



1. General Description

CELLULARM is a 4G LTE-to-Analog Converter that allows you to connect standard analog telephones or alarm dialers to the LTE cellular network using an RJ-11 interface. It functions just like a traditional landline (PSTN), enabling you to make and receive calls over a cellular connection.

This unit is the next-generation equivalent of other GSM-based converters, but with the reliability, speed, and broader coverage of modern LTE networks. Whether for residential, commercial, or industrial use, CELLULARM offers a robust and wireless alternative to traditional copper phone lines—ideal for areas where landlines are unavailable or unreliable.

2. Features and Functions

- Simple Installation Quick setup with no complex configuration required.
- Reliable Performance Built with an industrial-grade LTE module and rugged housing.
- Alarm System Integration Connects easily to most alarm dialers for wireless event reporting.
- High-Gain Antennas Enhanced signal strength and stable voice quality.
- SIM Compatibility Supports both 1.8V and 3V Mini-SIM (2FF) cards.
- Carrier Support Compatible with AT&T, T-Mobile, and U.S. Cellular.
- DTMF Second Dialing Supports dual-tone multi-frequency second dialing for enhanced use.
- Wide Voltage Support Operates between DC 10–20V with low power consumption.
- Battery Backup Built-in 1000mAh Li-ion battery (up to 24 hrs standby, 2.5 hrs talk).



• Durability – Rugged galvanized steel housing suitable for harsh environments.

3. Panel Overview

Front Panel:

- LED indicators for:
 - Signal Strength
 - Power
 - Working Status
 - Talking Indicator
 - A Battery LED blinks while charging

Rear Panel:

- (1) SMA antenna connector
- (2) RJ-11 phone ports
- Power input port
- Power switch

Bottom Panel:

• (1) SIM card slot (2FF Mini-SIM)

4. Package Contents:

- 1. CELLULARM Unit
- 2. 12V DC Power Adapter
- 3. LTE Antenna (Rubber Ducky style with SMA connector)
- 4. RJ-11 Phone Cord

RACO Cellularm[®]

5. Antenna Placement Guidelines:

To ensure stronger signal and clear voice quality:

- Do not mount the antenna directly on the device.
- Place the antenna at least 1.5 meters (5 feet) away from the terminal.
- Ideally, mount it near a window or in an elevated location with minimal obstructions.
- Use an extension cable if necessary to reach a better reception area.

6. Installation Instructions:

Follow these steps to install and power up your CELLULARM device:

- Insert SIM Card Insert a 2FF Mini-SIM into the SIM card slot located on the bottom of the unit.
- Attach Antenna Connect the included LTE antenna to the SMA port on the rear. Ensure proper placement as described above.
- 3. Connect Analog Device

Use an RJ-11 phone cord to connect your analog telephone, PBX system, or alarm dialer to one of the two phone ports.

4. Power the Unit

Plug the 12V DC power adapter into the power port and then into a 120V AC outlet.

Note: LTE signal strength directly affects voice call quality. Proper antenna placement is essential.

7. Technical Specifications

Max powder consumption:	0.25W / 0.5W	Antenna amplifying:	>2.5db
Standby:	Less than 25mA	Input power:	DC 10V - 20V
Transmission:	Less than 400mAh	Dimensions (average):	170 x 118 x 30mm (L x W x H)
Sensitivity:	-105dB	Weight:	1.6 lbs
Dial tone frequency:	450MHz (standard)	Connection mode:	RJ-11 phone sockets
Hanging Voltage:	45V	Antenna connection:	SMA female
Picking current:	30mA/41mA	Battery backup:	Primary; Li-ion 1000mAh. Up to (40hrs standby) (2.5 hrs. Transmitting) External Secondary:
Operation temperature:	-10°C ~ +60°C	Material:	Galvanize steel
Operation humidity:	45% ~ 95%	Power Supply:	Mean Well GST25A12-P1J
Atmosphere pressure:	86 ~ 106KPa	4G LTE	B2/B4/B5/B12/B13/B14/ B66/B71
Environment noise:	<60dB	Certifications	FCC identifier: 2ALP-8848 FCC and Rule Parts 24E, 27
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8. Contact Information

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