

CLM412/422

Cellular Add-on



The CLM412/422 is an LTE, category 1 cellular add-on that allows the **FORCE Series** intruder alarm systems¹, to communicate over a cellular network. The add-on is mounted on the control panel's circuit board and is supplied with an antenna.

CLM412 is based on Quectel² EC21-E module. CLM422 is based on Quectel³ EC21-AU module. The modules deliver M2M-optimized speeds of 10Mbit/s downlink and 5Mbit/s uplink.

The CLM412/422 supports LTE, UMTS/HSPA+ and GSM/GPRS/EDGE networks.

PIMA Electronic Systems' portfolio includes a wide selection of hardwired and wireless detectors, sensors and sirens for both security and safety purposes. Our products are developed with uncompromising quality, ease of installation, and operation experience.

PIMA's wireless detectors integrate the FastLink technology, an advanced encrypted wireless detection technology that ensures maximum security.

PIMA's detectors are a perfect solution for the business as well as for the home markets.

The **FORCE Series** alarm systems interface with a wide selection of expanders and peripherals, enabling the customer to expand the system as needed.

Main features

- Dual-SIM
- Supports various cellular operators
- Requires SIM card (not supplied)
- Status LEDs

Technical Specifications

- Channels: LTE, UMTS/HSPA+/GSM/GPRS/EDGE
- (U)SIM Type: Nano
- Dual-(U)SIM. Master/Backup set by the control panel
- Antenna Cable Length: 2m
- Input Power (by the control panel): 6-20VDC
- Current Consumption: Min. 30mA, Max. 200mA
- Sizes: 9 X 7 X 2.5 cm
- Weight: 245gr
- CE Compliance
- Operating Temperature: -10 to +55 °C
- Humidity (Max.): 93% R.H., Non-condensing.
- Data
 - UMTS
 - DC-HSDPA: Max 42Mbps (DL)
 - HSUPA: Max 5.76Mbps (UL)
 - WCDMA: Max 384Kbps (DL)/Max 384Kbps (UL)
 - GSM
 - EDGE: Max 296Kbps (DL)/Max 236.8Kbps (UL)

¹ Version 1. 2 and higher

² www.quectel.com

³ www.quectel.com

- GPRS: Max 107Kbps (DL)/Max 85.6Kbps (UL)
- LTE
 - FDD: Max 10Mbps (DL)/Max 5Mbps (UL)
 - TDD: Max 8.96Mbps (DL)/Max 3.1Mbps (UL)
- Audio
 - Digital Audio and VoLTE (Voice over LTE) (Optional)
- Interfaces
 - USB 2.0
 - PCB connector
 - Antennas
- Enhanced Features
 - DFOTA: Delta Firmware Upgrade Over the Air
- Electrical Characteristics
 - Output Power:
 - Class 3 (23dBm±2dB) for LTE FDD
 - Class 3 (23dBm±2dB) for LTE TDD
 - Class 3 (24dBm+1/-3dB) for WCDMA
 - Class E2 (27dBm±3dB) for EDGE 850/900MHz
 - Class E2 (26dBm+3/-4dB) for EDGE 1800/1900MHz
 - Class 4 (33dBm±2dB) for GSM 850/900MHz
 - Class 1 (30dBm±2dB) for GSM 1800/1900MHz
 - Consumption:
 - 20uA @Power off
 - 3mA @Sleep, Typ.
 - 22mA @Idle
 - Sensitivity:
 - LTE B1: -101.5dBm (10M)
 - LTE B2: -101dBm (10M)
 - LTE B3: -101.5dBm (10M)
 - LTE B4: -101dBm (10M)
- LTE B5: -101dBm (10M)
- LTE B7: -99.5dBm (10M)
- LTE B8: -101dBm (10M)
- LTE B12: -101dBm (10M)
- LTE B13: -100dBm (10M)
- LTE B20: -102.5dBm (10M)
- LTE B28: -102dBm (10M)
- WCDMA B1: -110dBm
- WCDMA B2: -110dBm
- WCDMA B4: -110dBm
- WCDMA B5: -110.5dBm
- WCDMA B8: -110.5dBm
- GSM: -109dBm
- DCS: -109dBm
- Approvals
 - RoHS Compliant
 - CE/GCF/Vodafone (Europe)
 - Anatel (Brazil)

Ordering Information

- CLM412: P/N 8300049
- CLM422: P/N 8300050



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For product information
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Doc no. SPC-8300049, Revision: 07-2019