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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# LANTRONIX®



# **Embedded Device Server**

- Flexible, well-developed IP protocol stack
- TTL serial interface
- Two serial ports
- ► Accepts 5 VDC regulated input power
- ▶ HTTP, serial, Telnet and SNMP management
- ► Flash ROM for easy software upgrades
- Custom protocol support available
- 256-bit AES encryption for secure communications



# **Build 10/100 Base-T Ethernet Connectivity into Your Products Quickly and Economically**

The Lantronix Micro125 is a board-level product for OEM users who want to embed proven mainstream Ethernet connectivity in their products quickly and economically.

Building Ethernet connectivity into a product is no simple task. It requires a significant investment in hardware and software integration – often in areas outside of core competencies. So why build it yourself when there is a better alternative?

The Micro125 embedded device server provides an integrated solution to add proven Ethernet connectivity to an existing design quickly and economically, and with a high level of flexibility.

Device networking starts with a Device Server.<sup>™</sup>
These amazing products enable most any device with serial capability (TTL) to become a fully functional member of an Ethernet network. Device Servers include all of the elements needed to network-enable your products – a processor, real-time operating

system (RTOS), a robust TCP/IP stack, a web server, and a network connection. All the connected product additionally needs is a header, providing connections to a power source and to a TTL serial port.

The Micro125 brings over a decade of device networking experience, rock-solid IP firmware, extensive applications support and advanced encryption standards to industrial and commercial environments.

Measuring only 49 x 40 mm the Micro125 can easily fit into almost any size serial device that would benefit from network connectivity. It includes a serial interface TTL connector and 10/100 Base-T Ethernet RJ45 jack. The Micro125 includes the same IP protocol stack found on the other Lantronix embedded products.

RoHS-compliant, the Micro125 meets Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment.





#### **Features**

#### **Protocols**

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

#### **Networking Interface**

RJ45 (10/100Base-T) Ethernet

#### **Serial Interface**

TTL level (Asynchronous)

#### **Data Rates**

300 bps to 230 Kbps

#### **Serial Line Formats**

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

#### **Modem Controls**

DTR, RTS, CTS, DCD

#### Flow Control

XON/XOFF (Software) CTS/RTS (Hardware)

#### Management

HTTP

SNMP Serial login Telnet login Security Optional 256-bit AES Password protection

#### **System Software**

Flash ROM standard: downloadable from a TCP/IP host (TFTP) or over serial port

#### **Diagnostic LEDs**

Serial Channel Status **Ethernet Link Status Diagnostic Information** 

#### Compatibility

Ethernet: Version 2.0/IEEE 802.3

### **Power Requirements**

5 VDC +/-5% at ~ 200 mA

#### Memory

Flash: 512K

RAM: 256K - zero wait

#### **Environmental**

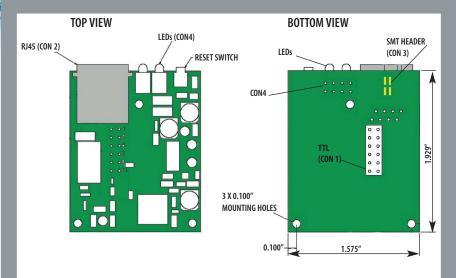
**Standard Temperature** 0° to 70°C (32° to 158°F)

Storage Temperature -40° to 85°C (-40° to 185°F)

#### Physical Dimensions (W x H)

49 x 40 mm (1.929 x 1.575 in)

## **Board Layout and Pinouts**



CON	1 (2 x 6 Pins)TTL	CON	CON2 (RJ45)	
Pin	Function	Pin	Con1	
1	+5V	1	TX+	
2	GND	2	TX-	
3	RXA (Input)	3	RX+	
4	TXA (Output)	4	NC	
5	RTSA (Output)	5	NC	
6	DTRA (Output)	6	RX-	
7	CTSA (Input)	7	NC	
8	DCDA (Input)	8	NC	
9	R/V/A (Output)			
10	RESET			

#### CON3 (2 x 2 SMT in place of RJ45)

Pin	Function
1	TX+
2	TX-
3	RX+
4	RX-

#### CON4 (2 x 4 pins in place of LEDs)

Pin	Function
1	+3.3V
2	+3.3V
3	DIAG (Red)
4	CH1 (Green)
5	+3.3V
6	+3.3V
7	CH2 (Yellow)
8	Link (Green)

### **Warranty**

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RXB (Input)

TXB (Output)

2-year limited warranty

# **Ordering Information**

Part Number	Description
M000AA003-01R	Micro 125, No RJ45 connector, No LEDS, with TTL pin header, RoHS
M000AA0E3-01R	AES Encrypted Micro125, No RJ45 connector, No LEDS, with TTL pin header, RoHS
M011AA003-01R	Micro125 with RJ45 connector, LEDS, with TTL pin header, RoHS
M011AA0E3-01R	AES Encrypted Micro125 with RJ45 connector, LEDS, with TTL pin header, RoHS
M022AA003-01R	Micro 125, Pin header for Ethernet, Pin header for LED connection, with TTL pin header, RoHS
M022AA0E3-01R	AES Encrypted Micro125, Pin header for Ethernet, Pin header for LED connection, with TTL pin header, RoHS

