

CTM-500 Wireless Gateway

Superior 5G connectivity in a compact, all-in-one solution.

Higher Speed for Unparalleled Connectivity

The all-powerful CTM-500 is built with an advanced processor to transmit data at the highest speed. With 5G connectivity for fixed site or mobile applications, the CTM-500 can integrate seamlessly into any environment. The dual Ethernet ports offer more integration options with different sensors or power sources.

Eliminate downtime and keep your operations running smoothly with the powerful removable battery. Cypress IOT device management platform offers secure and reliable control over your devices after deployment.

The CTM-500 is an ideal solution for automatic vehicle location as well as for a primary or failover network.

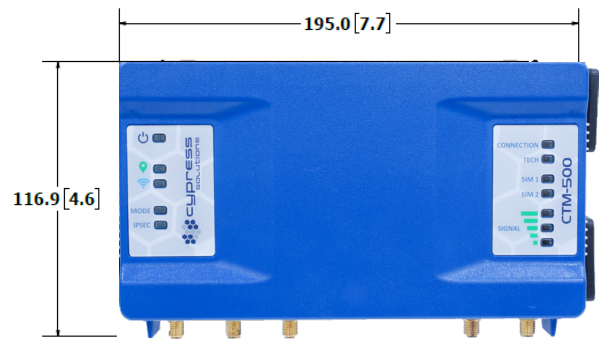


Features

- Industrial and rugged design suitable for extreme operating environments
- Optional interchangeable battery
- Dual SIM support
- All antennas are external
- Securely configure, monitor and deploy devices with Cypress IOT
- Flexible for various industries and applications
- Compact - W195 mm x D117 mm x H64 mm / W7.7 in x D4.6 in x H2.5 in



BACK OF CTM-500



TOP OF CTM-500



FRONT OF CTM-500

Cellular Wireless

	5G
5G bands	NSA: n2/n5/n7/n12/n25/n30/n38/n41/n66/n71/n77/n78 SA: n2/n5/n7/n12/n14/n25/n26/n30/n38/n41/n48/n66/n70/n71/n77/n78
LTE category supported	LTE-A: DL Cat 19, UL Cat.18
LTE bands	FDD Bands: B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71 TDD Bands: B34/B38/B39/B40/B41/B42/B43/B48 LAA: B46 (only support 2 x 2 MIMO)
WCDMA bands	B1/B2/B4/B5/B8
Antenna connection	4x SMA
MIMO	4x4
SIM	Dual 2FF
Data speed	5G SA Max: DL 4.2 Gbps; UL 450 Mbps 5G NSA Max: DL 5.0 Gbps; UL 600/650 Mbps LTE: Max. 2Gbps (DL) /Max. 200 Mbps (UL) WCDMA: Max: DL 42 Mbps; UL 5.76 Mbps

Wi-Fi

- Triple band 2.4GHz, 5GHz and 6GHz 802.11a/b/g/n/ac/ax
- Multiple SSID
- Concurrent dual band
- Dual RP-SMA for antenna connection
- 2.4GHz radio: 2x2 MU-MIMO 20/40 MHz channel bandwidth
- 5GHz radio: 2x2 MU-MIMO 20/40/80/160 MHz channel bandwidth
- 6GHz radio: 2x2 MU-MIMO 20/40/80/160 MHz channel bandwidth
- Support Bluetooth v5.1

Power Supply

- Main DC voltage 7-32VDC
- Typical current draw for main power input is 500mA @12V
- Optional PoE PD
- Optional back up battery
- Battery options: 2-cell 7.4V/2600mAh or 2-cell 6.4V/1500mAh

Power Management

- Standby mode 10mA @ 12VDC
- Wake on: power applied, reset switch, RTC, CAN, ignition

External Interfaces

- RJ45 dual port 10/100/1000 BaseT Ethernet; Optional PoE/PoE+
- One RS-232 serial port
- GPIO 4x digital outputs, 4x analog inputs
- Dual CAN 2.0B
- One External USB-C dual role port
- 1-Wire

Internal Features

- Power accessory detection
- Soft reset switch
- L1 receiver with Automotive Dead Reckoning for GNSS
- Temperature sensor
- 12-bit ADC
- Watchdog

Processing System

- Quad core Cortex A53 @ 1.8GHz
- RAM 1GB LPDDR4
- Flash 8GB eMMC
- Boot device eMMC

Environmental

- Operating temperature: -30°C to +70°C
- Operating humidity: 5% to 95% non-condensing
- Designed to meet or exceed MIL-STD- 810F/G for shock and vibration

EMC

- FCC Part 15B Class B radiated
- Electrostatic discharge EN 61000-4-2
- Radiated immunity EN 61000-4-3
- Electrical fast transient/burst EN 61000-4-4
- Conducted immunity EN 61000-4-6

Certifications

- FCC
- IC
- PTCRB
- Applicable carriers

Call: 1.604.294.4465 | **Email:** info@cypress.bc.ca | **Visit:** cypress.bc.ca