LAN911X icon. This brings up the "LAN911X Ethernet Driver" Settings dialog box where the IP Address is configured.

Configuring Screen Resolution

From the Start menu select Programs → Command Prompt. At the command prompt type the command "setdisplay." This displays the supported screen resolution settings (Refer to Figure 5).

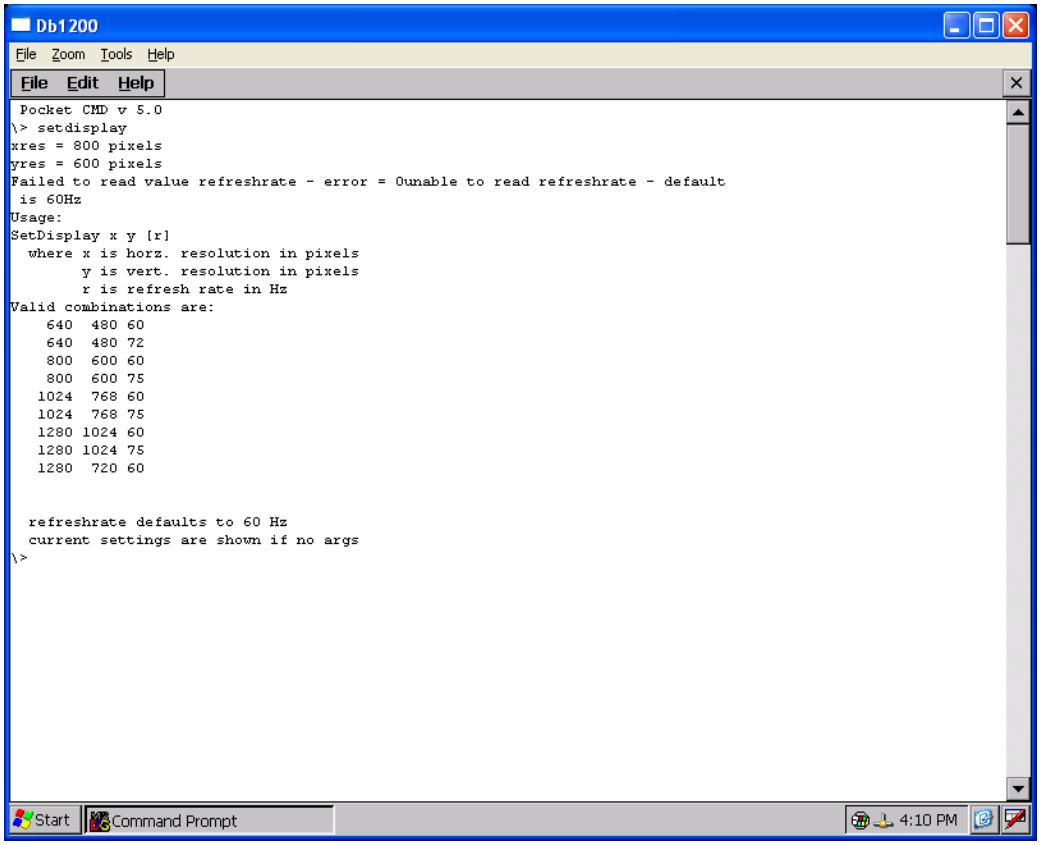

Figure 5-Changing Screen Resolution

For example, the following command will configure the ConnectPort display for a 1280 x 1024 screen resolution:

setdisplay 1280 1024

Configuring Internet Explorer for the Windows XP User Agent

Start Internet Explorer. From the View menu select Internet Options. This brings up the Internet Options dialog box. From the User Agent drop down box, select Same as Windows XP. Click OK to exit the dialog box.

4 ConnectPort Display Features

This section lists the features of the ConnectPort Display and, when necessary, provides a brief comment or insight to that particular feature.

Media Player 9

Windows Media Player 9 is used for playing audio, video and viewing images. The ConnectPort Display supports MPEG 2, MP3, and WAV file formats.

Remote Desktop Connection

This allows the CnnectPort Display to remotely control a PC on the Network.

From the Start menu select Programs → Command Prompt. Then, at the "\>" prompt, type the following example to connect to a target PC with IP address 192.168.0.2:

```
cetsc /v:192.168.0.2
```

Connecting to a Shared Network Resource

This allows the ConnectPort Display to share files with other devices on the network.

From the Start menu select Programs → Windows Explorer. In the Address field enter something like the following (where "testpc1" is the name of the shared device on the network):

```
\\testpc1
```

Internet Explorer 6

Microsoft's popular Web browser is included and there is a short-cut provided on the Desktop.

WordPad

WordPad, a simple word processor, is also included.

5 Storing Files and Using USB Flash Drives

This section provides details on how to store files on the ConnectPort Display and use files from attached USB Flash Drives.

Storing Files on the ConnectPort Display

The ConnectPort Display stores files locally in two different locations. One location is called “System Flash” and the other is called “User Flash.” Both may be accessed by double-clicking the My Device icon located on the Desktop (Refer to Figure 6).

The User Flash provides 1GB of non-volatile storage and the smaller System Flash is where the ConnectPort Display stores system information including the Registry and Desktop.

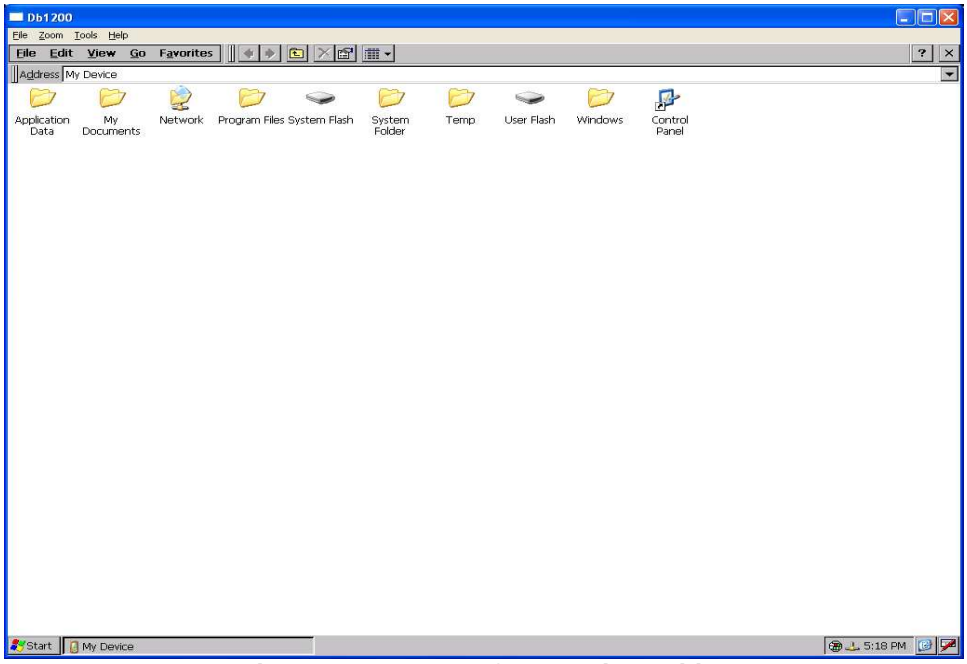

Figure 6-Contents of My Device Folder

Using USB Flash Drives

USB Flash Drives can be used by attaching them to the front panel of the ConnectPort Display. Once connected, they can be accessed by double-clicking on the My Device icon located on the Desktop.

6 Hardware Specifications

This section provides the physical dimensions, environmental, pinouts, and power requirements of the ConnectPort Display.

Dimensions

Length: 4.35 in (11.05 cm)
Width: 7.20 in (18.29 cm)
Height: 1.03 in (2.61 cm)
Weight: 10.00 oz. (311.00 g)

Environmental

Operating temperature: 32^{o} F to 131^{o} F (0^{o} C to 55^{o} C)
Relative humidity: 0% to 95% (non-condensing)

Pinouts

Serial Port 1 Pinouts

Pin Number	EIA-232 Signal
1	DCD
2	RxD
3	TxD
4	DTR
5	GND
6	DSR
7	RTS

8	CTS
9	RI

Serial Port 2 Pinouts

Pin Number	EIA-232 Signal
1	N/C
2	N/C
3	CGND
4	TxD
5	RxD
6	GND
7	N/C
8	N/C

Video Port DB15 Pinouts

Pin Number	VGA Signal
1	RED
2	GREEN
3	BLUE
4	ID2
5	DDC_GND
6	RED_GND
7	GREEN_GND

8	BLUD_GND
8	DDC_+5V
10	SYNC_GND
11	ID0
12	DDC_SDA (ID1)
13	HSYN
14	VSYN
15	DDC_SCL (ID3)

Amplified Speaker Port (Audio)

Where Pin 1 is the right-most pin on the connector, and Pin 4 the left-most.

Pin Number	Signal
1	Right +
2	Right -
3	Left -
4	Left +

Amplified Speaker Port (Audio) Watts per Channel

Speakers	Watts Per Channel
8Ω	1.4
4Ω	2.1

Power Requirements

The ConnectPort Display uses a 120/230VAC 50/60Hz power adapter that supplies 5VDC to the unit. It is recommended that only the enclosed power supply be used with ConnectPort Display. However, power to the ConnectPort Display may be supplied by a UL Listed Direct Plug-In Power Unit or Information Technology Equipment Rated Power Unit rated 5VDC, at least 2.9 A if used in the U.S. and Canada or a power supply with similar rating and approved by your local safety code if it is used elsewhere. For polarity, see the following diagram:

7 Regulatory and Safety Information

Federal Communications Commission (FCC) Regulatory Information (USA only)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to correct the interference by one or more of the following measures:

- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet that is on a circuit different from the receiver.
- Consult the dealer for help.

Warning: The connection of a non-shielded interface cable to this equipment will invalidate the FCC Certification for this device.

FCC Regulation - Part 15 Declaration of Conformity (DOC)

This device complies with the requirements of the Code of Federal Regulations listed below:

FCC Title 47 CFR, Part 15 Class B for a digital device.

Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

Department of Communication (DOC) Notice (Canada only)

This Class B digital apparatus meets the requirements of the Canadian Interference- Causing Equipment Regulations.

Cet appareil numerique de la Classe B respecte toutes les exigences du Reglement sur le materiel brouiller du Canada

European Community - CE Mark Declaration of Conformity (DOC)

According to ISO/IEC Guide 22 and EN 45014

Manufacturer's Name:	Digi International
Corporate Headquarters:	11001 Bren Road East Minnetonka MN 55343
Manufacturing Headquarters:	10000 West 76th Street Eden Prairie MN 55344

Digi International declares, that the product:

Product Name:	ConnectPort Display
Model Numbers:	50001323-xx 50001333-xx

	50001334-xx 50001335-xx

conforms to the relevant EU Directives listed here:

- EMC Directive 2004/108/EC|
- Low Voltage Directive 2006/95/EC
- R&TTE 1999/5/EC

using the relevant section of the following EU standards and other normative documents:

International EMC Standards

Immunity

- EN55024 (1998+A1,A2)
- EN61000-3-2(2000+A2)
- EN61000-3-3(1995+A1,A2)

Emissions

- EN55022 Class B(2006)
- CISPR22

Safety

- IEC 950
- EN 60950 (2001)

EN61000-3-3: 1995, EN61000-3-2: 2000 and EN55024: 1998

Test	Specification	Requirement
Electrostatic Discharge	EN61000-4-2	+/-2kV, 4kV contact, indirect +/-2kV, 4kV, 8kV air
Radiated Immunity	EN61000-4-3	80 MHz to 1000 MHz at 3 V/m
Electrical Fast Transient Burst Immunity	EN61000-4-4	+/-1kV (A/C), +/-0.5kV (I/O)

Surge Immunity	EN61000-4-5	+/-0.5kV, 1kV, 2kV common mode and differential mode on power lines
Conducted Immunity	EN61000-4-6	0.15 MHz to 80 MHz at 3Vrms
Magnetic Immunity	EN61000-4-8	1 A/m Not Applicable
Voltage Dips & Interrupts	EN61000-4-11	>95% at 10ms, 30% at 500ms, & >95% at 5sec reduction of rated voltage Quasi-Stationary Current Harmonics Test 230V at 50Hz, 39th Odd Harmonics and 40th Even harmonics

EN55022 Class B (1994 w/A1: 1995 & A2: 1997)

Test	Specification EN55022	Requirement
Radiated Emissions		Class B[1]
Conducted Emissions	CISPR 22	Class B

[1] This product has been tested with shielded cables. Use shielded cable or unshielded cable with snap-on ferrite, such as Fair-Rite Part#:0461164281 or similar, to ensure continued compliance with Class B emission limits. Unshielded cable without ferrite may be used for Class A limits.

Safety Standards

This device complies with the requirements of following safety standards below:

- UL 1950, 3rd edition
- CSA No. 950

Important Safety Information

- To avoid contact with electrical current:
- Never install electrical wiring during an electrical storm.
- Never install an Ethernet connection in wet locations unless that connector is specifically designed for wet locations.
- Use caution when installing or modifying Ethernet lines.
- Use a screwdriver and other tools with insulated handles.
- You and those around you should wear safety glasses or goggles.
- Do not place Ethernet wiring or connections in any conduit, outlet or junction box containing electrical wiring.
- Installation of inside wire may bring you close to electrical wire, conduit, terminals and other electrical facilities. Extreme caution must be used to avoid electrical shock from such facilities. You must avoid contact with all such facilities.
- Ethernet wiring must be at least 6 feet from bare power wiring or lightning rods and associated wires, and at least 6 inches from other wire (antenna wires, doorbell wires, wires from transformers to neon signs), steam or hot water pipes, and heating ducts.
- Do not place an Ethernet connection where it would allow a person to use an Ethernet device while in a bathtub, shower, swimming pool, or similar hazardous location.
- Protectors and grounding wire placed by the service provider must not be connected to, removed, or modified by the customer.
- Do not touch uninsulated Ethernet wiring if lightning is likely!

- External Wiring: Any *external* communications wiring you may install needs to be constructed to all relevant electrical codes. In the United States this is the National Electrical Code Article 800. Contact a licensed electrician for details.

ConnectPort Display models may contain a lithium button cell CR2032. There is a risk of explosion if the battery is replaced by an incorrect type. Dispose of used batteries according to instructions included with the replacement battery, or return them to a recycling center. Do not incinerate. Digi International assumes no liability for the end user's attempt to make changes to the ConnectPort Display, including those that require opening the enclosure.

China RoHS statement:

The Table of Toxic and Hazardous Substances/Elements and their Content shall apply to any product covered by this manual and labeled with the following symbol:

The Table of Toxic and Hazardous Substances/Elements and their Content as required by China's Management Methods for the Control of Pollution from Electronic Information Products						
	Toxic and Hazardous Substances or Elements **(有毒有害物质或元素)**					
Part Name (部件名称)	Lead (Pb) (铅)	Mercury (Hg) (汞)	Cadmium (Cd) (镉)	Hexavalent Chromium (Cr (VI)) (六价铬)	Polybrominated biphenyls (PBB) (多溴联苯)	Polybrominated diphenyl ethers (PBDE) (多溴二苯醚)
301-1002-08	X	O	O	O	O	O

O: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T 11363-2006.
表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T11363-2006 标准规定的限量要求以下.

X: Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T 11363-2006.
示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006 标准规定的限量要求.