



# xPico® 110

Wired Device Server  
Module



## ROBUST MACHINE IOT- ENABLEMENT WITHOUT COMPLEXITY

Connectivity without complexity. Designed for swift integration with minimal engineering effort, the compact xPico® 110 module makes it easy for OEMs to IoT-enable their industrial machines.

### Get From Zero to Connected. Fast.



Connect to virtually any 8/16/32-bit microcontroller with a UART interface. Simplify your application firmware with a completely offloaded hardened TCP/IP network stack, robust connectivity software and flexible configuration interfaces without writing a single line of code.

### Secure Data Communications Support for Hundreds of Protocols



Securely communicate device data with one or more applications on the local network or across the Internet. Customer proven TruPort® Serial technology supports reliable and transparent pass-through of hundreds of standard fieldbus protocols such as Modbus as well as proprietary serial protocols.

### Compact & Industrial Design That Fits Virtually Any Board



Integrate PoE or utilize different Ethernet connector types in your design. On-module PHY and an extended operating temperature range simplifies design integration in the harshest environments.

### xPico 110 Highlights

- Hardened and completely offloaded TCP/IP stack and network services
- TruPort® Serial technology for robust and secure data communication
- Fine-grained security policy configuration
- Integrated web server
- NIST certified 256-bit AES encryption
- Integrated on-module 10/100 Mbps PHY
- Available Modbus gateway variant
- Compact SMT footprint (18mm x 31mm)
- Industrial operating temperature range (-40°C to + 85°C)

### Perfect For

- Access Control & Physical Security
- Industrial Machines
- Renewable Energy
- Building Automation

## Features and Specifications

### Data Communication

- TruPort® Serial Technology— TCP and UDP Server Mode, TCP and UDP Client Mode, Multi-host Connect; AES Encrypted Sessions
- SMTP Alerts—GPIO Triggers; Serial Data Stream Triggers

### Security and Authentication

- NIST Certified AES (FIPS-197) Algorithm
- 256-bit, 192-bit, 128-bit AES encryption
- Configuration Password (Telnet, Serial)
- Software Controlled Network Service Port Enable/Disable

### Management Interfaces

- Serial Port, Telnet, Internal Web Server (HTTP), SNMP
- Microsoft Windows-based utility for web configuration
- Lantronix Device Discovery Protocol
- Firmware upgrade via TFTP and Serial Port

### Protocol Support

- DHCP Client, BOOTP, TFTP
- Telnet Server, HTTP server
- IPv4, TCP/IP, UDP/IP, ARP, ICMP, Auto-IP, DNS, SNMP v1

### Ethernet Specifications

- IEEE 802.3 MAC and PHY, 10BaseT and 100BaseT
- Auto Negotiation; Full duplex and half duplex support

### Serial Specifications

- 2x UART (Serial) Ports
- CMOS (Asynchronous) 3.3V Level Signals (5V Tolerant)
- Data Rates: 300 bps to 921 kbps (software selectable)
- Data Bits: 7 or 8; Stop Bits: 1 or 2; Parity: Odd, Even or None
- Control signals: DTR/DCD, RTS/CTS (Serial Port 1 only)
- Flow Control: XON/XOFF (software), RTS/CTS (hardware), None

### Other Interfaces

- Programmable I/O: 8 PIO pins (software selectable)

### Architecture

- CPU: 16-bit x86 DSTni-EX up to 120 MHz
- Memory: 256 KB SRAM, 512 KB Flash
- 384 KB for Web Pages

### Power

- Input Voltage: 3.3 VDC
- Current Consumption: 240 mA typical (100 BaseT; 120MHz CPU)

### Dimensions

- 18.3 mm (W) x 31.1 mm (L) x 3.0 mm (H)

### Packaging

- Tape & Reel: 250 units/reel
- Sample Pack: 10 units/pack

### Environmental

- Operating Temp: -40°C to +85°C
- Storage Temp: -40°C to +85°C
- Relative Humidity: 10% to 90% non-condensing

### Certifications

#### Emissions

- EN55032:2010 Class B; CFR Title 47, Part 15, Subpart B, Class

#### Immunity

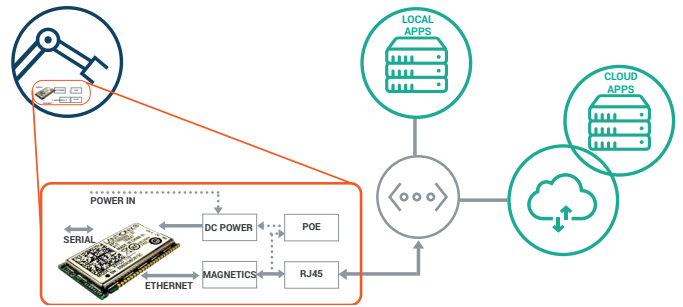
- EN 55024:2010; EN 61000-3, EN 61000-4

#### Safety

- UL 60950-1, 2nd Ed; CSA C22.2 No. 60950-1-07, 1st Ed
- IEC 60950-1:2005, 2nd Ed; EN 60950:2006

### Warranty

- 5 Year Limited



## Ordering Information

Part Number	Description
XPC100200B-01	xPico 110 Wired Device Server Module, AES, BULK
XPC100200S-01	xPico 110 Wired Device Server Module, AES, SAMPLE
XPC10020MB-01	xPico 110 Wired Device Server Module, Modbus, BULK
XPC100200K-02	xPico 110 Wired Device Server Module, Evaluation Kit

## Contact Information

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Actual Size

