



### Flexible Deployment

In network-restricted environments, the X1000 is configurable to a “Stand-Alone Mode” where data is sent directly to a local third-party application server. In a remote management situation, the X1000 in “AC Manage Mode” sends data to a remote third-party application via the Cassia IoT AC.

## ADVANCED FEATURES

### Processor & Memory

- CPU: 4 core ARM Cortex-A5, up to 1.5GHz
- 256MB RAM DDR3, 4GB eMMC storage

### Bluetooth

- Bluetooth low power chip: 2x CSR8811
- Bluetooth version: 4.0/4.1
- Connections: Up to 22 connections
- Frequency: 2.400 to 2.483 GHz
- Data rates: up to 2x1Mbps
- Tx power: 0 to 10dBm
- Rx sensitivity: -105dBm
- Antenna Gain: 5.7dbi vertical polarized

### Wi-Fi (802.11 b/g/n)

- Frequency: 2.4 GHz
- Mode: Wi-Fi client or hotspot (for setup only)
- Tx power: 12.5 to 17.5dBm
- Rx sensitivity: -96 to -71dBm
- Antenna: Omnidirectional

### Multiple Roles

- Supports broadcaster, listener, sender and receiver roles, and multiple-roles simultaneously.

### Security Services

- Supports Bluetooth 4.1 security standards
- Bluetooth Secure Simple Pairing (Just Works, Passkey Entry, OOB)
- WPA2 enterprise security (PEAP-MSCHAPv2, EAP-TLS, EAP-TTLS)
- Advanced 128bit AES encryption
- Password protected router web console page
- Communication between the Cassia IoT AC and the router is based on DTLS 1.2 over UDP
- MQTT communication encryption between Cassia router and broker. Router to AC MQTT option supported
- Firmware is signed by certificate to ensure authenticity
- Supports HTTPS access to the Cassia AC and router
- Dedicated SSL private key and certificate import options

### Additional Features

- Diagnostic tools: Ping, Traceroute, TCP dump and NetCat on router’s console
- Configurable statistic report interval for reducing backhaul traffic between AC and router



### Power Interface

- Power-over-Ethernet: 802.3af/at compliant source
- Power consumption: up to 2.5W for normal usage; cellular USB modem adds an additional 2.5W

### Other Interfaces

- 10/100 BASE-T Ethernet (RJ-45) uplink
- Reset button
- LED lights: Power / System
- USB 2.0 (can be used for cellular USB modem)

### Mechanical

- Dimensions:
  - 154 mm (D) x 259 mm (H)
  - 6.1-inch (D) x 10.2 inch (H)
- Weight: 800 g / 28 oz

### 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: IP65

### Mounting

- Wall or pole mounting kit included

### Certification

- FCC (US), IC (Canada), CE (Europe), BQB, TELEC (Japan), CB, CRC (Colombia), SRRC (China), RoHS, REACH, ICASA (South Africa), ANATEL (Brazil), RCM (Australia), SUBTEL (Chile), NOM (Mexico)

### Warranty

- 1-year limited hardware warranty