- ## HL7800

Air Interface: Cat-M1,Cat-NB1
Region: Global
Carrier: AT&T,Verizon,Sprint,SouthernLINC,Rogers,Telus,NTT
Docomo,KDDI,Vodafone,Deutsche Telekom,Telstra,Spark,Sierra Wireless

HL7800 LPWA Module

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

The HL7800 module for Cat-M1/NB1 worldwide networks is fully compliant with the 3GPP Release 13. 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 <u>Smart Connectivity</u> 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 <u>CF3® design</u> 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 <u>firmware over-the-air (FOTA)</u> upgrades future-proof deployments and keep them secure

Cloud Connected

Securely collect data and remotely manage your IoT deployments with integrated <u>AirVantage®</u> 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

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

UART	1 X 8-wire
USB	1
ADC	2
GPIO	8

Tx ON Indicator	
1	
SIM interface 1.8V/3V	
1	

HARDWARE

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

APPROVALS

Carrier

AT&T, NTT Docomo, Deutsche Telekom, KDDI, Rogers, Spark, SouthernLINC, Sprint, Telstra, Telus, Verizon, Vodafone, Sierra Wireless

Regulatory

FCC, GCF, IC, JRF, JPA, KC, PTCRB, RCM, RED

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.

<u>Dev Kit Details</u>