

Sierra Wireless AirPrime® Embedded Modules HL Series

Compact, Flexible, and Future Proof 2G, 3G, and 4G Essential Modules

Sierra Wireless AirPrime® HL embedded modules offer everything device manufacturers need to meet essential connectivity requirements for energy solutions such as smart grid or smart meter applications. Key differentiators include a common form factor, small size, low-power consumption, enhanced RF performance, optional GNSS (GPS and GLONASS), and worldwide coverage.

COMPACT: THE SMALLEST 2G TO 4G FORM FACTOR ON THE MARKET

The HL Series is the smallest module on the market sharing a common form factor across 2G, 3G, and 4G technologies. Now, with just one PCB design, device manufacturers can easily integrate voice and data connectivity and deploy in any region, on any wireless mobile network.

FLEXIBLE: SOLDER DOWN OR CHOOSE THE SNAP-IN SOCKET TO SWITCH MODULES ANY TIME

The compact form factor offers the choice of soldering down the module for efficient high-volume production or, using a snap-in socket on the same solder pads for total flexibility in prototyping or smaller volume runs. The innovative snap-in socket allows device manufacturers to deploy or change modules at any point in the production and product life cycles.

FUTURE PROOF: INTELLIGENT PIN-TO-PIN COMPATIBILITY TO SUPPORT EVOLVING TECHNOLOGIES

The core and extension pins on the common form factor enables forward and backward compatibility between the different 2G, 3G, and 4G module variants. This means that the mechanical pin location delivers the same function across the series. The optional custom pins allow for new features as technology evolves making it the most future proof module on the market.



EASY TO INTEGRATE AND MANAGE

The HL Series can be managed remotely with AirVantage® Management Service, enabling device manufacturers to securely upgrade device firmware over-the-air. This can extend the life of your products and solutions by future-proofing remote assets, expanding service quality, and saving customers time and operating costs.

Essential



AirPrime®

Sierra Wireless AirPrime[®] Embedded Modules HL Series

	HL75xx Series	HL8548	HL6528
FORM FACTOR	LGA	LGA	LGA
AIR INTERFACE	LTE & LTE/HSPA	GSM/GPRS/EDGE/HSD/PA/HSUPA	GSM/GPRS
FREQUENCY BANDS			
LTE	HL7519: B2/B4/B13 HL7528: B1/B3/B5/B7 HL7548: B2/B4/B5/B13/B17 HL7549: B3/B7/B28 HL7588: B2/B4/B5/B13/B17		
HSPA	HL7588: B2/B5	B1/B2/B5/B6/B8	
EDGE		850/900/1800/1900	
GSM/GPRS		850/900/1800/1900	850/900/1800/1900
APPROVALS			
Regulatory	PTCRB, FCC, GCF, IC, KC Mark	CE, FCC, PTCRB, GCF, IC, Anatel, CCC	CE, FCC, PTCRB, GCF, IC, Anatel, CCC
Carrier	Depends on Models: AT&T, Verizon, Rogers, KT, SKT, LGU+...	AT&T, Vodafone, NTT...	Approved in many carriers over the world
CURRENT CONSUMPTION			
Power Supply for Extended Battery Life	2.8V supports	2.8V supports	2.8V supports
Alarm (leakage only)	110µA	40µA	35µA
Standby and Idle (Sleep)	LTE: 1.5 mA	1.2 mA	1 mA
GSM/GPRS max		360 mA	360 mA
HSPA max	HL7588: 560 mA	560 mA	
LTE max	CAT 4: 750 mA		
AUDIO			
Analog Audio			✓
Digital Audio	✓ depends on the variants	✓	✓
Codec	depends on the variants	HR, FR, EFR, AMR	HR, FR, EFR, AMR
Echo Cancellation & Noise Reduction	depends on the variants	✓	✓
DTMF	depends on the variants	✓	✓
INTERFACES			
UART	✓ 8 lines	✓ 8 lines	✓ 8 lines
USB	✓	✓	
SPI			✓
ADC	2	2	2
GPIO	8	8	8
Flash LED Output	✓	✓	
PWM (Buzzer)	1	1	2
Tx Burst Indicator	✓	✓	✓
SIM interface 1.8V/3V	✓	1 SIM DSDS support	2 SIM DSDS support
LOCATION SOLUTION		GPS & Glonass Sirf V	GPS & Glonass Sirf V
CLOUD SERVICES	FOTA through AVMS	FOTA through AVMS	FOTA through AVMS
INTERNET SERVICES	TCP+UDP+FTP+HTTP+HTTPS	TCP+UDP+FTP+HTTP+HTTPS	TCP+UDP+FTP+HTTP+HTTPS
DRIVERS	USB drivers for Linux, Android, Win CE, Win8	USB drivers for Linux, Android, Win CE, Win7, Win XP	RIL driver for Win CE & Linux
DEVICE DIMENSIONS	22x23x2.5 mm	22x23x2.5 mm	22x23x2.5 mm
TEMPERATURE RANGE	- 40°C / + 85°C	- 40°C / + 85°C	- 40°C / + 85°C

About Sierra Wireless

Sierra Wireless is the global leader in machine-to-machine (M2M) devices and cloud services, delivering intelligent wireless solutions that simplify the connected world. Our solutions are **simple**, **scalable**, and **secure**, and enable customers to get their connected products and services to market faster.

For further company and product information, please visit www.sierrawireless.com.