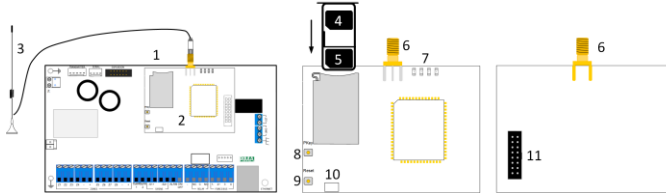


GSM512

Installation Instructions

English



1	FORCE's Control Panel
2	GSM512 Add-on
3	Antenna (SMA)
4	SIM1 Card Holder
5	SIM2 Card Holder
6	Antenna Connector
7	LEDs
8	PKey Button
9	Reset Button
10	Micro USB Socket
11	Circuit Board Connector

GSM512 Cellular Add-on

The GSM512 is a Quad-band, dual-SIM, 2G, cellular add-on that allows the **FORCE Series** intruder alarm systems, to communicate over a cellular network. The add-on is mounted on the control panel's circuit board and is supplied with an SMA antenna.

The GSM512 is based on a Quectel¹ M95 module, which guarantees fast and reliable transmission of data, voice, and SMS via GSM/GPRS, and integrates TCP/IP protocol stacks, serial multiplexer and enhanced AT commands.

The GSM512 is supplied without a (U)SIM card. Note that only Nano cards can be used.

For how to set the add-on in the control panel, see the **FORCE's** Installation guide (P/N: 4410459).

Technical specifications

- Channels: GPRS/SMS/Voice
- Quad-band Frequencies: 850/900/1800/1900MHz
- Dual-(U)SIM. Master/Backup selected by the control panel
- Sizes: 9 X 7 X 2.5 cm
- Antenna Cable Length: 2m
- Input Power: 6-20VDC
- Weight: 335gr
- CE Compliance
- Operating Temperature: -10 to +55 °C
- Humidity (Max.): 93% R.H., Non-condensing.
- Power Consumption
 - 1.3mA @DRX=5
 - 1.2mA @DRX=9
- Data
 - High Data Speed
 - GPRS Multi-slot Class 12
 - Class 1-12 configurable 85.6Kbps Max (uplink & downlink)
- Approvals
 - RoHS Compliant
 - CE/ GCF/Vodafone/UCRF/ATEX (Europe)
 - DoC (Russia)
 - Anatel (Brazil)
 - ICASA (South Africa)
- GPRS Multi-slot Class: 12, 1~12 Configurable
- GPRS Mobile Station: Class B
- Enhanced AT Commands
- Voice
 - Half Rate (HR)
 - Full Rate (FR)
 - Enhanced Full Rate (EFR)
 - Adaptive Multi-Rate (AMR)
 - x 2 (Embedded Class-AB amplifier in one channel)
 - PCM
 - Echo Arithmetic
 - Echo Cancellation
 - Echo Suppression
 - Noise Reduction
- Output power
 - Class 4 (2W @850/ 900MHz)
 - Class 1 (1W @1800/ 1900MHz)
- Sensitivity
 - GSM850: -109dBm
 - GSM900: -109dBm
 - DCS1800: -109dBm
 - PCS1900: -109dBm

¹ www.quectel.com

- DATA Mode, GPRS (1 Rx, 4Tx)
CLASS 12
 - GSM850
 - @power level #5 <660mA, Typical 457mA
 - @power level #12, typical 182mA
 - @power level #19, typical 106mA
 - EGSM900
 - @power level #5 <660mA, Typical 484mA
 - @power level #12, typical 187mA
 - @power level #19, typical 109mA
 - DCS1800
 - @power level #0 <530mA, Typical 461mA
 - @power level #7, typical 149mA
 - @power level #15, typical 97mA
- PCS1900
 - @power level #0 <530mA, Typical 439mA
 - @power level #7, typical 159mA
 - @power level #15, typical 99mA

Content of the product package

- GSM512 Add-on
- Antenna + Cable
- This guide

How to install the GSM512



Disconnect the control panel from AC and battery power before installing the GSM512.

Follow the next steps to install the add-on.

1. Carefully pull out the (U)SIM card tray (no. 4+5 in the above figure) from the socket, by gently pressing the eject bar.
2. Align (U)SIM 1 (main) card into slot 4, and (U)SIM 2 (backup, if in use) card into slot 5, with the metal contacts facing downwards and the angled corner of the card positioned correctly, and carefully insert the tray into place.
3. Connect the antenna to the antenna connector (no. 6 in the above figure), by rotating the SMA connector clockwise.
4. Connect the add-on's circuit board connector (no. 11 in the above figure) to its socket on the control panel's circuit board.
5. Connect the control panel to power.
6. Locate the antenna where the cellular signal is strong.
7. Set the add-on in the control panel.
8. Test the add-on.

The LEDs

The GSM512 has 4 LEDs, described in the table below.

Label	Color and state	Description
LD1	Yellow 1 blink/2000ms pause	Modem is registered on the network
	Yellow 1 blink/800ms pause	Modem is not registered on the network
	Yellow 1 blink/600ms pause	Data transfer
LD2	Red	Used by the manufacturer
LD3	Green solid	Power on
LD4	Blue solid	Used by the manufacturer

The buttons

Button	Description
Pkey	Used by the manufacturer
Reset	Reset key: press to reset the modem after a firmware update