

Cellular Expansion Card

The Cellular Expansion Card allows for:

- 2G / 3G / 4G operation
- dual-mode Cat M1/NB1 (NB-IoT) capability.

All models support dual SIM for additional redundancy. A wide range of modulation is supported.



FEATURES

- Automatic fall-back from 4G to 3G to GPRS
- 2G GPRS, 3G and 4G networks
- Dual SIM for automatically detecting the best path
- Automatically detected by the S1000
- Supports GPS location
- Supports LTE-CATM1 and NB-IoT network connectivity

TECHNICAL SPECIFICATIONS

General

Physical	
Dimensions	80mm x 56mm (3.1" x 2.2")
Weight	50g (0.04oz)
Environmental	
Operating temperature	-10°C (14°F) to 70°C (158°F) UL 2610, UL 294: -10°C (14°F) to 49°C (120.2°F)
Operating humidity	5% (0°C or 32°F) to 95% (40°C or 104°F)
Electrical	
Power consumption	Idle 25mA at 12VDC Peak 450mA at 12VDC UL 2610, UL 294: 30mA at 12VDC input with full load
Communications	
Protocols	VIGIL CORE TCP/IP using SSL security
Data rate	Up to 72Mbps (802.11n)

Cellular Expansion Card

Purchasing details	
Product code	SE1-CELL-PCB
Communication	
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)

GPS Expansion Card

Purchasing details	
Product code	SE1-CELL-PCB-L
Communication	
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

COMPLIANCE

RoHS, RCM, FCC, CE, WiFi Certified, GCF, EN 50136, EN 50130, EN 50131, UL 294, UL 2610

ORDERING INFORMATION

PART NO.	TYPE CODE	DESCRIPTION
320 200 102	SE1-CELL-PCB	2G/3G/4G Cellular Expansion Card with wireless and an antenna
320 200 152	SE1-CELL-PCB-L	2G/4G Cellular Expansion Card with GPS and GNSS support and antenna
320 300 250	SE1-CELLGPS-KIT	Antenna kit to allow SE1-CELL-PCB-L to connect to the GPS network.