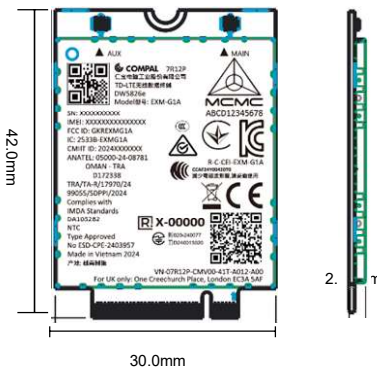## Compal Electronics EXM–G1A Embedded Modules

### Advanced LTE Data Module

Enabling a new generation of the art data cards featuring with LTE, WCDMA and GNSS support for the following applications: High Power Fixed Wireless Access, enterprise routers and gateways, indoor/outdoor CPE, video broadcasting and surveillance.



42.0mm

30.0mm

2. m

## Compact, Powerful, Hostless and Highly integrated Proof LTE Modules

Compal EXM-G1A is a series of LTE communication modules for Worldwide EU broadband Market, which support LTE network architectures with faster transmission speed, better carrying capacity, and lower network latency.

EXM-G1A Module supports LTE and WCDMA standards, eliminating customers' investment concerns in the initial stage of LTE construction and responding to the commercial demand of rapid landing.

This WWAN card follows the PCIe association standard for pin definitions and supports commonly found interfaces on M.2 cards such as USB 2.0/3.0, I2C, MIPI, and GPIO. Its abundant functionalities, including USB drivers for Windows 7/8/8.1/10, Linux, and Android, extend the module's applicability to IoT and M2M applications, such as business routers, industrial laptops, consumer laptops, industrial PDAs, and rugged tablet PCs.

Key Benefits

- Quad Cortex-A7 application processor 1.28GHz
- 4G LTE FDD and TDD and WCDMA
- LTE R12 Cat.12
  - 600Mbps DL 3CC, 2x2 MIMO
  - 150 Mbps UL 2CC
  - DL 256QAM / UL 64QAM
- Driver support for Linux, Windows

| EXM-G1A | |
|---|---|
| **FORM FACTOR** | M.2  |
| **FREQUENCY BANDS** | |
| **LTE** | LTE FDD: B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B18, B19, B20, B25, B26, B28, B29, B32, B66, B71<br>LTE TDD: B38, B39, B40, B41, B42, B43, B48 |
| **WCDMA** | B1, B2, B4, B5, B6, B8, B9, B19 |
| **Simultaneous GPS** | L1, GLONASS(GLO), Galileo(GAL), BeiDou(BDS) and QZSS |
| **DL 2x2 MIMO** | LTE FDD: B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B18, B19, B20, B25, B26, B28, B29, B32, B66, B71<br>LTE TDD: B38, B39, B40, B41, B42, B43, B48 |
| **INTERFACE** | |
| **Antenna Port** | x 2<br>Support 2x2 MIMO |
| **Tunable antenna** | MIPI x 1 |
| **USB** | USB 2.0 HS/3.0/3.1 SS Gen1: |
| **GPIO** | General-Purpose I/O x 3pin<br>RF Antenna control x 4pin |
| **I2C** | I2C_CLK/ I2C_DATA/ I2C_IRQ# Reserved |
| **SIM interface 1.8V/3V** | Dual USIM 2.85V/1.8V (One embedded eSIM and USIM1 interface) |
| **LED Indicate Control Pin** | ISINK x 1 (up to 12 mA) |
| **Key** | Power On, Reset |
| **Protocol Stack** | IPV4/IPV6 |
| **Firmware update** | FOTA |
| **DRIVERS** | Windows 10/11, Linux, Chrome |
| **AT commands** | 3GPP TS 27.007 |
| **Dimensions** | 42.0mm × 30.0mm × 2.30mm |
| **Temperature** | |
| **Operating temperature** | -30°C ~ +70°C |
| **Extended temperature** | -40°C ~ +85°C |
| **Support Voltage** | |
| **Power Supply Voltage** | 3.135~4.4V (Typical:3.3V) |
| **APPROVALS** | |
| **RoHS Compliant** | Y |

VISIT US: https://www.compal.com          Email: Compal_5G@Compal.com          Tel: +886-2-87516228