

Continental Access



UDS1100 Device Server

- ▶ Network virtually any device in minutes
- ▶ Access, monitor and control equipment over Ethernet
- ▶ Replace dedicated PCs and/or modem lines with fast and reliable Ethernet networking
- ▶ Configure quickly and easily via HTTP, DHCP, Telnet, serial or Lantronix DeviceInstaller™ utility
- ▶ Supports RS232, RS422 and RS485 communications
- ▶ Environmentally-friendly RoHS and WEEE compliant
- ▶ Small enough to place almost anywhere

Remotely Monitor, Manage and Share Equipment Over the Net

Device networking is what powers M2M (machine to machine) communication. The UDS family of Device Servers™ enables users to connect, manage and control just about any piece of equipment with a serial port from virtually anywhere over Ethernet or the Internet.

With the UDS1100, virtually any piece of equipment can be added to an Ethernet network in a matter of minutes! This single-port Device Server is a quick, simple and inexpensive way to bring the advantages of remote management to equipment not currently connected to a network.

Extending Serial 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 encapsulates serial data into packets and transports it over Ethernet. Serial tunneling can be done in two 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.
- Connecting two UDS1100 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.

The built-in web server enables users to access and configure the UDS1100 from a standard web browser. Web pages enabling the UDS1100 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, non-volatile web page storage.

Easy to Set Up and Use

The UDS1100 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

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.

If you're looking for a transparent, cost-effective, and scalable means to network-enable your serial devices, look no further than the UDS.

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



UDS1100 Example Configurations



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

Environmental

Operating: 5° to 50° C (41° to 122° F)
 Storage: -40° to 66° C (-40 to 151° 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

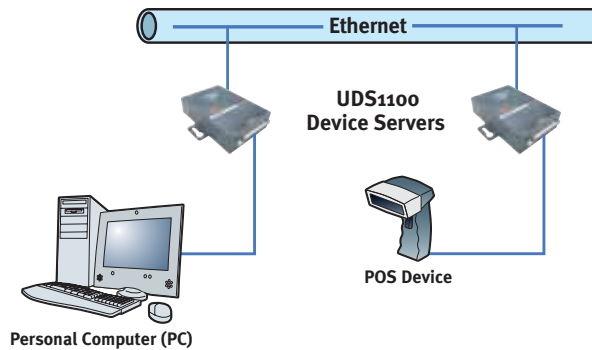
Shipping Dimensions

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

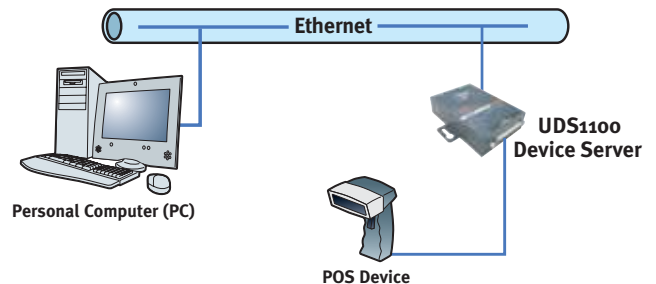
Included Software

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

SERIAL TUNNELING CONFIGURATION



DIRECT TCP/IP OR REDIRECTOR CONFIGURATION



Emissions

FCC Part 15 Subpart B Class A
 ICES-003 Issue 4 February 2004 Class A
 AS/NZS CISPR 22: 2004 Class A
 EN55022: 1998 + A1: 2000 + A2: 2003 Class A
 VCCI V-3/2005.04 Class A
 EN61000-3-2: 2000 Class A
 EN61000-3-3: 1995 + A1: 2001

Radiated Emissions 30MHz – 1000MHz
 Radiated Emissions 30MHz – 1000MHz
 Radiated Emissions 30MHz – 1000MHz
 Radiated Emissions 30MHz – 1000MHz
 Radiated Emissions 30MHz – 1000MHz
 Harmonic Current Emissions
 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
UD1100001-01	UDS1100 Device Server, US domestic power 120 VAC power supply
UD1100002-01	UDS1100 Device Server, 100-240 VAC International power supply with regional adapters
UD110000B-01	UDS1100 Device Server board only

Accessories

500-163	DB25M to DB9F serial cable
ACDIN1001-01	Optional DIN-rail mount
500-171	DB25M to RS485 and power input screw terminal adapter

LANTRONIX®

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