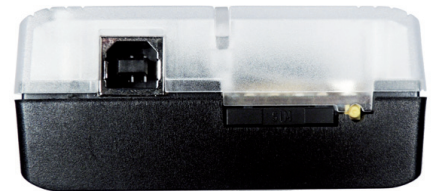


MC89 LTE Terminal

4G LTE Cat 1
Optimized for M2M/IoT solutions
Powered by Java™



General features:

- Cinterion® ELS61-E embedded
- LTE (FDD) 3GPP Rel.9 Compliant Protocol Stack, RX-Diversity
- Penta-Band LTE: Bands 1, 3, 8, 20, 28* (700*, 800, 900, 1800, 2100 MHz)
- Dual-Band GSM 900 and 1800 MHz
- SIM Application Toolkit, letter classes b, c, e with BIP and RunAT support
- Control via standardized and extended AT commands (Hayes, TS 27.007 + 27.005)
- TCP/IP stack access via AT command and transparent TCP/UDP services
- Secure Connection with TLS
- Internet Services TCP/UDP server/client, DNS, Ping, HTTP, SMTP, FTP client
- Supply voltage range: 8 - 30V
- Operational temperature range: -30 °C to +75 °C
- Dimensions: 65x74x33mm
- Weight: approx. 110g
- DIN rail mounting
- Screw fixing

*) support of LTE band 28 in a separate variant only

Java™ Open Platform features:

- Java™ ME 3.2
- Secure data transmission with HTTPS/SSL
- Multi-threading programming and Multi-Application execution
- 18 MB RAM and 31 MB Flash File System

Special features:

- USB Interface features a composite mode, compliant to Windows, Linux and Mac
- Firmware update via USB and ASC
- Real time clock with alarm functionality
- Multiplexer according 3GPP TS 27.010
- RLS Monitoring (Jamming detection)
- Informal Network Scan
- Hardware watchdog
- Integrated FOTA, configurable and royalty free
- Customer IMEI/SIM-Lock as variant

Specification for data:

- LTE Cat.1
DL: max. 10.2 Mbps, UL: max. 5.2 Mbps
- GPRS Class 12
DL: max. 85.6 kbps, UL: max 85.6 kbps
- SMS text and PDU mode support

Approvals:

- CE, RED
- WEEE, EuP, RoHS and REACH compliant

Interfaces:

- Power connector 6-pole Western jack
- Mini SIM card reader, 1,8V and 3,0V
- Antenna connector FME (male)
- 2 operating status LED's
- 6 programmable LED's
- USB 2.0 HS interface up to 480 Mbps
- V.24/ V.28 RS-232 interface (D-sub 9-pole female socket) 920kbps, auto bauding

optional:

- **Wireless M-Bus**
- **Digital GPIOs**
- **Any customer specific interface possible**

Driver:

- USB, MUX driver for Microsoft® Windows 7™ and Microsoft® Windows 10™
- RIL Driver for Android versions KitKat (V4.x) and Lollipop (V5.x)
- RIL, USB driver for Microsoft® Windows Embedded Handheld™ >= 6.x