

## MTX-HSPA-PH8-P+G Terminal

### M2M applications to the future

Powered by Cinterion Wireless Module PH8-P







HSPA+ DL: 14.4 Mbps UL: 5.7 Mbps

UMTS 800/850, 900, 1900/2100 MHz





USB port RS232 port

Audio analog port

USB 2.0 high speed CDC-ACM compliant

Video call support

GPS antenna.

Dedicated AT commands

When your application needs UMTS top speed, 14.4 Mbps download and 5.7 Mbps upload (ideal for video transmission), MTX-HSPA-PH8-P terminal is the solution based on HSPA+ 3.5G technology.

The HSPA+ (High Speed Packet Access) is a transmission standard based on the UMTS network which allows a download speed of up to 14.4 Mbps. The technology therefore enables services like broadband internet, e-mail access, high-speed download of large data files and streaming of videos or music. MTX-HSPA-PH8-P covers almost all UMTS frequencies allowing you to use it in world-wide UMTS network coverage. This terminal will be 4G and LTE ready when the network is ready.

The MTX-HSPA-PH8-P is a complete terminal that encapsulates everything you need in one compact plug-and-play unit. The integration is almost not necessary because it has its own SIM card reader and a USB port which minimizes the need for further hardware components.

The MTX-HSPA-PH8-P is controlled via AT commands in their standard interfaces, the USB 2.0 full speed (480Mbps) and Serial High Speed up to 920Kbps RS232 port. They can be used at same time. GPS receiver NMEA data is present without Muxer over USB and serial interfaces.

This terminal is intended to be used with NDIS/USB driver for Microsoft® Windows  $XP^{TM}$ , Windows Vista<sup>TM</sup> and Windows  $7^{TM}$ , also Windows Mobile and CE. It also features a USB CDC-ACM compliant mode to support e.g. Linux, Android.

When UMTS-HSPA network operation is not present, the MTX-HSDPA-EU3 can operate in EDGE class 12 max. 237 kbps (DL), max. 237 kbps (UL) or in GPRS class 12: max. 85.6 kbps (DL), max. 85.6 kbps (UL). The MTX-HSPA-PH8-P can also work in simple CSD data transmission (GSM data rate 14.4 kpbs, V.110, UMTS data rate 57.6 kbps V.120) as well Short Messaging (SMS) and FAX specifications. It has also an analogue interface and is capable to make voice communication calls.

The MTX-HSPA-PH8-P is RoHs & WEEE compliant and it is manufactured with the ISO 9001 & ISO 14001 Quality certifications.

A full list of antennas, cables, suppliesand accessories are available.

#### General features:

- HSPA 14.4 Mbps
- Five Band UMTS (WCDMA/FDD):
- 800/850, 900, 1900/2100 MHz
- Quad-Band GSM 850/900/1800/1900 MHz
- EDGE (E-GPRS) multi-slot class 12
- GPRS multi-slot class 12
- UMTS / HSPA+, 3GPP release 6 / 7
- GSM / GPRS / EDGE, 3GPP release 99 /
- Control via AT commands (Hayes 3GPP TS 27.007 and 27.005) • Power consumption:
  - Average Supply Current < 970mA (HSDPA data transfer)
- Temperature range
  - Normal Operation: -20°C to +85°C
    - Storage: -40°C to +85°C
- Dimensions. Excluding connectors: 78.1 x 66.8 x 37.2 mm
- Weight: < 190 g
- Supply voltage range: 9 ... 30 V

#### **GPS** features

- •E911 A-GPS functionality via Control Plane
- Standalone GPS, SUPL prepared
- •GPS dedicated AT command
- •Protocol: NMEA-0183 V2.3
- •GPS active antenna supply: 3.3 V
- Tracking Sensitivity: better than -158 dBm
- No GPS blanking

#### Interfaces:

- FME M UMTS antenna connector
- SMA F GPS antenna connector
- USB 2.0 full speed interface
- Complete 9-pin RS232 @920Kbps port.
- Operating status LED bi-color
- SIM card interface 3 V, 1.8 V
- Plug-in power supply and on/off interfaces
- Handset audio interface

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#### Special features:

- Improved power-saving modes
- Firmware update via USB and ASC0

#### Ordering information: MTX-HSDPA-PH8-P+G

# www.mtx-terminals.com

#### Specification for HSPA data transmission:

- HSDPA/HSUPA rates:
  - DL: max. 14.4 Mbps
  - UL: max. 5.76 Mbps

#### Specification for UMTS data transmission: • UMTS: max. 384 kbps (DL), max. 384 kbps (UL)

#### Specification for EDGE data transmission:

- EDGE class 12:
  - DL: max. 237 kpbs
  - UL: max. 237 kbps
- Mobile station class B
- Modulation and coding scheme MCS 1-9

#### Specification for GPRS data transmission:

- GPRS class 12:
  - DL: max. 85.6 kbps
  - UL: max. 85.6 kbps
- Mobile station class B
- Full PBCCH support
- Coding schemes CS 1-4

#### Specification for CSD data transmission:

- GSM data rate 14.4 kpbs, V.110
- UMTS data rate 57.6 kpbs V.120
- RLP (Non-transparent mode)

#### Specification for SMS:

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

#### Specification for voice:

- AMR, EFR, FR HR Codecs
- DTMF supported
- CEPT/ANSI supervisory tones supported
- Handset, Headset, Hands-free modes

• TTY supported

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