

Item no.: 385589

## UC-8220-T-LX-US-S (CTO) - Arm Cortex-A7 dual-core 1 GHz IIoT gateway with built-in TPM module, US region L

from 1.087,93 EUR

Item no.: 385589  
shipping weight: 0.80 kg  
Manufacturer: MOXA



### Product Description

Moxa's Arm-based compact fanless industrial-grade computers are wireless-ready and come with comprehensive security features. They are built for space-critical applications. The computers are specifically designed for long-term operations, making them an ideal choice for remote monitoring and data-acquisition applications.

Arm Cortex-A7 dual-core 1 GHz IIoT gateway with built-in TPM module, US region LTE Cat. 4 module preinstalled, 1 Mini PCIe expansion slot for a Wi-Fi module, 1 CAN port, 4 DIs, 4 DOs, -40 to 70°C operating temperature

Computer CPU- Armv7 Cortex-A7 dual-core 1 GHz DRAM- 2 GB DDR3L Supported OS- Moxa Industrial Linux 1 (Debian 9, kernel 4.4), 2027 EOL- Moxa Industrial Linux 3 (Debian 11, kernel 5.10), 2031 EOL Storage Pre-installed- 8 GB eMMC Expansion Slots- MicroSD (SD 3.0) socket x 1 Computer Interface Ethernet Ports- Auto-sensing 10/100/1000 Mbps ports (RJ45 connector) x 2 Serial Ports- RS-232/422/485 ports x 2, software selectable (DB9 male) CAN Ports- CAN 2.0 A/B x 1 (DB9 male) Digital Input- DIs x 4 Digital Output- DOs x 4 USB 2.0- USB 2.0 hosts x 1, type-A connectors Wi-Fi Antenna Connector- RP-SMA x 2 Cellular Antenna Connector- SMA x 2 GPS Antenna Connector- SMA x 1 Expansion Slots- mPCIe slots x 1 SIM Format- Nano Number of SIMs- 2 Buttons- Programmable button TPM- TPM v2.0 Ethernet Interface Magnetic Isolation Protection- 1.5 kV (built-in) Security Functions Hardware-based Security- TPM 2.0- Hardware Root of Trust Secure Boot Intrusion Detection- Host-based Intrusion Detection Security Tools- Security Diagnostic Tool- Security Event Auditing- Secure Update Disk Protection- LUKS Disk Encryption Recovery- One-step recovery to the last known secure state- Dual-system design with automatic fallback Reliability- Network Keep Alive- Network Failover and Failback Serial Interface Baudrate- 300 bps to 921.6 kbps Data Bits- 7, 8 Stop Bits- 1, 2 Parity- None, Even, Odd, Space, Mark Flow Control- RTS/CTS, XON/XOFF- ADDC (automatic data direction control) for RS-485- RTS Toggle (RS-232 only) Console Port- 1 x 4-pin header to DB9 console port Serial Signals RS-232- Tx, Rx, RTS, CTS, DTR, DSR, DCD, GND RS-422- Tx+, Tx-, Rx+, Rx-, GND RS-485- 2w- Data+, Data-, GND CAN Interface No. of Ports- 1 Connector- DB9 male Baudrate- 10 to 1000 kbps Industrial Protocols- CAN 2.0A- CAN 2.0B Isolation- 2 kV (built-in) Signals- CAN\_H, CAN\_L, CAN\_GND, CAN\_SHLD, CAN\_V+, GND Digital Inputs Connector- Screw-fastened Euroblock terminal Dry Contact- Off: open- On: short to GND Isolation- 3K VDC Sensor Type- Wet contact (NPN)- Dry contact Wet Contact (DI to COM)- On: 10 to 30 VDC- Off: 0 to 3 VDC Digital Outputs Connector- Screw-fastened Euroblock terminal Current Rating- 200 mA per channel/O Type- Sink Voltage- 24 VDC nominal, open collector to 30 VDC Cellular Interface Cellular Standards- LTE Cat. 4 Band Options- LTE Band 2 (1900 MHz) / LTE Band 4 (1700 MHz) / LTE Band 5 (850 MHz) / LTE Band 13 (700 MHz) / LTE Band 17 (700 MHz)- UMTS/HSPA 850 MHz / 1900 MHz- Carrier Approval: Verizon, AT&T GPS Interface Receiver Types- GPS/GLONASS/Galileo- State-of-the-art GNSS solution Accuracy- Position: 2.0 m @ CEP50 Acquisition- Hot starts: 1.1 sec- Cold starts: 29.94 sec Sensitivity- Cold starts: -145 dBm- Tracking: -160 dBm Time Pulse- 0.25 Hz to 10 MHz LED Indicators System- Power x 2- Programmable x 1- SIM card indicator x 1 Wireless Signal Strength- Cellular/Wi-Fi x 6 Power Parameters No. of Power Inputs- Redundant dual inputs Input Voltage- 12 to 48 VDC Power Consumption- 10 W Input Current- 0.8 A @ 12 VDC Reliability Alert Tools- External RTC (real-time clock) Automatic Reboot Trigger- External WDT (watchdog timer) Physical Characteristics Dimensions- 141.5 x 120 x 39 mm (5.7 x 4.72 x 1.54 in) Weight- 750 g (1.65 lb) Housing- SECC- MetallIP Rating- IP30 Installation- DIN-rail mounting- Wall mounting (with optional kit) Environmental Limits Operating Temperature- -40 to 70°C (-40 to 158°F) Storage Temperature (package included)- -40 to 85°C (-40 to 185°F) Ambient Relative Humidity- 5 to 95% (non-condensing) Shock- IEC 60068-2-27 Vibration- 2 Grms @ IEC 60068-2-64, random wave, 5-500 Hz, 1 hr per axis (without USB devices attached) Standards and Certifications EMC- EN 55032/35- EN 61000-6-2/-6-4 EMI- CISPR 32, FCC Part 15B Class A EMS- IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV- IEC 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m- IEC 61000-4-4 EFT: Power: 2 kV; Signal: 1 kV- IEC 61000-4-6 CS: 10 V- IEC 61000-4-8 PFMF- IEC 61000-4-5 Surge: Power: 0.5 kV; Signal: 1 kV Industrial Cybersecurity- IEC 62443-4-1- IEC 62443-4-2 Hazardous Locations- Class 1 Division 2- ATEX- IECEx Carrier Approvals- Verizon- AT&T Safety- UL 62368-1- EN 62368-1 Green Product- RoHS, CrRoHS, WEEE MTBF Time- 528,574 hrs Standards- Telcordia (Bellcore) Standard TR/SR

### Specifications

Scan this QR code to view the product  
All details, up-to-date prices and availability

