

Fort Digital 4G Modem Data Sheet

| Parameter | Specification / Description | Typical Values / Bands |
|-------------------------|---|--|
| Module Name | Quectel E Series (LTE Category 1) | Quectel E Series (LTE Category 1) |
| Dimensions | Physical size of module | Approx. 32.0 × 29.0 × 2.4 mm |
| Weight | Typical module weight | About 4.1 g |
| Form Factor | LCC package | 144-pin LCC |
| LTE Category | Defines max data rate for LTE | Category 1 |
| Supported Bands (LTE) | LTE-FDD Bands | Band 1,3,7,8,28,38,40 |
| Fallback | 3G / 2G fallback if LTE is not available | UMTS/HSPA+ (B1/B8), GSM/GPRS/EDGE |
| Data Rates (LTE) | Downlink / Uplink | Up to ~10 Mbps (DL) / 5 Mbps (UL) |
| Data Rates (UMTS/HSPA+) | Downlink / Uplink | Up to ~21 Mbps (DL) / 5.76 Mbps (UL) |
| Operating Voltage | Power supply range | 3.3 V to 4.3 V |
| Power Consumption | Typical idle / sleep / active | Varies by network & firmware |
| Operating Temperature | Ambient temperature for normal operation | -35°C to +75°C |
| Storage Temperature | Temperature range for non-operational storage | -40°C to +90°C |
| Interfaces | Available physical / logical interfaces | USB 2.0 High Speed, Serial RS232, Serial RS485 |
| SIM Interface | Supports external SIM card | 1.8 V / 3.0 V |
| Antenna Interface | RF connection | Main LTE antenna & Rx-diversity antenna |
| Certifications | Regional compliance (may vary by region) | CE-RED, GCF, RCM, etc. |
| Firmware Upgrade | Methods of updating module firmware | USB DFU / FOTA |
| Audio Interface | PCM / I2S interface support | 2-wire or 4-wire PCM |
| AT Command Set | 3GPP TS 27.007 and 27.005 + Quectel proprietary | Supported for control & configuration |
| GPIO | General Purpose I/O pins | Up to 8 (depending on firmware) |
| IP Protocols | Network protocols supported | TCP/IP, UDP, PPP, FTP/HTTP, MQTT (optional) |
| SMS / MMS | Messaging capabilities | Text/PDU mode for SMS |
| Security Features | Encryption, secure boot, etc. | TLS/SSL, secure data channels |
| Reference Design | Typical hardware reference | Available in Hardware Design manual |
| Mounting | PCB surface mount | LCC package, reflow soldering |
| RoHS Compliance | Hazardous substance restrictions | RoHS & REACH compliant |
| Technical Documents | Core documentation from Quectel | Hardware Design, AT Command Manual, EVB Kit |
| Casing Size | 51mm width x 80mm x 16mm, antenna petrude out 10mm, bracket petrude out from the side of casing 11.5mm width x 35.3mm height, antenna lenght 107.7mm | |
| SIM Card | Normal Size | |
| SIM Card Protection | 2 Screws Cover | |

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