

Cassia M2000 Cellular Bluetooth Gateway

Cassia's M2000 is a compact, easy to install and use Cellular Bluetooth gateway that provides superior Bluetooth performance. The M2000 supports 4G and Wi-Fi as backhaul. The gateway provides customers with the enterprise-grade security, flexibility, and scalability needed to deploy IoT projects in the most cost-effective method. The M2000, in addition to Cassia's full product suite of Bluetooth gateways, can be managed by Cassia's IoT Access Controller (AC), the industry's most powerful enterprise Bluetooth network management solution. Like other Cassia enterprise Bluetooth gateways, M2000 also supports Bluetooth roaming and Bluetooth locationing. The M2000 is complementary to Cassia's other enterprise Bluetooth gateways such as the X2000 gateway. The M2000's unique design with the support of 4G backhaul, GPS and DC 9-36V is especially ideal for situations requiring mobility, quick deployment, and in a moving vehicle. The M2000 gateway can be used in a variety of industries and applications such as continuous vital sign monitoring in hospitals, telehealth, industrial IoT, smart campus, supply chain management, as well as personnel and asset tracking (in buildings and in vehicles).

Power Interface

- DC 5V 2A, USB-C
- DC 9-36V (supported by external DC 9-36V to DC 5V)
- Adaptator US / UK / EU included.

Bluetooth

- Bluetooth chip: Nordic nRF52833
- Version: Bluetooth Low Energy 4.x and 5.0. nRF52833 supports Bluetooth Low Energy 5.1
- Frequency: 2.400 to 2.483 GHz • Data rates: up to 2Mbps
- Connections: up to 10 simultaneous bidirectional connections
- Scan: supports hundreds of BLE devices and PureScan™ mode for high-interference environments
- Coverage: up to 150 meters with Bluetooth 4.x (LoS), longer with Bluetooth 5.0

Wi-Fi

- Version: 802.11 b/g/n
- Frequency: 2.4 GHz
- Concurrent Wi-Fi hotspot mode for local configuration and Wi-Fi STA (client) mode for backhaul connection
- Antenna: Integrated

Cellular Backhaul

- Cellular technology: CAT-M1 / NB-IoT
- Max data rates:
 - CAT M1: 588 kbps (DL) / 1119 kbps (UL)
 - CAT NB2: 127 kbps (DL) / 158.5 kbps (UL)
 - CAT NB1: 32 kbps (DL) / 70 kbps (UL)
- Frequency:
 - CAT M1: Band 1/ 2/ 3/ 4/ 5/ 8/ 12/ 13/ 18/ 19/ 20/ 25/ 26/ 27/ 28/ 66/ 85
 - CAT NB: Band 1/ 2/ 3/ 4/ 5/ 8/ 12/ 13/ 18/ 19/ 20/ 25/ 28/ 66/ 71/ 85
- Cellular carrier: global
- Antenna: integrated

References

Product name	Ref	Description
CASSIA M2000 Gateway	GTW51201-01A	M2000 Compact Cellular Bluetooth Gateway (Indoor) WIFI & Cellular connectivity



GPS

- Active GPS with an internal GPS antenna

Gateway Management

- Remote management via Cassia IoT AC
- Configuration and firmware upgrade via AC or local Wi-Fi console

Application Integration

- Cassia RESTful API: Compatible with other gateway types
- Cassia MQTT API: bi-directional communication with BLE device via gateway MQTT interface
- MQTT Bypass: route BLE advertising packet to MQTT interface
- Cassia DI (Device Integrator): an easy device integration tool

Security

- Bluetooth Low Energy 4.2 secure connection
- Advanced 128-bit AES encryption
- TLS 1.2 is used for communication between the M2000, AC, and the customer's IoT server

Other Interface

- Reset button: restores to factory settings
- Three green LED lights: System + Wi-Fi, 4G and BLE
- Micro SIM card socket

Mounting

- Mounting kit included

Warranty

- 2 years warranty included per gateway

Certification (Plan)

- FCC (USA), IC (Canada), CE (EU), TELEC (Japan), JATE (Japan), RoHS (EU), REACH (EU), CB, BQB

Housing

- Dimensions : 90 mm (W) x 90 mm (L) x 30 mm (D)
- Weight : 85g
- Color : Off-white
- IP Rating : IP30
- Operating temperature : -30°C to +70°C
- Humidity : 0% to 90% non condensing