

## M1500 Bluetooth Gateway

### OVERVIEW

Cassia's M1500 is a compact, cost-effective, easy to install and use Bluetooth gateway that provides superior Bluetooth performance. The M1500 supports Wi-Fi and Ethernet as backhaul and support PoE power supply. This gateway provides customers with the enterprise grade security, flexibility, and scalability needed to deploy IoT projects in the most cost-effective method. The M1500, as well as other Cassia's Bluetooth gateways, can be managed by Cassia's IoT Access Controller (AC). Cassia IoT AC is the industry's most powerful enterprise Bluetooth network management solution. Like other Cassia enterprise Bluetooth gateways, M1500 also supports Bluetooth roaming and Bluetooth positioning. The M1500 is complementary to Cassia's other enterprise Bluetooth gateways such as the M2000, E1000 and X2000 gateways. The M1500 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.

### Power Interface

- DC 5V 2A, USB-C
- PoE: 802.3af/at compliant source
- IMPORTANT: Limited to one power source at a time (PoE or USB-C)

### Mechanical

- Dimensions: 114 x 114 x 40 mm
- Weight: 200 g
- Color: white

### Bluetooth Specifications

- Bluetooth chip: Nordic nRF52833
- Version: Bluetooth Low Energy 4.x and 5.0. nRF52833 supports Bluetooth Low Energy 5.1, ZigBee and Thread
- Frequency: 2.400 to 2.483 GHz
- Data rates: up to 2Mbps
- Connections: One M1500 can establish up to 20 bi-directional connections to Bluetooth low power devices simultaneously
- Scan: The M1500 can scan hundreds of Bluetooth devices and supports Cassia's PureScan™ Mode to offer the best scan performance in high noise environments with a large number of Bluetooth devices
- Coverage: In an open-space-line-of-sight environment, the M1500's communication range is up to 300 meters with a Bluetooth 4.x device, or more with a Bluetooth 5 device

### Wi-Fi Specifications

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

### Security Features

- Bluetooth Low Energy 4.2 secure connection
- Advanced 128-bit AES encryption
- TLS 1.2 is used for communication between the M1500, AC and customer IoT server



### Application Integration

- MQTT Bypass: Transport scanned data from M1500 to MQTT broker server directly
- Cassia RESTful API through AC: Compatible with other gateway types
- Cassia MQTT API: bi-directional communication with BLE device via gateway MQTT interface
- Cassia DI (Device Integrator): Easy device integration tool

### Gateway Management

- Management system: Cassia IoT AC remotely manages M1500 deployed on a large-scale
- Configuration and upgrade: the M1500's configuration and firmware upgrade can be completed using the Cassia IoT AC or a local console page through Wi-Fi hotspot

### Other Interface

- 10/100 BASE-T Ethernet (RJ-45) uplink
- Reset button: restores to factory settings
- LED: Wi-Fi / BT / System / Power / Ethernet

### Environmental

- Operating temperature: -30°C to +70°C (-22°F to +158°F)
- Operating humidity: 0% to 90% non-condensing
- IP rating: IP30 (>2.5mm solid protection, no liquid protection)

### Mounting

- A mounting kit is included
- Can be placed on a desktop

### Certification (Plan)

- SRRC (China)

### Warranty

- 1-year limited replacement warranty