



UDS1100-B Device Server

- ▶ Quick way to embed network connectivity to access, monitor and control equipment over Ethernet
- ▶ RS-232, RS422 or RS-485 serial support
- ▶ RJ45 10Base-T/100Base-TX Ethernet Interface
- ▶ Configurable via internal web server, Telnet on serial
- ▶ 2 MB Flash ROM
- ▶ Environmentally-friendly RoHS and WEEE compliant
- ▶ Compact design allows for easy integration

Quickly Network Enable Equipment Allowing Remote Monitoring and Management From Anywhere on the Net

Lantronix UDS1100-B Device Server, can quickly and easily network-enable electronic equipment with a serial interface so it can be remotely accessed and controlled over the Net. This flexible product is designed to be integrated with the circuit board of devices like factory machinery, security systems, heating and ventilation systems, lighting control systems and point-of-sale devices.

Building networking capability into a product can be a complex task. The UDS1100-B offers a flexible and easy-to-implement networking solution which enables OEMs to concentrate on their core competency, reduce time-to-market and quickly increase product value.

Extending Communications Across the Globe

Using a method called 'serial tunneling,' the UDS1100-B encapsulates serial data into packets and transports it over Ethernet. Serial tunneling can be done in multiple ways:

- Using two Device Servers connected by a network, virtual serial connections can be extended across a facility or around the world.
- Implementing Lantronix COM Port Redirector™ software simplifies the integration process by extending the functionality of (serial) COM port-based Windows® applications. It redirects application data destined for a local serial (COM) port on a PC over the Ethernet network and through the UDS1100-B enabled device. Communications to or from the networked equipment is processed by the PC application as if it were from the local COM port.

- OEMs that have control over their application source can also modify their applications to communicate directly to the UDS1100-B.

Easy to Set Up and Use

The built-in web server enables users to access and configure the UDS1100-B from a standard web browser. Web pages enabling the Device Server 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. The UDS1100-B can be set up locally through its serial port, or remotely using Telnet or a web browser. The Lantronix DeviceInstaller™ Windows-based configuration software simplifies setup and provides an easy way to:

- Discover and group devices on the local network
- 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.

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





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**
- 3.3 VDC on DB25F serial interface**

Environmental

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

Packaging

- Dimensions (LxWxH):** 8.4 x 5.8 x 1.4 cm (3.3 x 2.3 x .55 in)
- Weight:** 0.12 kg (0.26 lb)

Warranty

- 2-year limited warranty

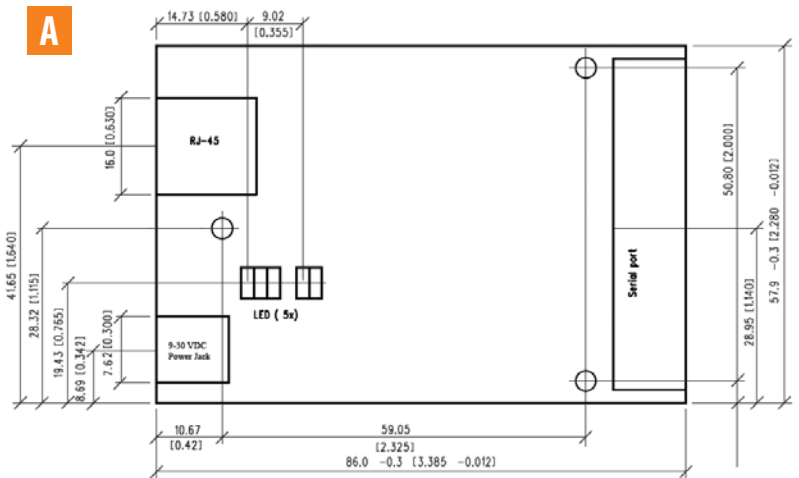
Isolation

- 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

Description

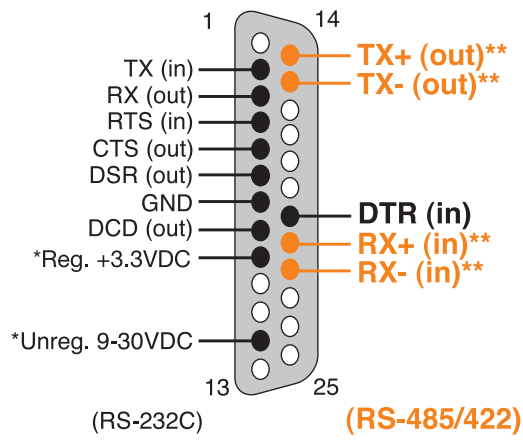
- UDS1100-B board-level Device Server featuring a 10/100 (RJ45) Ethernet Interface, 1 DB25F DCE RS232/422/485 serial interface TCP/IP protocol support, Flash ROM, diagnostic LEDs, HTTP, Telnet or serial management.

UDS1100-B Board Layout



Units: mm [in]

B



*The Device Server can alternately be powered up via the serial port using one of these pins.
 **The minus sign (-) is sometimes represented as A (e.g., TXA). The plus sign (+) is sometimes represented as B (e.g., TXB).

Ordering Information

| Part Number | Description |
|--------------|---|
| UD110000B-01 | UDS1100 Device Server board only |
| 500-163 | DB25M to DB9F serial cable |
| 500-171-R | DB25M to RS485 and power input screw terminal adapter |

