

CTM-400N Wireless Gateway

Durable Networking for Everyday
Industrial Demands

Purpose-Built for Branch Networks

The CTM-400N is a next-generation wireless gateway engineered for high-speed performance and reliable connectivity. Powered by an advanced processor, it efficiently handles large volumes of data, making it ideal for demanding applications. Offering LTE CAT 6 connectivity, the CTM-400N is purpose-built for fixed-site and branch networking deployments, delivering consistent performance across a range of commercial and industrial environments.

The CTM-400N is designed for durability and long-term operation in controlled settings. Its compact form factor, flexible mounting options, and wide input voltage range make it a practical choice for equipment enclosures, network cabinets, or indoor utility spaces.



FRONT OF CTM-400N



Features

- Industrial and rugged design suitable for extreme operating environments
- Flexible for branch networking applications
- Optional internal rechargeable battery
- Securely configure, monitor and deploy devices with [Cypress IOT](#)
- Compact - W153 mm x D138 mm x H50 mm / W6 in x D5 in x H2 in



TOP OF CTM-400N



BACK OF CTM-400N

Cellular Wireless

	4G LTE
LTE category supported	Category 6
LTE bands	2,4,5,7,12,13,14,17,25,26,41,66,71
Performance	Max cell UL 50Mbps; Max cell DL 300Mbps
Antenna connection	External (2x SMA)
MIMO	2x2
SIM	1x 4FF Nano SIM removable 1x MFF2 soldered down (optional)
Supported Mobile Network Operator (MNO)	Telus, Bell, Rogers, AT&T, TMO, Verizon

Wi-Fi

- Support 802.11abgn/ac
- Dual AP, dual client, concurrent AP/Client
- 1x internal antenna and 1x external RP-SMA antenna
- Support Bluetooth v5.1, BLE

Power Supply

- Sources: external DC, internal rechargeable battery
- External DC Voltage: 6-36 VDC
- Internal battery capacity: 6000 mAh
- Up to 5 hours of battery life

Power Management

- **States:** ON, LPM with wakeup, OFF when running on battery
- **LPM wakeup sources:** RTC, ignition
- **OFF wakeup source:** external DC power

Typical power consumption

- ON: 300mA @ 12V
- LPM: 5mA @ 12V
- OFF: 10uA from internal battery

External Interfaces

Power	Molex™ Micro-Fit locking connector
Ethernet	Single RJ45 10/100/1000 BaseT
RS-232	2 ports RXD/TxD/GND only; Molex™ Micro-Fit locking connector

GPIO inputs	• 4x analog/digital • 0-5V • Maximum withstand voltage $\pm 60V$ • Capable of sensing pulses up to 200Hz on each input • Molex™ Micro-Fit locking connector
GPIO outputs	• 4x open drain • Max current: 0.5ADC • Max withstand voltage $\pm 60V$ • Molex™ Micro-Fit locking connector
Ignition Sense	• 3V threshold • Maximum withstand voltage $\pm 60V$ • Molex™ Micro-Fit locking connector
USB-C	• USB2.0 • As a device: used for factory FW loading • As a host: able to provide up to 500mA at 5V
LED lights	1x blue and 4x dual color (green/red) LEDs indicators: Power (Blue), SIM, Cell, Wi-Fi, Battery
Reset switch	Recessed push-button accessible with a paperclip or similar tool

Internal Features

- HW watchdog
- Temperature sensor internal to processing system

Processing System

- RAM 2GB LPDDR4X
- Flash 16GB eMMC
- Security: secure boot

Environmental

- Operating temperature: $-30^{\circ}C$ to $+70^{\circ}C$
- Operating humidity: 5% to 95% non-condensing
- IP54; 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

- PTCRB

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