

X2000 Cassia Bluetooth Gateway

Cassia X2000 — The robust, long-range, and scalable Bluetooth gateway for your most demanding IoT deployments.

Push the limits of Bluetooth.

The Cassia X2000 is a high-performance industrial Bluetooth gateway that delivers and supports up to 40 simultaneous device connections — without requiring any changes to existing end devices.

Engineered for the toughest environments.

With its rugged, weatherproof IP66-rated enclosure, the X2000 is built to withstand harsh indoor and outdoor conditions — from factories and shipyards to campuses and large facilities. It's quick and flexible to install on walls, poles, or desktops with the included mounting kits.

Secure, intelligent, and easy to manage.

Featuring an integrated TPM chip for enterprise-grade security, the X2000 supports Ethernet, Wi-Fi, and cellular backhaul and is fully managed via the Cassia IoT Access Controller (AC) — the industry's most powerful Bluetooth network management platform. This enables centralized deployment and monitoring of thousands of gateways and devices.

Powerful performance, lower costs.

With edge computing capabilities, RESTful APIs for easy integration, and high connection density per gateway, the X2000 helps cut infrastructure costs while boosting IoT performance. It also supports Bluetooth roaming and real-time location tracking for seamless device mobility and visibility

Processor and Memory

- CPU: 4 core ARM Cortex-A5, up to 1.5GHz
- RAM: 1GB DDR3 (approximately 700MB for container)
- Storage: 4GB eMMC

Bluetooth

- Bluetooth low power chip: 2x nRF52840
- Version: Bluetooth Low Energy 4.0/4.1/4.2/5.0
- Connections: Up to 40 connections
- Frequency: 2.400 to 2.483 GHz
- Data rates: up to 2x2Mbps
- Rx sensitivity: -105dBm
- Tx power: configurable in 3~19dBm (limited by local regulatory requirements)
- Antenna gain: 5.7dbi vertical polarized
- Optional: use two external Bluetooth antennas with N-type male connectors

Wi-Fi (802.11 a/b/g/n/ac)

- Frequency: 2.4GHz and 5GHz ISM band
- Mode: Wi-Fi client or hotspot (for setup only)
- Tx power:
 - 12.5 to 17.5dBm for 2.4GHz
 - 8.5 to 15.5dBm for 5GHz
- Rx sensitivity:
 - 96 to -71dBm for 2.4GHz band
 - 91 to -71dBm for 5GHz band depending on modulation
- Antenna: Integrated dual-band



Cellular

- Modem: Quectel G25-G
- Region: Global
- Performance: LTE Cat.4 (3GPP Release 11)
- Network Bands:
 - 4G LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28
 - LTE-TDD: B38/B39/B40/B41
 - 3G UMTS: B1/B2/B4/B5/B6/B8/B19
 - 2G GSM: 850/900/1800/1900
- Packet Data: Max. 150 Mbps downlink / 50 Mbps uplink
- SIM: Nano SIM (4FF)
- Antenna: Built-in, 2 x CRC9

Multiple Roles

Supports peripheral, central, broadcaster, and observer roles, and plays multiple roles simultaneously.

Security Services

- TPM (Trusted Platform Module) chip-based security
- Supports Bluetooth 4.2 security standards
- Bluetooth Secure Simple Pairing (Just Works, Passkey Entry, Legacy OOB, Secure OOB, Numeric Comparison)
- WPA2 enterprise security (PEAP-MSCHAPv2, EAP-TLS, EAP-TTLS)
- Advanced 128bit AES encryption
- Password-protected gateway web console page
- Communication between gateway and AC is based on TLS 1.2 (MQTT) or DTLS 1.2 (CAPWAP)
- Supports HTTPS access to Cassia RESTful API and gateway web console
- Firmware is signed by certificate to ensure authenticity
- Dedicated SSL private key and certificate import options

Power Interface

- 12V DC external power (adapter for EU / US / UK available)
- Power over Ethernet : 02.3af/at compliant source
- Power consumption : up to 2.5W for normal usage; USB cellular modem adds an additional 2.5W

Other Interfaces

- 10/100 BASE-T Ethernet (RJ-45) uplink
- Reset button
- LED lights: BT/AC/4G/Wi-Fi/Ethernet/System/Power
- USB 2.0 with reset circuit (can be used for optional USB cellular modem)

Mechanical

- Dimensions:
 - 186mm (W) x 159mm (L) x 254mm (H)
 - 7-5/16 inch (W) x 6-1/4 inch (L) x 10 inch (H)
- Weight: 1450 g / 51 oz

Mounting

- Wall or pole mounting kit included
- Optional: desktop stand kit

Certifications

- Available: FCC (US), NRTL (US), IC (Canada), CE (Europe & United Kingdom), SRRC (China), China RoHS, CB, RoHS, REACH, RCM (Australia & New Zealand), TELEC (Japan), BQB, CRC (Colombia), NCC & BSMI (Taiwan), ANATEL (Brazil), ICASA & NRCS (South Africa), SUBTEL (Chile), IMDA (Singapore), SIRIM (Malaysia), NRTA (Egypt), IFT & NYCE (Mexico), PTA (Pakistan), EANCOM (Argentina), NBTC (Thailand), MTC (Peru), MOC & SII (Israel), KC (South Korea), SUTEL (Costa Rica), SIT (Guatemala), INDOTEL (Dominican Republic), SMA (Jamaica), NTC (Philippines), TRA & ECAS & RoHS (UAE), PTCRB, JATE.

Environmental

- Operating:
 - Temperature: -40°C to +65°C (-40°F to +149°F)
 - Humidity: 0% to 90% non-condensing
- Storage and transportation:
 - Temperature: -50°C to +70°C (-58°F to +158°F)
- Wind resistance:
 - Up to 85-MPH sustained winds
 - Up to 135-MPH wind gusts
- IP rating: IP66

Warranty

- 2 years warranty included per gateway

References

Product name	Ref	Description
CASSIA X2000 Gateway	GTW50201-01A	X2000 Enterprise Bluetooth IoT Gateway (indoor/outdoor) Ethernet & WIFI connectivity
CASSIA X2000 Gateway (4G)	GTW50201-02A	X2000 Enterprise Bluetooth IoT Gateway (indoor/outdoor) Ethernet & WIFI & 4G LTE connectivity
ACCESSORIES		
X2000-MOUNT-KIT	ACIOM213	Mounting bracket, pole mounting straps, anchor with screws
X2000-ACCESS-KIT	ACIOM214	X2000 Accessories Kit, Cable Glands(2), USB Hole Silicone Plug(1), Cellular Screw Covers(2)
X2000-PWREU	ACIOM215	CASSIA X2000 12V DC power adapter (EU)
X2000-PWRUS	ACIOM216	CASSIA X2000 12V DC power adapter (US)
X2000-PWRUK	ACIOM217	CASSIA X2000 12V DC power adapter (UK)