



Sierra Wireless® HL Series Embedded Modules

UNLIMITED FOTA INCLUDED

Powered by AirVantage®, this cloudbased service makes it easy to keep the module firmware updated and your deployments healthy in the field.

22mm



23mm

The more we talked with Sierra
Wireless, the more confident we
became that they really understood
what we needed to not only build and
launch a new generation of outdoor
lighting fixtures, but to also grow and
evolve them over time.

– Vasanth Philomin, General Manager, Philips CityTouch

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. 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 SNAP-IN SOCKET OPTIONS

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

The pin-out 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 pin-out of the HL series is compatible with the application processing WP Series

Sierra Wireless HL SERIES EMBEDDED MODULES

	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/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 by 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)	110μΑ	40µA	35µA
Standby and Idle (Sleep)	LTE: 1.5 mA	1.2 mA	1 mA
GSM/GPRS max		360 mA	360 mA
HSxPA 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
GPI0	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 AirVantage	FOTA through AirVantage	FOTA through AirVantage
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 building the Internet of Things with intelligent wireless solutions that empower organizations to innovate in the connected world. We offer the industry's most comprehensive portfolio of 2G, 3G, and 4G embedded modules and gateways, seamlessly integrated with our secure cloud and connectivity services. OEMs and enterprises worldwide trust our innovative solutions to get their connected products and services to market faster.

For more information, visit www.sierrawireless.com.

