



AirPrime® HL7802 LPWA Module

LPWA 2G



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

Region: Global

Planned Carrier: Vodafone,AT&T,Verizon



World's smallest multi-mode LPWA module offering 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 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



Ready-to-Connect

Access best-in-class connectivity, reduce total cost of ownership, and strengthen end-to-end security with [Ready-to-Connect](#) modules from the RC Series



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 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



VoLTE

Enhance IoT applications with voice commands or call capabilities*

*Future release / 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, B66

2G

GPRS	850, 900, 1800, 1900
GSM	850, 900, 1800, 1900

DATA SPEED

Peak Download Rate	300Kbps
Peak Upload Rate	375Kbps

LOCATION SERVICES

Satellite Systems	GPS+Glonass*
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EMBEDDED SOFTWARE

Firmware	Secure boot*, Pre-certified firmware
Audio	Digital Audio*, VoLTE*
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

Planned Carrier	AT&T, Verizon, Vodafone
Regulatory	FCC, GCF, IC, PTCRB

EMBEDDED SIM

Optional Ready-to-Connect (Sierra Wireless USIM)*

CLOUD SERVICES

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

* Future release / firmware upgrade