

MTX-65+G+B V7 Terminal

GSM/GPRS Modem + GPS Receiver with Internal Battery



Powered by CINTERION Wireless Module TC65i rel.2 and Trimble C1216

Quad Band GSM
GPRS Class 12

22 Channel GPS
Receiver

1 RS232 port

USB port
SPI-I2C bus

Opto isolated
Inputs/Outputs

Integrated
TCP/IP Stack

JAVA applications

Accelerometer

Automatic restart
after shutdown

Hardware
Watchdog

GPS antenna
supervision

Li_Ion internal
battery

MTX-65+G+B V7 TERMINAL

The MTX-65+G terminal is an all-in-one solution enabling GSM Voice, SMS, Fax and Data (GPRS class 12). The Quad Band functionality allows it to operate at all relevant GSM frequencies. It has intrinsic and powerful TCP-IP stack communication with Internet Services: TCP, UDP, HTTP, FTP, SMTP, POP3.

MTX-65+G+B-V7 is same terminal as MTX-65+G-V6 but includes extra internal Ion-Li 1600 mA/h battery with backup features.

The MTX-65+G+B-V7 includes a 16-channel high sensitivity (-158dBm) GPS receiver connected to GSM engine. AGPS, DGPS and SBAS (EGNOS, WAAS) techniques are enabled. GPS JAVA APIs can be used. NMEA PARSER is also available.

The MTX-65+G+B-V7 terminal is a powerful combination of a GSM/GPRS radio system and a GPS receiver, including a range of I/Os and USB/SPI-I2C/RS232 ports. Many peripherals (display, RFID, sensors...) can be connected and controlled internally.

The MTX-65+G+B-V7 compact self-contained unit can host and control your Java J2ME application. This allows you to develop and embed your code directly onto the MTX-65+G, to shorten time onto the market and to reduce costs in order to avoid external components.

Together with its small size and all the standardised connectors, -USB and RS232 port interfaces, internal SIM card reader-, ability to connect to PC's, control boards and other peripherals, it minimises the need for further hardware components and facilitates integration.

MTX-65+G+B-V7 is pin to pin compatible with MTX-65+G+B-V5. Software needs to be modified due to new internal modules.

MTX-65+G+B-V7 is CE marked and it is RoHs & WEEE compliant, manufactured with the ISO 9001 & ISO 14001 quality certifications.

General features:

- Quad-Band GSM 850/900/1800/1900 MHz
- GPRS multi-slot class 12
- Control via AT commands
- SIM Application Toolkit (release 99)
- TCP/IP stack access via AT commands
- Internet Services: TCP, UDP, HTTP, FTP, SMTP, POP3
- Supply voltage range: 9 ... 36 V Typ 12V
- Power consumption (at 12 V):
 - Power down mA
 - Sleep mode (registered DRX = 6)
 - Idle mode (DRX=9) 60 mA
 - GPRS class 12 (average) 720 mA
- Temperature range
 - Operation*: -40°C to +85°C
- Dimensions. Excluding connectors: 78,1 x 66,8 x 37,2 mm
- Weight: < 190 g

Interfaces:

- GSM FME M antenna connector
- GPS SMA F antenna connector
 - 3 Opto isolated Inputs (1 for pulse counter)
 - 3 Opto isolated Outputs
 - 1 TTL input/output GPIO
 - 2 Analog Inputs
 - 1 x I2C bus. SPI optional
 - 1 x 2-wires RS232 UART*
- USB 2.0 port
- 2 Operating status LED: GSM status and user programmable
- SIM card interface 3 V, 1.8 V
- Handset audio interface
- 3 Axis Accelerometer

Open application resources

- ARM© Core, Blackfin© DSP
 - Memory: 400 KB (RAM) and 1.7 MB (Flash)
- Custom model with TC651-X with 2M RAM and 8M Flash
- Improved power-saving mode

Java™ features :

- CLDC 1.1 HI
- J2ME™ profile IMP-NG
- Watchdog

Over-the-air update :

- Application SW: OTAP
- Firmware: FOTA (OMA compliant)

Ordering code: **199801302**

Modem only. Does not include accessories.
Warranty: 1 Year. (Additional years by request)
CE approval
EICC/GeSI, RoHs & WEEE compliant
TARIFF 8517620090

MTX-Terminals

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Specification for GPS

- Receiver 22 channel, L1 1575.42 MHz
- Accuracy Position: <2.5 m 50%
- Position with DGPS/SBAS: <2.0 m 50%
- Support of SBAS (WAAS/EGNOS/MSAS) data
- GPS active antenna supply: 3.0 V
- A-GPS enabled
- Tracking sensitivity: -160 dBm (with external antenna)
- Date WGS-84
- Start-up Time
 - Hot start: < 2 s
 - Warm start: 35 s
 - Cold start: 38 s
- Protocols: NMEA-0183. Baudrate 9600 default, configurable 4800,19200, 38400, 57600, 115200
- NMEA-0183 Messages: GGA, GSA, GSV, RMC, CHN, GLL, VTG, ZDA.

Specification for GPRS data transmission:

- GPRS class 12
- Mobile station class B
- PBCCCH support
- Coding schemes CS 1-4

Specification for CSD data transmission:

- Up to 14.4 kbit/s
- V.110
- Non-transparent mode
- USSD support

Specification for SMS:

- Point-to-point MO and MT
- SMS cell broadcast
- Text and PDU mode

Specification for fax:

- Group 3, class 1, 2

Specification for voice:

- Triple-rate codec for HR, FR, and EFR
- Adaptive multi-rate AMR
- Basic hands-free operation
- Echo cancellation
- Noise reduction

Battery

- Internal Ion-Li 1650mA/h with UPS/backup function