

SAGEMCOM

HiLo^{NC}-3GPS

HSPA SLIM CONNECTIVITY
FOR AUTOMOTIVE



PRODUCT OVERVIEW



HiLo^{NC}-3GPS is the smallest HSPA module designed for the most demanding automotive market.

Operating from -40°C to +85°C thanks to an exclusive design providing enhanced heating dissipation, it provides full speed downloads over 3G up to 14Mbps, uploads up to 5,76Mbps, and is able to make accurate location fixes using GPS satellites, or Glonass as an option.

Leveraging on its expertise in cellular technologies and device management, Sagemcom offers a wide range of high added value solutions including communicating terminals to innovative customers worldwide. Moreover, to provide the highest level of performance and services to its customers, Sagemcom has built a value proposition based on two pillars: slim or smart modules, and M2M-SCAPE services to remotely manage Sagemcom modules or cellular devices over the air.

Moreover, by choosing Sagemcom, you decide to select:

- A technology validated and approved worldwide
- A top of the range technical support
- The highest standards of quality

- Automotive grade
- Extended temperature range (operations from -40° to +85°C)
- Enhanced mechanical resistance
- Ecall InBand modem (3GPP)
- High sensitivity in a compact form factor
- HSPA up to 14Mbps DL and 5,76Mbps UL with RX diversity
- Biband EU (2100/900MHz) and Triband US (850/1700/1900MHz).
- GSM, GPRS, EDGE Class 12, Quadband (850/900/1800/1900MHz)
- GPS embedded, Glonass as an option
- Lowest power consumption (1,4mA in GSM standby mode)
- USB high speed interface, UART interface
- Audio PCM

TECHNICAL FEATURES

ENVIRONMENT

- Size (L x W x H): 28,5x34x2,9 mm
- SMT: LGA with enhanced layout providing efficient heat dissipation and planarity
- Operational temperature range: -40°C / +85 °C
- Full type approved: R&TTE, GCF, PTCRB, FCC, Rohs compliancy
- Power supply: from 3,4V to 4,2V (3,7v typ)
- Consumption in standby mode (GSM call reception/emission): 1,4 mA
- Consumption data transfer mode: from 180mA (2G) to 600mA (3G)
- Consumption tracking mode (GPS): 13 mA
- Certifications: ISO 9001-2000 and ISO/TS16949:2002, PPAP, 8D

RADIO LINK

- GPRS, EDGE Class 12 (GSM R4), Quadband 850/900/1800/1900MHz
- HSPA up to 14,4Mbps DL / 5,76 Mbps UL (WCDMA R5)*
- HSPA Biband 900/2100MHz or Triband 850/1700/1900MHz*
- Enhanced sensitivity from -106 to -110dBm
- Output Power: Class 4 (2W) for 850 / 900 Mhz; Class 1 (1W) for 1800 / 1900 Mhz

DATA INTERFACES

- UART (4Mbps) and USB high speed (480Mbps)
- 6 GPIO
- Hardware and software flow control
- AT commands set: GSM 07.05; 07.07; 07.10, proprietary AT commands
- Multiplexing 07.10 serial interface
- Data over HSPA, EDGE, GPRS, CSD
- Complete internet connectivity embedded: TCP, FTP, UDP
- Reset input

RADIO INTERFACE

- Voice codecs: HR, EFR, FR, AMR
- Echo cancellation & noise reduction
- Digital audio (PCM) interface

GSM FEATURES

- Automatic hang up for data call
- Internal phonebook
- CLIP / CLIR / COLP / COLR
- eCall (3GPP) option
- Call: wait / hold / conference / forward / barring
- Supports of: FDN, USSD, Sim Toolkit, AoC
- PDU and text mode SMS support
- MMS support (dedicated AT commands)
- Module reset/alarm based on RTC

LOCALIZATION

- SMS CB, Cell ID
- Network cells measurements
- GPS
- Glonass option

SECURITY

- Device lock possibility
- Dedicated TAC for customization purpose
- Sim 3 V & 1.8 V supported

DEVELOPMENT AND SUPPORT TOOLS

- Extensive documentations: hardware specifications, application note, AT command list, pedagogical documentations
- Online support with OTRS private account
- Development board
- Upgrade tools
- Design, certification & production support

* Depending on model

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