

SPG Cellular + WIFI Expansion card



The SPG Cellular expansion card allows for 3 options - one option has 2G/3G/4G operation, the other includes WiFi support for both end node and hotspot operation, and the last one supports dual-mode Cat M1/NB1 (NB-IoT) capability. The card also supports dual SIM for additional redundancy. A wide range of modulation is supported.



Automatic fall-back
from 4G to 3G to GPRS



2G GPRS, 3G and 4G
networks



Dual SIM auto detecting
best path



Supports LTE-CATM1 and
NB-IoT network connectivity



Optional WiFi hotspot
or device mode



Auto card detection
on S1000



Supports GPS location

Technical Specifications

Cellular Expansion Card

Product Code	SE1-CELL-PCB
Bands	2G (GSM/DSC) B8(900MHz) B3(1800MHz) 3G (WCDMA) B8(900MHz) B1(2100MHz) 4G (LTE) B20(800MHz) B8(900MHz) B3(1800MHz) B7(2600MHz) B1(2100MHz)

Cellular and WIFI Expansion Card

Product Code	SE1-CELLWIFI-PCB
Bands	2G (GSM/DSC) B8(900MHz) B3(1800MHz) 3G (WCDMA) B8(900MHz) B1(2100MHz) 4G (LTE) B20(800MHz) B8(900MHz) B3(1800MHz) B7(2600MHz) B1(2100MHz)
WiFi	IEEE 802.11 b/g/n

GPS Expansion Card

Product Code	SE1-CELL-PCB-L
Bands	2G (GSM/DSC) B2(1900MHz) B3(1800MHz) B5(850MHz) B8(900MHz) 4G (LTE) B1(2100MHz), B2(1900MHz) B3(1800MHz) B4(AWS1700MHz) B5(850MHz) B8(900MHz) B12(700MHz) B13(700MHz) B18(800MHz) B19(800MHz) B20(800MHz) B26(850MHz) B28(700MHz)
Data	Cat-M1m and NB-IoT
GNSS	GPS, GLONASS, Beidou, Galileo

All

Protocols	ARCO TCP/IP using SSL security
Data rate	up to 72Mbps (802.11n)
Temperature	-10°C to 70°C
Humidity	5%(0°C) to 95%(40°C)
Power Consumption	Idle 25mA @ 12VDC / Peak 450mA @ 12VDC
Dimensions	80mm x 56mm
Weight	50g



Ordering Information

Part Number	Product Code	Description
200102	SE1-CELL-PCB	2G/3G/4G Cellular backup card with antenna
200103	SE1-CELLWIFI-PCB	2G/3G/4G Cellular backup card with WiFi support and dual antennas
200152	SE1-CELL-PCB-L	2G/4G Cellular backup card with GNSS support and antenna
300250	SE1-CELLGPS-KIT	Antenna Kit to allow SE1-CELL-PCB-L to connect to the GPS network.