



# UMTS Modem alpha<sup>®</sup> UMTS WTM 3

For stationary or mobile application in extreme temperature conditions (-25 °C...+70 °C)



FMN communications GmbH is certified CISCO-ATP-partner and CTD-partner.  
This product is compatible with the CISCO-MAR-3200 series.





## UMTS Modem alpha<sup>®</sup> UMTS WTM 3

For stationary or mobile application in extreme temperature conditions (-25 °C...+70 °C)



IP20-case

The **alpha<sup>®</sup> UMTS WTM 3** is an UMTS modem with GPS functionality designed for outdoor use.

The modems are available as PC/104-Plus-assembly, as PCB in a robust IP54-Outdoor-case as well as IP20-DIN-rail case. The PC/104-Plus-version can be easily integrated in PCB systems.

Together with the CISCO MAR 3200 (Mobile Access Router), it is offered by FMN in versions of the **alpha<sup>®</sup> route**.

### Functionality

- Transformation UMTS / HSDPA / HSUPA / GPRS / EDGE ↔ Ethernet 10/100
- IP on both interfaces (UMTS, Ethernet)
- Router
- GPS
- Web interface for the setting of parameters
  - UMTS- and access parameter
  - Router parameter
- possibility to update
- VPN-functionality
- simple Firewall-functions

### Applications

- mobile broadband access
- Video transmission via UMTS optimized for the connection to the FMN-video server **alpha<sup>®</sup> Video Server**

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### wireless interface

- UMTS antenna
  - U.FL RF at **alpha<sup>®</sup> UMTS WTM 3 PC/LP**
  - SMA at **alpha<sup>®</sup> UMTS WTM 3 EG/HS**
- GPS antenna
  - U.FL RF at **alpha<sup>®</sup> UMTS WTM 3 PC/LP**
  - MCX connection at **alpha<sup>®</sup> UMTS WTM 3 EG**
  - SMA at **alpha<sup>®</sup> UMTS WTM 3 HS**

### Ethernet

- 2x 10/100 Mbps
  - Plug AMP 104960-4 (alternatively RJ45 over adapter) at **alpha<sup>®</sup> UMTS WTM 3 PC/LP**
  - RJ45 at **alpha<sup>®</sup> UMTS WTM 3 EG/HS**

### SIM

- Onboard Socket

### Status information

- Status indications (LED)

### GPS

- NMEA 0183 over tcp (virtual serial port)

### VPN

- OpenVPN Client

### RF Features

- Quad-band GSM/GPRS/EDGE 850, 900, 1800, 1900 MHz
- UMTS WCDMA FDD 2100 MHz (Band Class I)

### Packet-Mode Features

- UMTS data rates 384 kbps Downlink, 384 kbps Uplink
- HSDPA data rates 7,2 Mbps Downlink, HSUPA data rates 1,4 Mbps Uplink
- GPRS/EDGE Class B, Multislot Class 10

### Operating temperature

- -25 °C ...+70 °C (+ 55 °C at case versions)

### Power supply

- $V_{cc} = 3.0 \dots 3.6 \text{ V}$ ,  $I_{max} = \text{approx. } 2.0 \text{ A}$
- at **alpha<sup>®</sup> UMTS WTM 3 EG** external IP64-power supply unit
- at **alpha<sup>®</sup> UMTS WTM 3 HS** 10 ... 60 VDC or Power-over-Ethernet

### Versions

- **alpha<sup>®</sup> UMTS WTM 3 PC** - Form factor according to PC/104-Plus specification version 2.0 Nov. 2003
- **alpha<sup>®</sup> UMTS WTM 3 LP** - as **alpha<sup>®</sup> UMTS WTM 3 PC** but without PC/104-Plus-connector
- **alpha<sup>®</sup> UMTS WTM 3 EG** - IP54-case
- **alpha<sup>®</sup> UMTS WTM 3 HS** - IP20-DIN hat rail