

xPico® 110



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 $(-40^{\circ}\text{C to} + 85^{\circ}\text{C})$

Perfect For

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





xPico® 110

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
- \bullet 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

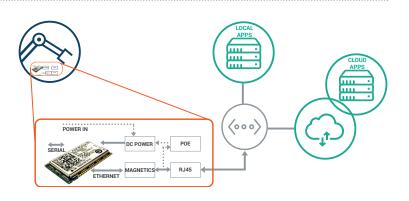
• EN 55024:2010; EN 61000-3, EN 61000-4

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

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Actual Size





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