





Air Interface: Cat-M1,Cat-NB1

Region: Global

Planned Carrier: Telstra, Verizon, AT&T, Vodafone, KDDI, T-Mobile, Rogers

AirPrime® HL7800 LPWA Module

World's smallest multi-mode LPWA module offering 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 standard and is Release 14 ready to support NB2 features in the future, providing a new low-cost, best-in-class power technology for low-bandwidth IoT applications with extended reach beyond traditional cellular.

Delivering up to 300Kbps download speed and 375Kbps upload speed, this module is ideal for simple static sensor applications, or real-time fixed or mobile applications such as asset tracking and monitoring, industrial equipment, consumer wearables, smart city, healthcare and agricultural monitoring devices.

Design now with LPWA modules in the CF3® form factor and scale to 3G or 4G networks in the future as the application evolves.

Benefits



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



Embedded SIM

Ready-to-Connect solutions streamline operations and add future flexibility (optional)*



FOTA Upgrades

FREE unlimited 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*



Secure Boot

Prevent unauthorized code on the target to keep your connectivity secure



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

^{*}Supported as a future firmware upgrade

Technical Specifications

4G LTE

Category Cat-M1/NB1

Frequency Bands B1, B2, B3, B4, B5, B8, B9, B10, B12, B13, B14, B17, B18, B19,

B20, B25, B26, B27, B28, B65, B66

Data Speed

Peak Download Rate 300Kbps

Peak Upload Rate 375Kbps

Embedded Software

Firmware Pre-certified firmware, Secure boot

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

Planned Carrier AT&T, KDDI, Rogers, T-Mobile, Telstra, Verizon, Vodafone

Regulatory FCC, GCF, IC, JRF, JPA, PTCRB

Cloud Services

Free Unlimited FOTA upgrades, Connectivity Management option*, Device Management option*

Connectivity

Optional Ready-to-Connect Sierra Wireless embedded SIM*



Sierra Wireless is an IoT pioneer, empowering businesses and industries to transform and thrive in the connected economy.

https://www.sierrawireless.com/products-and-solutions/embedded-solutions/products/hl7800/ 3-20-18

^{*} Supported as a future firmware upgrade