LANTRONIX®

UDS1100-IAP Industrial Device Server

- In minutes, securely connect factory floor devices to enterprise systems
- Access, monitor and control equipment over Ethernet
- Replace dedicated PCs and/or modem lines with fast and reliable Ethernet networking
- Supports RS-232, RS-422 and RS-485 communications
- Includes Modbus TCP, ASCII, RTU and DF1 protocols
- 15KV serial ESD protection
- Wide -40°– 70°C operating temperature range
- Environmentally-friendly RoHS and WEEE-compliant

Remotely Monitor, Manage and Control Industrial Equipment Over the Net

The UDS1100-IAP is a rugged and powerful tool which enables users to connect, manage and control just about any piece of industrial equipment from virtually anywhere over Ethernet or the Internet.

This single-port Device Server is a quick, simple and inexpensive way to bring the advantages of real-time or on-demand information access.

Standards Based Communications

Using an open Ethernet architecture as a standard provides the flexibility for equipment to communicate to virtually any type of industrial device.

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 industrial equipment networked by the UDS1100-IAP.

Extending Communications Across the Globe

Our approach to network-enabling devices is transparent to your attached equipment and software so you won't need to change the way you work. Using a method called serial tunneling, the UDS1100-IAP encapsulates serial data into packets and transports it over Ethernet. Serial tunneling can be done in multiple ways:

- Using Lantronix supplied Com Port Redirector™ software, Windows device applications not designed for network communications are re-directed to communicate to devices connected to the UDS1100-IAP.
- Connecting two UDS1100-IAP Device Servers configured to automatically talk to each other over the network creates virtual serial connections that can extend serial communications across a facility or around the world.

Built-in Web Server

The built-in web server enables users to access and configure the UDS1100-IAP from a standard web browser. Web pages enabling the UDS1100-IAP to be customized for unique applications can be built using Lantronix development tools. On-board Flash memory provides room for future system software upgrades and maintenance-free, nonvolatile web page storage.

Easy to Set Up and Use

The UDS1100-IAP can be set up locally through its serial port, or remotely using Telnet or a web browser. The included DeviceInstaller™ Windows-based configuration software simplifies setup and provides an easy way to:

- Assign IP & other network specific addresses
- Load custom web pages
- Enable web-based configuration of the Device Server
- Ping or query the attached device(s) over the network
- View specific device data files
- Upgrade firmware
- Simplify process of installing industrial protocols

Complete with an auto MDI/MDIX Ethernet interface, the UDS1100-IAP is a powerful device communication solution that's perfect for your most demanding industrial applications.

Modem Replacement

In modem emulation mode, the UDS is used to replace dial-up modems. The unit accepts modem AT commands on the serial port. It then establishes a network connection to the end device, leveraging network connections and bandwidth to eliminate dedicated modems and phone lines.

RoHS-compliant, the UDS1100-IAP meets Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

If you're looking for a transparent, cost-effective, and scalable means to network-enable your industrial automation equipment, look no further than the UDS1100-IAP.

Features and Specifications

Serial Interface
Interface: Software-selectable RS232, RS422 or RS485 (2 and 4 wire support)
Connectors: 1 DB25F DCE serial port
Data Rates: Software-selectable baud rate from 300 to 230 KBaud
Characters: 7 or 8 data bits
Parity: odd, even, none
Stop Bits: 1 or 2
Control Signals: CTS/RTS (Hardware)
Flow Control: XON/XOFF (Software)

Network Interface
Interface: 10Base-T/100Base-TX Ethernet port
Software selectable Ethernet speed 10/100/Auto
Software selectable Half/Full/Auto duplex
Connector: RJ45
Standards: ARP,UDP,TCP, ICMP,Telnet,TFTP, AutoIP,DHCP,HTTP, SNMP, TCP,UDP, and Telnet,TFTP

Indicators (LED)
Power, 10/100 Link/Activity (green), **100/100 Link/Activity**(green), **Diagnostics** (red), **Status** (green)

Processor
CPU: Lantronix DSTNI-EX 48 MHz clock
Memory: 256 KB zero wait state SRAM, 2 MB Flash

Management
Lantronix DeviceInstaller GUI, Serial login,SNMP, Telnet login,HTTP

Power
9-30 VDC or 9-24 VAC on barrel connector (1.5 Watts maximum consumption)
9-30 VDC on DB25F serial interface
3.3vdc on serial interface

Environmental
Operating: -40° to 70° C (41° to 158° F)
Storage: -40° to 85° C (-40 to 185° F)

Packaging
Material: Metal enclosure with integrated wall mounts; optional 35 mm DIN-rail mount available
Dimensions (LxWxH): 9.0 x 6.4 x 2.3 cm (3.5 x 2.5 x 0.9 in)
Weight: 0.20 kg (0.45 lb)
IP Rating: 30

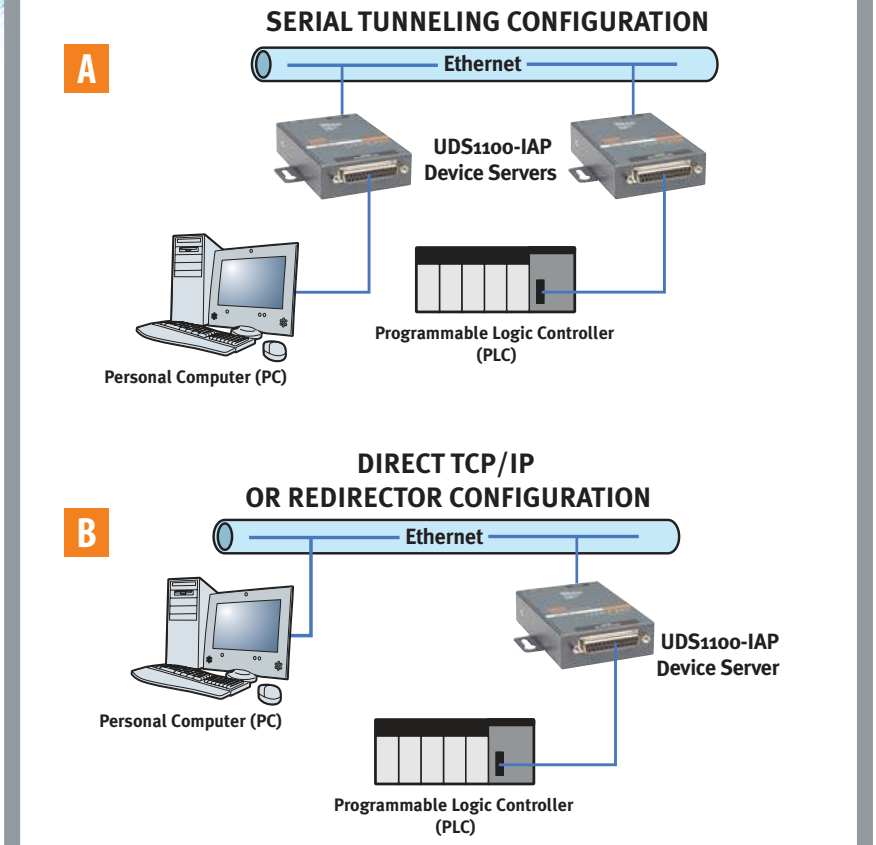
Agency Approvals
UL, CSA, FCC, CE,TUV, CTick,VCCI

Warranty
2-year limited warranty

Shipping Dimensions
Dimensions (LxWxH): 242 x 191 x 115 mm (9.5 x 7.5 x 4.5 in)
Weight: 1.5 kg (3.0 lbs)

Included Software
Windows® 98/ME/NT/2000/XP-based DeviceInstaller configuration software, Com Port Redirector™software and related utilities

UDS1100-IAP Example Configurations



Emissions
FCC Part 15 Subpart B Class A Radiated Emissions 30MHz – 1000MHz
ICES-003 Issue 4 February 2004 Class A Radiated Emissions 30MHz – 1000MHz
AS/NZS CISPR 22: 2004 Class A Radiated Emissions 30MHz – 1000MHz
EN55022: 1998 + A1: 2000 + A2: 2003 Class A Radiated Emissions 30MHz – 1000MHz
VCCI V-3/2005.04 Class A Radiated Emissions 30MHz – 1000MHz
EN61000-3-2: 2000 Class A Harmonic Current Emissions
EN61000-3-3: 1995 + A1: 2001 Fluctuations and Flicker

Immunity
EN55024: 1998 +A1: 2001 +A2: 2003
IEC_61000-4-2: 1995 ESD 8KV Air Discharge (Direct), 4KV Contact Discharge (Direct/Indirect)
IEC_61000-4-3: 1995 Radiated Immunity 3.0V/m, 1KHz AM Sine Wave at 80%
IEC_61000-4-4: 1995 EFT/Burst 1.0KV Power Lines, 0.5KV I/O Lines
IEC_61000-4-5: 1995 Surge Immunity 1.0KV Common Mode, 1.0 KV Differential Mode
IEC_61000-4-6: 1996 Conducted Immunity 3.0 Vrms, 80% AM Modulated (1KHz)
IEC_61000-4-8: 1993 Magnetic Field Immunity 50Hz 1.0 Arms/m
IEC_61000-4-11: 1994 Voltage Dips and Interrupts (>95%,0.5 periods), (30%,25 periods), (>95%,250 periods)

Isolation
Designed with protection against transients and ESD for use under harsh environments.
Serial Port: 15 KV ESD protection on RS232 and RS422/485 transceivers
Power Input: Up to non-repeated 600 W 10/100 usec pulse protection against transient over voltages
Ethernet Port: 1500 VAC isolation shielded with shield connected to chassis ground for signal integrity and ESD protection

Ordering Information

Part Number	Description
UD1100IA2-01	UDS1100-IAP Device Server, 100-240 VAC International power supply with regional adapters, includes 500-163 cable and ACDIN1001-01 Din rail mount
Accessories	
500-163	DB25M to DB9F serial cable (included)
ACDIN1001-01	Optional DIN-rail mount (included)
500-171-R	DB25M to RS485 and power input screw terminal adapter (order separately)

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