



## **GM6225/GM6235** **Mini PCI-E WiMAX Modem**

Teltonika GM6225 and GM6235 PCI Express Mini Card WiMAX modems offer high speed data rate connectivity via WiMAX networks. Both modems are compliant with IEEE802.16e-2005 WiMAX Wave 2 standard thus they support mobile wireless connectivity and is ideally suited for laptops, netbooks or any device with a Mini PCI-E socket. GM6225/GM6235 incorporates a separate embedded CPU for running connection management applications therefore only a few drivers are needed on a host device. GM6225/GM6235 implements dual independent transmit chain with an advanced 2Tx closed-loop diversity (2T-CLD) algorithm which provides significantly increased link budget, improved cell coverage, and superior mobile performance. 2T-CLD delivers diversity gains well beyond single Tx solutions and ensures the best diversity for any channel environment.

### **Key Features:**

- Hostless Operation
- IEEE 802.16e-2005 Compliant (Mobile WiMAX)
- WiMAX Wave 2 Compliant
- PCI Express Mini Card form factor
- USB 2.0 Interface
- Embedded Web Server
- Integrated Firewall functionality
- Operates within 2.5-2.7 GHz or 3.3-3.6 GHz Frequency Range
- 2 Tx with Closed Loop Diversity
- 40 Mbps throughput (combined downlink and uplink)
- MIMO Matrix A and B for Improved Transmission Speed and Coverage
- 2 x U.FL antenna connectors
- Compatible with Windows XP/Vista/7, Linux, Mac OS X



## SPECIFICATIONS

Standard Compliant	IEEE 802.16e-2005
Air Interface	S-OFDMA
Frequency Band	2.5-2.7GHz or 3.3-3.8 GHz
Channel Bandwidth	3 MHz, 3.5 MHz, 5 MHz, 6 MHz, 7 MHz, 8.75 MHz and 10 MHz
Modulation	Adaptive QPSK, 16QAM, 64QAM
MIMO	MRC, Matrix A + MRC, Matrix B
Beamforming	All I/O Beamforming Items
RF Output Power	2x25 dBm @ 2.5-27GHz; 2x23 dBm @ 3.3-3.6GHz
RX Sensitivity:	QPSK1/2: -99.5 @ 2.5 GHz and 10 MHz BW 16QAM1/2: -94.29 @ 2.5 GHz and 10 MHz BW QPSK1/2: -99 @ 3.5 GHz and 10 MHz BW 16QAM1/2: -93.8 @ 3.5 GHz and 10 MHz BW
Handover	Hard / Optimized Handover
QoS Mechanism	UGS, Real-Time-VR, Non Real-Time-VR, Best Effort, ERT-VR
Authentication	EAP-TLS, EAP-TTLS-MSCHAPv2
Encryption	3 CCM-Mode 128-bit AES
Error Handling	HARQ UL and DL, up to Category 7
Throughput	40 Mbps Total DL + UL
OS Support	Windows XP/Vista/7, Linux, Mac OS X
Software	Hostless Operation

## Electrical, Mechanical & Environmental:

Dimensions (H x W x D)	51mm x 30mm x 5mm
Weight	10g
Power Supply	Mini PCI-E (3.3V)
Power Consumption	< 3W
Operating Temperature	0° to 50° C
Storage temperature	-20° to 70° C
Operating Humidity	10% to 90% Non-condensing
Storage humidity	5% to 95% Non-condensing

