

Item no.: 385588

## UC-8220-T-LX-US-S - Arm Cortex-A7 dual-core 1 GHz IIoT gateway with integrated TPM module

from 1.104,23 EUR

Item no.: 385588  
shipping weight: 0.80 kg  
Manufacturer: MOXA



### Product Description

Arm-based computers Moxa's compact fanless arm-based industrial computers are wireless and have comprehensive safety functions. They are designed for space-critical applications. The computers are specifically designed for long-term operation, making them the ideal choice for remote monitoring and data acquisition applications. For more information, visit our Arm Linux IIoT Gateway solution portal page.

**UC-8220-T-LX-US-SUC-8200 Series** Arm Cortex-A7 Dual-Core 1 GHz IIoT Gateway with built-in TPM module, US region LTE Cat. 4 module pre-installed, 1 Mini PCIe expansion slot for a Wi-Fi module, 1 CAN port, 4 DI, 4 DO, -40 to 70°C operating temperature

**Computer** CPU: Armv7 Cortex-A7 Dual-Core 1 GHz DRAM: 2 GB DDR3L Supported operating system: Moxa Industrial Linux 1 (Debian 9, Kernel 4.4), 2027 EOL Moxa Industrial Linux 3 (Debian 11, Kernel 5.10), 2031 EOL See [www.moxa.com/MIL](http://www.moxa.com/MIL) Memory 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 connector) CAN ports: CAN 2.0 A/B x 1 (DB9 connector) Digital input: DI x 4 Digital output: DO 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 buttons 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 Hard Disk Encryption-Recovery: One-step recovery to last known secure state Dual System Design with Automatic Failback-Reliability: Network Keep Alive, Network Failover and Failback Serial Interface Baud Rate: 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 connector: 1 x 4-pin header to DB9 console connector 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 Number of ports: 1 Connector: DB9 connector Baud rate: 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+, GNDDigital inputs-Connection: Screwable Euroblock terminal-Dry contact: Off: open On: short circuit 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-Connection: Screwable Euroblock terminal Rated current: 200 mA per channel I/O type: Sink Voltage: 24 VDC nominal, open collector up to 30 VDC Mobile radio interface-Mobile radio 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-Capture: Hot starts: 1.1 sec Cold starts: 29.94 sec Sensitivity: Cold starts: -145 dBm Tracking: -160 dBm-Timing 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 Performance Parameters Number 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; metal Degree of protection: IP30 Installation: DIN rail mounting, wall mounting (with optional kit) Environmental conditions Operating temperature: -40 to 70°C (-40 to 158°F) Storage temperature (including packaging): -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 hour per axis (without USB devices connected) 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 PFM IEC 61000-4-5 Surge: Power: 0.5 kV; Signal: 1 kV-Industrial cyber security: IEC 62443-4-1 IEC 62443-4-2 Explosive atmospheres: Class I Division 2 ATEX IEC Ex-Operator approvals: Verizon AT&T-Safety: UL 62368-1 EN 62368-1 Green product: RoHS, CRoHS, WEEE MTBF Time: 528.574 hours Standards: Telcordia (Bellcore) Standard TR/SR

### Specifications

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

