



- HL7810



LPWA



Air Interface: Cat-M1, Cat-NB2

Region: Global

HL7810 Global LPWA Module for Industrial IoT

LTE-M and NB-IoT module offering ultra low power, small footprint and deep coverage

For battery-powered or low power deployments, Sierra Wireless' HL7810 module supports 3GPP's Release 14 features and offers best-in-class power consumption, high transmit power and the highest level of security from the edge to the cloud. This ensures field longevity and reduces the risk of your mission critical applications such as asset tracking, smart energy, smart cities and more.

Benefits



Private Networks

Band 8 with NAD to enable utilities in the US to deploy their own 900MHz private network



Deep Building Penetration

Improve indoor and underground coverage with class 3 (23 dBm) transmission power



Best-in-class power efficiency

Reduce operational and device maintenance cost of battery-powered and low power devices



End-to-End Security

Security keys encrypted are stored in a secure element for an added layer of protection for your solution, from the edge to the cloud



Common Form Factor

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



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



FOTA Upgrades

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



Location Services

Integrated GNSS receiver with Assisted GNSS enables tracking and location-based services



TCP/IP Stack

Embedded stack to easily communicate over the internet supporting a rich set of protocols including HTTP/S, TCP, UDP, TLS, DTLS

Technical Specifications

4G LTE

Category

Cat-M1/NB2

Frequency Bands

B1, B2, B3, B4, B5, B8, B9, B10, B12, B13, B17, B18, B19, B20, B25, B26, B27, B28, B66, B85

DATA SPEED

Peak Download Rate

Cat-M1 590Kbps, Cat-NB2 127Kbps

Peak Upload Rate

Cat-M1 1100Kbps, Cat-NB2 158Kbps

LOCATION SERVICES

Satellite Systems

GPS+Glonass

EMBEDDED SOFTWARE

Firmware

Secure boot, Pre-certified firmware

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

EMBEDDED SIM

Optional Ready-to-Connect (Sierra Wireless USIM)

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.

Dev Kit Details