



- HL7802



Air Interface: Cat-M1,Cat-NB1 with 2G fallback

Region: Global

Carrier: Vodafone,AT&T,Verizon,Orange,Sierra Wireless

HL7802 LPWA Module

Multi-mode LPWA module offers best-in-class power performance for global LTE-M, NB-IoT, 2G, and GNSS networks

The HL7802 module for Cat-M1/NB1 worldwide networks with 2G fallback is fully compliant with the 3GPP Release 13 standard. It provides a low-cost, best-in-class power technology for low-bandwidth IoT applications with extended reach beyond traditional cellular.

This module is ideal for simple static sensor applications, or real-time fixed or mobile applications such as asset tracking, industrial equipment monitoring, consumer wearable devices, smart city deployments, healthcare applications and agricultural monitoring devices.

Benefits



Ready-to-Connect

Get instant access to Sierra Wireless Smart Connectivity to reduce total cost of ownership, strengthen end-to-end security, and simplify operations with a single point of accountability and management platform



Common Form Factor

Compact CF3® design to migrate between technologies and future-proof product platforms



Global

Worldwide coverage on a single module with industry and mobile network certifications to get you to market faster



FOTA Upgrades

FREE firmware over-the-air (FOTA) upgrades future-proof deployments and keep them secure



Cloud Connected

Securely collect data and remotely manage your IoT deployments with integrated AirVantage® cloud services



Ultra-Low Power Mode

Best-in-class power performance extending the life of battery operated devices by 5-10X



Location Services

Integrated GNSS receiver enables tracking and location-based services



TCP/IP Stack

Embedded stack to easily communicate over the internet



Programmability

Basic and Extended AT Commands simplify development



Industrial-Grade

Tested for harsh environments and extreme temperatures

Technical Specifications

4G LTE

Category

Cat-M1/NB1

Frequency Bands

B1, B2, B3, B4, B5, B8, B9, B10, B12, B13, B17, B18, B19, B20, B25, B26, B27, B28, B66

2G

GPRS

850, 900, 1800, 1900

GSM

850, 900, 1800, 1900

DATA SPEED

Peak Download Rate

Cat-M 300Kbps, Cat-NB1 27Kbps

Peak Upload Rate

Cat-M 375Kbps, Cat-NB1 65Kbps

LOCATION SERVICES

Satellite Systems

GPS+Glonass

EMBEDDED SOFTWARE

Firmware

Secure boot, Pre-certified firmware

System Drivers

Linux Driver: Standard ECM

INTERFACES

- 1 X 8-wire
 - 2
 - 8
 - 1
 - 1
- UART
ADC
GPIO
Tx ON Indicator
SIM interface 1.8V/3V

HARDWARE

- LGA
 - 15x18x2.4mm
 - Industrial Grade: -40°C / +85°C
- CF3 Form Factor
Dimensions
Temperature Range

APPROVALS

- AT&T, Orange, Verizon, Vodafone, Sierra Wireless
 - FCC, GCF, IC, PTCRB, RCM, RED
- Carrier
Regulatory

EMBEDDED SIM

Optional Ready-to-Connect (Sierra Wireless USIM)

CLOUD SERVICES

Free FOTA upgrades, Connectivity Management option, Device Management option

Development Kit



mangOH® Yellow open source reference design is the official development kit for this module, providing a sensor-to-cloud platform with built-in antennas to rapidly prototype ideas and get them to production. Build low-power IoT applications that can run on a battery with mangOH Yellow, which also offers built-in accelerometer, gyroscope, magnetometer, pressure, humidity, acoustic mic, air index quality, temperature, and light sensors, in a compact form factor.