



## UDS2100 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
- ▶ Two DB9M DTE serial ports supporting RS232, RS422 and RS485
- ▶ Environmentally-friendly RoHS and WEEE compliant
- ▶ Features TruPort® Com port control technology



## Remotely Monitor, Manage and Share Equipment Over the Net

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 UDS2100, two pieces of equipment of virtually any type can be added to an Ethernet network in a matter of minutes! This dual-port device server is a quick, simple and inexpensive way to bring the advantages of remote management and control 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 UDS2100 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 UDS2100.
- ▶ Connecting two UDS2100 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 UDS2100 from a standard web browser. Using Lantronix development tools, users can build web pages to customize the UDS2100 for unique applications.

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 UDS2100 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.

### Total Com Port Control with TruPort Technology

Built into the included Com Port Redirector software, TruPort® technology enables Windows-based applications to access and control serial ports on the UDS2100 as if they were actually local PC serial ports. The application can monitor and set hardware pins on the UDS2100 serial ports as well as access serial buffers for total Com port control. This allows existing applications to seamlessly transition from controlling local devices to true remote monitoring and control of devices around the world.





## Features and Specifications

### Serial Interface

Interface: Software-selectable RS232, RS422 or RS485 (2 and 4 wire support)  
 Connectors: 2 DB9M DTE serial ports  
 Data Rates: Software-selectable baud rate from 300 to 921 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, RFC2217

### LED Indicators

Power (blue)  
 RX1 Serial (Activity) (green)  
 TX1 Serial (Activity) (yellow)  
 RX2 Serial (Activity) (green)  
 TX2 Serial (Activity) (yellow)  
 RJ45 LEDs Link (100=green, 10=yellow)  
 Act (Full=green, Half duplex=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 on barrel connector (1.8 Watts maximum consumption)

### Environmental

Operating: 0° to 60° C (32° to 140°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): 9.5 x 7.2 x 2.3 cm (3.7 x 2.8 x 0.9 in)  
 Weight: 0.4 kg (0.9 lb)  
 IP Rating: 30

### Agency Approvals

FCC, C/UL, CSA, VCCI, CE, TUV, Ctick

### Warranty

2-year limited warranty

### Shipping Dimensions

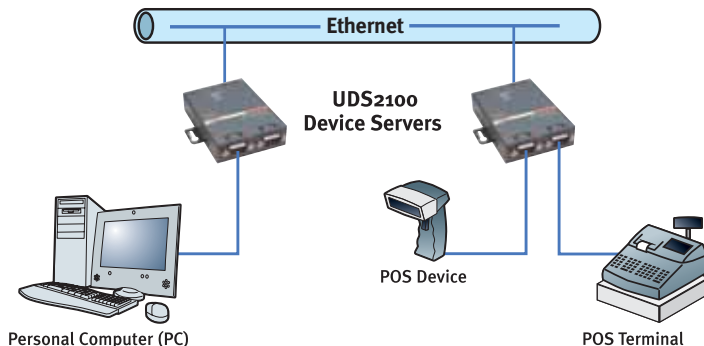
Dimensions (LxWxH): 35.5 x 17.1 x 7.6 cm (14 x 6.75 x 3 in)  
 Weight: 1.5 kg (3.0 lbs)

### Included Software

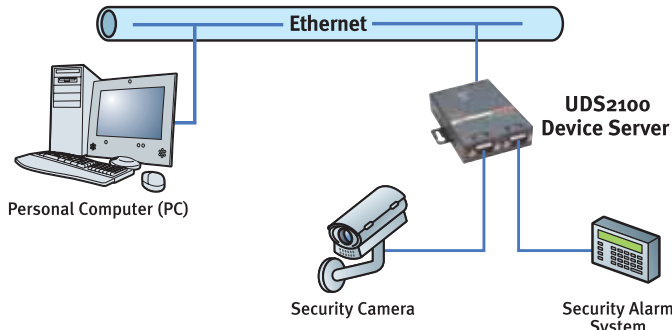
Windows 98/ME/NT/2000/XP-based DeviceInstaller configuration software, Com Port Redirector software and related utilities

## UDS2100 Example Configurations

### 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: 2006 Class A  
 EN55022: 1998 + A1: 2000 + A2: 2003 Class A  
 VCCI V-3/2006.4 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
UD2100001-01	UDS2100 two-port 10/100 device server; RoHs compliant with US domestic power supply
UD2100002-01	UDS2100 two-port 10/100 device server RoHS compliant; international power supply with regional adapters
UD2100NL2-01	UDS2100 two-port 10/100, non-labeled device server; RoHS compliant; international power supply with regional adapters

### Accessories

500-164-R	DB9F to DB9F Null modem cable
500-163-R	DB25M to DB9F serial cable
ACDIN2001-01	Optional DIN-rail mount

