

X300 Series

Compact Cellular IoT Gateway Solution



ELEVEL Technical Services



Ideal for mission-critical applications, the new X300 Cellular Compact IoT Gateway Solution combines Lantronix's IoT gateway hardware with services subscription, including centralized device management, cellular data, enhanced security, and expert technical support in an all-in-one package.

The X300 Series offers extensive IoT communication with LTE M or Cat-1 cellular, Wi-Fi, Bluetooth/BLE, Ethernet, and serial interface in a small, industrial-grade form factor. The X300's combined offering gives you everything you need to guarantee your project's success.

- **PercepXion™** cloud-based device management and analytics software platform
- **Connectivity Services** embedded SIM card with scalable cellular data plans
- **LEVEL Technical Services** providing technical experts and limited lifetime hardware warranty

Industrial Grade, Compact Form Factor

The Lantronix X300 Series gateway is a compact (79 x 79 mm) IoT gateway with multiple hardware interfaces available such as a multi-mode Serial, an Ethernet, cellular, Wi-Fi and Bluetooth/BLE. The gateway is designed for complex deployments in harsh environments, even where space is limited.

Built-in Security Framework with Lantronix InfiniShield™

The highest level of security for mission-critical applications is key to preventing cyber security threats. InfiniShield™ Security provides a comprehensive security suite, including a secure element chip, enables secure boot, access, and data communications, preventing unauthorized access.

Process and Customize at the Edge

With the ePACK software suite, based on Linux framework, the X300 IoT gateway provides a user-friendly environment to develop your application and leverage the Linux development community applications.

BLE Sensors Accessory to Collect More Critical Data

Read temperature, humidity, sense motion or get ID location via a complete range of integrated BLE sensors.

Perfect For:



Digital Signage



Industry 4.0



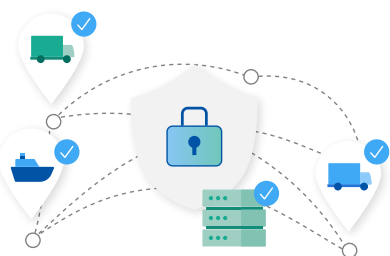
Remote Asset Management



BLE Gateway

X300 Series Highlights

- Compact industrial-grade design
- Multiple hardware interfaces
- Latest Cyber Security protection
- PercepXion Device Management
- Integrated Lantronix Connectivity Services
- Expert Technical Support
- Limited Lifetime Warranty
- Advanced hardware replacement



Lantronix Software Services

PercepXion™ - secure cloud platform to manage remote IoT gateways through a single pane of glass. lantronix.com/percepXion

Connectivity Services - Global cellular data plans and VPN security with an easy-to-use cloud platform to manage your SIMs and services. lantronix.com/connectivity-services

LEVEL 2 Technical Services - providing fast response, configuration assistance, software updates and advanced hardware replacement. lantronix.com/level

Hardware

Cellular

- LTE Cat M1 - X303 with 2G fallback mode
- LTE Cat1 - X304 with 3G or 2G fallback mode options

Wi-Fi & Bluetooth Operation

- Wi-Fi 5 and Bluetooth/BLE 5.0; via one (X303) or two (X300, X304) RP-SMA antenna connector

Ethernet

- One LAN port; 10/100BASE-T; via a RJ-45 header fitted with two LEDs

Serial Communication

- RS-232 6-signal (Rx, Tx, RTS, CTS, either DSR or DCD, DTR) implementation; via an RJ-45 header
- RS-485 half or full duplex, via RJ-45 header
- Switchable by software

SIM

- Lantronix Connectivity Services embedded MFF SIM; auxiliary mini-SIM holder

Location Services

- Qualcomm® IZat™ gen. 8C gps One; via a dedicated SMA antenna connector (X304 only)

Memory & Data Storage Security Chip

RAM

- DDR2 SDRAM 128MB

SPI Flash Memory

- 8MB

User Data Storage

- Internal: via the parallel 256MB NAND Flash memory
- External: via a user-accessible microSD card (not provided)

Physical Description

- Brushed aluminum alloy
- Size: 79 x 79 x 23.5 mm without connectors
- Weight: approximately 150 grams
- Operating Status LEDs: Seven as green for (i) POWER; blue for (ii) SIM; (iii) Wi-Fi; amber for (iv) Activity; (v) Network; (vi) Signal; red for (vii) ALERT

Temperature & Humidity Ranges

- Operating: -30°C ~ +70°C; up to 95% RH
- Storage: -40°C ~ +85°C; up to 95% RH

CPU

- ARM926EJ-S-based CPU running at 600 MHz
- Built-in 32 KB instruction cache and 32 KB data cache

Power

- Input voltage: 9 ~ 30 V DC
- 3-pin Nano-Fit™ header
- Digital Input (Ignition): One (1) digital input, on the second pin of the 3-pin header
- Input: 0 ~ 2.5 V DC => ZERO; 3 ~ 50 V DC => ONE

Software Suite

Administration & Network Protocols

- Web-based user interface, setup wizard, console log viewer, save / load configuration, NTP, SMS / OTA remote configuration, TR-069-capable, and Lantronix Provisioning Manager

Redundancy

- Ethernet, Cellular, Wi-Fi – configurable as failover or load balancing

Resilience

- Network connectivity watchdog (configurable), internal application watchdog

Wi-Fi

- InfiniShield™ Security Client or Access point (approx. 12 users), WPA, WPA-PSK / WPA2-PSK / WPA3-PSK, Enterprise Security (WPA2-Enterprise/ WPA3-Enterprise). WPA3 not available for Access point mode.

Device Management Services

- Lantronix Perception™ platform – 1 year of subscription included

Performance & Fault Management

- Real time processor load and interface (WAN / LAN / Wi-Fi), traffic analysis, ICMP, trace-route, NS lookup

Routing

- DHCP, static routing, port forwarding, traffic routing, static / dynamic DNS, DNS proxy, NAT, STP

VPN & Tunneling Protocols

- Wireguard, PPTP client, L2TP, OpenVPN client / server / passthrough, GRE, IPsec up to 4 channels

Essential IoT Applications

- Serial and Bluetooth SPP to Network tunnels. Packages are available as IPKs for installation.
- Add your own IoT edge applications with the SDK and ImageBuilder.

Security

- Secure boot, zone-based firewall, VLAN, DMZ, HTTPS local and remote connection, SIM PIN

Essential Accessories

Visit lantronix.com/x300 for a full listing of accessories and ordering information.

Power Cord

- Power Cord - KDC32 or KDC33 (with one more stripped wire for Ignition)
- Power supply - ACC-520-0165-00, wall cube, 12 V DC 12W, 4 AC plugs, Level 6, with PSE

Din Rail Clip

- BR250 single mount 4½ U width; or doubling as 4-hole mounting brackets
- BR475, dual mount 4¾ U / 1¾ U widths

Remote (3 M), Adhesive, Antenna

- A31M0, or ACC-A31H1, LTE: X303
- A32M0, '2-in-1' LTE + LTE: X304, should its GNSS operation be ignored
- A33M0, '3-in-1' LTE + LTE + GNSS: X304

Wi-Fi Antenna(s)

- A21H0, L-shaped, hinged: X303
- Pair of A21H0, L-shaped, hinged: X300, X304

Ordering Information

| Part Number | Description |
|-------------|--|
| X300F202S | Wireless gateway |
| X303F202S | Worldwide - LTE-M gateway |
| X304G00AS | USA/Canada - LTE Cat 1 gateway |
| X304G000S | Latin America - LTE Cat 1 gateway |
| X304G002S | EMEA/APAC - LTE Cat 1 gateway |
| X304G007S | Japan/South Korea - LTE Cat 1 gateway |
| X304G00CS | China/India/Thailand/Indonesia - LTE Cat 1 gateway |

All Bundles Include

| | |
|------------------------------|--|
| Perception | Lantronix Perception™ device management platform for managing deployments of one to thousands of sites, including quick-and-easy access to assets and the ability to easily push new configurations and firmware upgrades. |
| LEVEL 2 Services | LEVEL 2 Technical Services providing fast response, configuration assistance, software updates and advanced hardware replacement. |
| Connectivity Services | Convenient and scalable cellular data plans - Contact your Rep to select the data plan (Not applicable for X300F202S) |
| A31M0 Only X303 | Single LTE antenna, adhesive remote antenna with 3000MM RG174 cable, SMA male |
| A33M0 Only X304 | Three-in-one LTE antenna, (2) LTE+GPS/glonass/bd antenna, 3000mm rg174 cable with (3) SMA male, adhesive mount. |
| A21H0 | 2.4/5.8GHZ Dipole Antenna for ISM & WLAN, RP-SMA(M)HINGED. |
| ACC-520-0165-00 | Power supply, wall cube, 12VDC 12W, 4 AC plugs, Level 6, with PSE, 1X3 3.0MM latched conn output |