



# Sierra Wireless GNX-6 LTE-M

#### **KEY BENEFITS**

- Support for LTE-M
- CAN/OBDII/J1708/J1939
- Dual mode Bluetooth 4.0 support for devices and applications such as HOS and driver performance
- Support for HOS & ELD applications
- High performance internal cellular & GPS antennas for ease and flexibility of installation of device
- Support for driver behaviour using auto-calibrating 3-axis accelerometer
- Full Garmin FMI native support
- Internal backup battery
- Multiple I/O for activity monitoring and peripheral support
- Intelligent power management
- Automatic over-the-air configuration and upgrade
- Fail-safe technology
- Voltage protection

#### **ACCESSORIES**

- Power harness
- Serial data cable
- Garmin PND power/ communication cable
- J-Bus cables (Deutsch 6 or 9-pin)
- OBD II cable

# All in One Fleet Tracking Unit with Bluetooth LE and CAN/J1708/J1939 Technology

The GNX-6 LTE-M trackers are highly configurable, feature rich, mobile asset tracking device designed to service a wide variety of market and industry requirements. The GNX-6 LTE-M is an ideal solution for Mobile Resource Management, vehicle tracking and many other location-aware applications and services. The GNX-6 LTE-M incorporates leading edge, quality components for superior reliability including high performance internal cellular and GPS antennas and an auto-calibrating 3-axis accelerometer for monitoring and reporting of rapid acceleration, deceleration, harsh cornering and other events.

## DUAL MODE BLUETOOTH 4.0, CAN/OBDII/J1708/J1939 SUPPORT

The GNX-6 LTE-M supports CAN/OBDII/J1708/J1939 interfaces to enable vehicle bus communications. The internal backup battery enables operation for up to 15 hours in the absence of primary power. The GNX-6 LTE-M device contains a dual mode Bluetooth 4.0 allows for integration with tablets for use in such applications as HOS and driver performance. The support for multiple vehicle buses allows for ease of installation and compatibility with a broad set of vehicles.

#### INPUT/OUTPUT AND PERIPHERAL SUPPORT

The GNX-6 LTE-M I/O capabilities enable peripheral support, multiple configurations and monitoring including digital inputs and outputs, relays, serial and 1-wire peripheral communications. The GNX-6 LTE-M supports driver ID, GPS data and other peripheral applications.

## PATENTED EASY-OVER-THE AIR SERVICING/CONFIGURATION

The GNX-6 LTE-M configuration parameters and firmware are upgraded over-the-air, pushed to the device using IP or SMS or autonomously pulled by the device from any TFTP or FTP server. This allows for factory-to-installation without any configuration required and automatic upgrade of latest firmware.

# Sierra Wireless GNX-6 LTE-M

	Specification
PHYSICAL	
Material	2-piece ABS enclosure
Dimensions (L x W x H)	142 x 75 x 19 mm
Weight	129 g
Power/Aux Connector	20-pin 3mm Molex
Data Connector	10-pin 3mm Molex
ELECTRICAL	
Operating Voltage	8 to 30V DC
Power Consumption (typical, @ 12.8 vdc)	Operating: <100mA (avg), 680mA (peak Tx)
	<ul> <li>Napping &lt;20mA (typical, SMS/UDP wake-up)</li> </ul>
	• Sleep <1mA (local wake-up)
ENVIRONMENTAL	
Operating Temperature	-20°C to +65°C / -4°F to +149°F (without battery)
Storage Temperature	-40°C to +85°C / -40°F to +185°F
Humidity	5 to 95% non-condensing
Shock and Vibration	SAE J1455
EMC/EMI	SAE J1113
GPS TECHNOLOGY	
GPS Receiver	72 Channel, GPS/GLONASS
Tracking Sensitivity	-167dBm Tracking, Nav
	-156dBm Reacquisition
	-148dBm Cold start (un-aided)
Horizontal Accuracy	2.0m CEP
Time-to-first-fix	26s (@ -130dBm, Cold start)

CELLULAR LTE-M	ROTOCOLS LTE-M and UDP/TCP/TFTP/SMS J1929, J1979, J1708 ISO 15765-4 CAN B1, B2, B3, B4, B5, B8, B9, B10, B12, B13, B14, B17, B18, B19, B20, B25, B26, B27, B28, B66
CELLULAR LTE-M	J1929, J1979, J1708 ISO 15765-4 CAN B1, B2, B3, B4, B5, B8, B9, B10, B12, B13, B14, B17, B18,
CELLULAR LTE-M	ISO 15765-4 CAN B1, B2, B3, B4, B5, B8, B9, B10, B12, B13, B14, B17, B18,
CELLULAR LTE-M	B1, B2, B3, B4, B5, B8, B9, B10, B12, B13, B14, B17, B18,
LTE-M	
INPUTS/OUTPUTS	
Digital Inputs 6	6 (3 hi, 2 low, 1 analog), including Ignition Sense line
Relay Drive Outputs	2 (150mA max. each)
Switched Output	1 (2.1A max.)
LED drive Output	1
RS-232 Port	1 (5-wire)
J1708 Port	1
CAN Port	1
Status LEDs	2
1-Wire	4
APPROVALS	
Regulatory	FCC, IC, PTCRB
Carrier	AT&T/Verizon/Sprint
	Rogers/TELUS/Bell - planned

### **KEY FEATURES**

- Packet data and SMS-based messaging
- Bluetooth LE
- High sensitivity auto calibrating 3-axis accelerometer for motion, hard breaking/acceleration, and impact detection
- Low power sleep modes
- 1-Wire support for driver ID & up to 4 temperature sensors

#### About Sierra Wireless

Sierra Wireless (NASDAQ: SWIR) (TSX: SW) is the leading IoT solutions provider that combines devices, network and software to unlock value in the connected economy. Companies globally are adopting IoT to improve operational efficiency, create better customer experiences, improve their business models and create new revenue streams. Whether it's a solution to help a business securely connect edge devices to the cloud, or a software/API solution to help manage processes associated with billions of connected assets, or a platform to extract real-time data to make the best business decisions, Sierra Wireless will work with you to create the right industry-specific solution for your next IoT endeavor. Sierra Wireless has more than 1,300 employees globally and operates R&D centers in North America, Europe and Asia.

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