LANTRONIX®

Wireless Industrial Device Server

- Provides mobility and remote management of industrial equipment while minimizing costly cabling
- Industry standard 802.11 b/g wireless or Ethernet networking
- Cascade multiple devices from a single network connection
- Supports industrial protocols
- Maximizes flexibility with an internal 2-Port 10Base-T/100Base-TX Ethernet switch
- 15KV serial ESD protection and 2.5KV Ethernet isolation
- Wide -40° to 70°C operational temperature range

RoHS WEEE COMPLIANT

Wirelessly Network All Your Industrial Equipment – Quickly and Easily!

The XPress-DR+™ Wireless industrial device server adds an unprecedented level of flexibility and mobility to networking factory equipment such as PLCs, drives, motion controllers, power equipment, barcode scanners and other serial devices. Without costly cable runs, this equipment can be managed from virtually anywhere over the Net.

A versatile, powerful tool for remote management of automation and assembly/packaging equipment at manufacturing sites, automated distribution centers, refinery plants – or any industrial setting – it provides complete wireless access and control of virtually any type of equipment with a serial port!

Extending Network Connectivity with SwitchPort+

XPress-DR+ Wireless supports 802.11 b/g and Ethernet networking modes. In Ethernet mode (two 10/100 Ethernet ports) it features patent-pending SwitchPort+™ technology which enables multiple industrial serial devices to be daisy chained (cascaded) from a single network backbone connection. SwitchPort+ combines Lantronix advanced device server technology with Ethernet switching technology to provide a robust and reliable method for networking equipment. Saves time and money by avoiding unnecessary cable runs and eliminates serial cable distance limitations.

Standards Based Communications

Using an open 802.11 b/g or Ethernet architecture as a standard for device communication provides the flexibility to communicate to virtually any type of industrial equipment. Additionally it enables new equipment to be quickly and easily incorporated into existing network system designs.

When used in conjunction with an OPC server, most Windows® based HMI, SCADA and PC-based control applications have full access to information in the connected device. Existing COM-port based Windows applications can access network-enabled devices using Lantronix Com Port Redirector™. This specialized software creates virtual serial ports, which are mapped to the device server over 802.11 or Ethernet.

Thrives in the Industrial Environment

The XPress-DR+ Wireless meets the demanding, complex industrial environment head on. Packaged in a rugged DIN-rail mount case, it's equipped with isolated serial and Ethernet ports and screw terminal connectors for serial and power. It supports industrial protocols such as Modbus TCP, Modbus ASCII, Modbus RTU and DF1.

- 15KV serial ESD protection and 2.5KV Ethernet isolation protects circuitry from overcurrent conditions.
- Wide -40° to 70°C operational temperature range.
- 9-30 VDC and 9-24 VAC power input options.

Configuration Flexibility

Flexible configuration options allow the unit to be set up locally using the serial port, or remotely over Ethernet using Telnet or browser. The included DeviceInstaller™ software simplifies the process of installing industrial protocols and configuring them for use with attached devices. The CPU's flash memory provides maintenance-free, non-volatile storage and easily accommodates future system upgrades. Complete with an auto MDI/MDIX Ethernet interface, the XPress-DR+ Wireless is a powerful device communication solution that's perfect for your most demanding industrial applications.

Features

Serial Interface
2 RJ45 RS-232 Serial Ports
Baud rate selectable from 300bps to 230 Kbps
1 screw terminal RS-422/485 interface on Serial Port 2 (2 and 4-wire support)
LED indicators for TXD and RXD activities

Serial Line Formats
Characters: 7 or 8 data bits
Stop bits: 1 or 2
Parity: odd, even, none

Flow Control
Hardware: RTS/CTS
Software: XON/XOFF

Modem Control
DTR, DSR

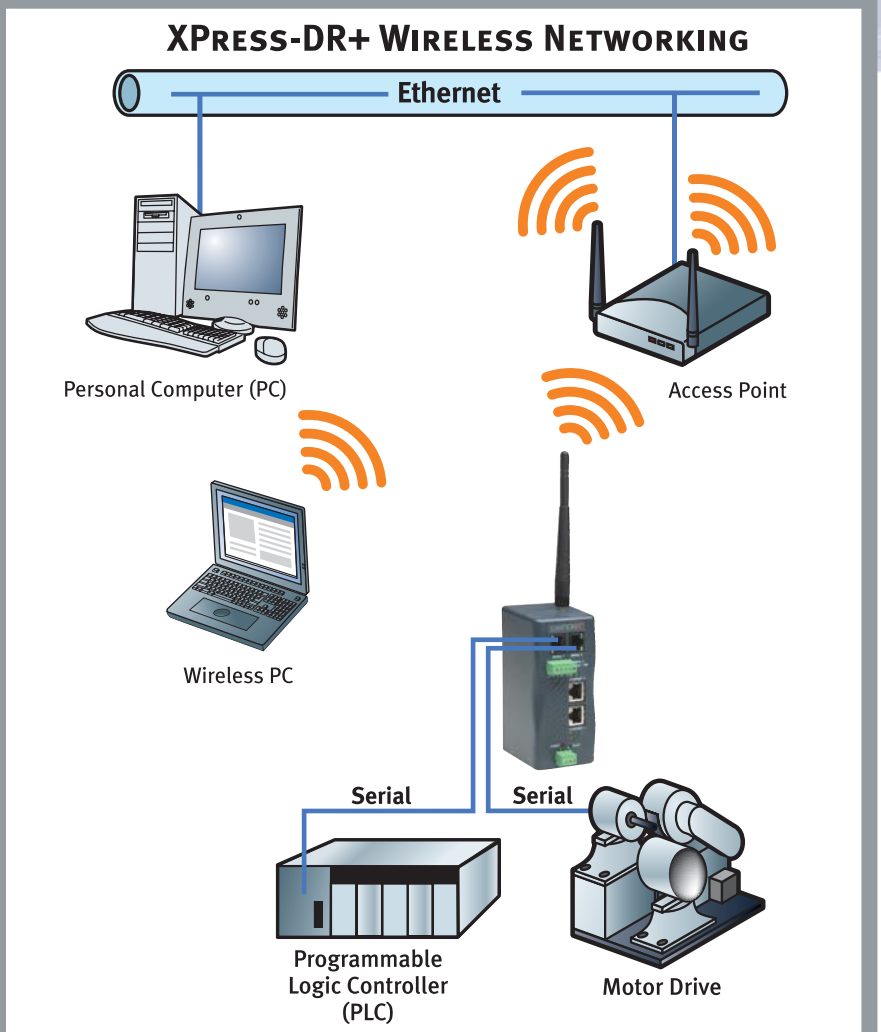
Network Interface
802.11 b/g wireless (with IEEE 802.11i – PSK with AES-CCMP Encryption)
2 RJ45 10Base-T/100Base-TX Ethernet ports
Embedded, unmanaged, fully compliant 802.3u non-blocking Ethernet switch
Store and forward architecture with 1K MAC address lookup table
Automatic MDI/MDI-X crossover
Full duplex IEEE 802.3x flow control
Half duplex back pressure flow control
IEEE 802.1d spanning tree

LED Indicators
TX/RX activity per serial
Link/Activity per Ethernet port
Power/System OK
Wireless Link

Management
Internal web server (standard tunneling firmware only)
SNMP (read only)
Serial login
Telnet login
DeviceInstaller software

Isolation
8 KV direct contact, 15KV air discharge, ESD protection on all Serial ports (IEC 1000-4-2, IEC 61000-4-2)
2 K VAC / 2.8K VDC galvanic isolation between Power Input port to Ethernet ports (except chassis ground)
2 K VAC / 2.8K VDC galvanic isolation between Power Input port to Serial ports
Transient Voltage protection and ESD with max non-repetitive surge current 800 Amp (8/20 µs) (IEC 61000-4-2)
2 K VA / 2.8K VDC galvanic isolation between Ethernet ports (except chassis ground)
2 K VA / 2.8K VDC galvanic isolation between Ethernet ports to Serial ports
40 A (5/50 ns) EFT protection (IEC 61000-4-4), 12 A (8/20 µs) lightning protection (IEC 61000-4-5) on all Ethernet ports

XPress-DR+W Example Configurations



Power
Removable screw terminal block connector
9-30 VDC or 9-24 VAC with chassis ground
2.6 Watts maximum

Environmental (Operating)
Temperature: -40°C to +70°C (-40 to 158°F)
Humidity: 20% to 90% relative humidity, non-condensing

Agency Approvals
UL, CSA, FCC, CE, TUV, CTick, VCCI, FM Class 1, Div. 2

Protocols Supported
ARP, UDP/IP, TCP/IP, Telnet, ICMP, SNMP, DHCP, BOOTP, TFTP, and HTTP

Installable Industrial Application Protocols
ModBus TCP, ModBus ASCII/RTU, DF1 Multi-Master

CPU
Lantronix DSTNI-EX 48 MHz clock, 256 KB SRAM Internal CPU Memory

Flash Memory
2 MB Flash

EEPROM
2 KB

Reset
Front panel recessed push button

Packaging
Case: High-impact plastic case with integrated DIN Rail (35 mm) mount
IP30 enclosure rating
Dimensions: (L x W x H):
88 x 57 x 123 mm (3.45 x 2.25 x 4.85 in), terminal blocks included
Weight: 0.21 kg (0.46 lb)

Shipping Dimensions (LxWxH)
187 x 229 x 111 mm (7.375 x 9.0 x 4.375 in.)

Warranty
2-year limited warranty

Ordering Information

Part Number	Description
XSDR22W00-01	XPress-DR+W two port 802.11 wireless Industrial device server, removable screw terminal port, 9-30VDC and 9-24VAC

LANTRONIX®

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 910-504 Rev B DGS2500

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