

Modem GSM/GPRS/EDGE FXT009

M76100 / M76140 / M71100

Order-No: **M76100 - GSM/GPRS Modem with omni-directional antenna**
M76140 - GSM/GPRS Modem with directional antenna
M71100 - Modem

- Data transfer by mobile telecommunications
- Compatible with Ammonit measuring systems
- Selectable quad band 850/900/1800/1900
- Email despatch via GPRS
- USB interface



In most cases meteorological stations are in remote locations without access to mains electricity and a telephone line. To transfer measurement data from the met mast to the host, remote communication systems are commonly used.

Air Interface	GSM /GPRS
Frequency Bands	850 / 900 / 1800 / 1900
Power	
Standby and Idle	2.5 mA
GSM / GPRS max	400 mA max (GPRS class 10 33dBm)
LED Status Indicator	1; red
Interfaces	
USB	1 Mini USB Device Port
Device Dimensions	
Normal operating cell temperature	89 x 60 x 30 mm
Operational Temperature	
	-30 °C ... +75°C
Power Supply	
Supply Voltage	4.75 ... 32 V
Supply Current	600 mA @ 4.75 V (average)
Supply Cable with Fuse	DC-IN/red; Ground/black; T2A (T = time lag)
Antenna	
Antenna Interface	SMA
Impedance	50Ω
Accessories	
USB cable	Article No. M70030
Supply cable	Article No. M71040

Attention: Handle the device carefully. Do not use a torque wrench to fix screws. Fix screws only finger-tight!



LED status information

LED signal	Description
Permanent red LED	Modem is powered, but not registered to a network.
Slowly flashing red LED	Modem is powered. Modem is registered to a network. Idle mode or traffic

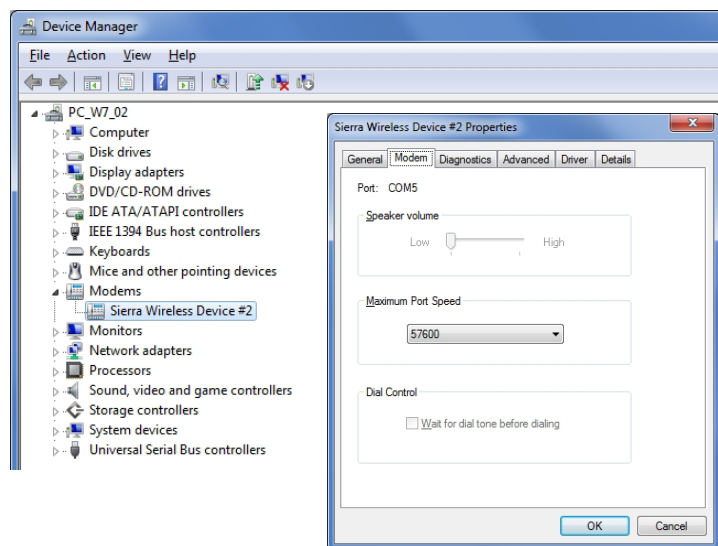
Configuration of frequency bands

The FXT009 modem is a quad band programmable gateway which supports EU bands (EGSM900/DCS1800) and US bands (GSM850/PCS1900). Users may switch from one supported band to another by using AT commands.

- AT+WMBS=5 (to switch to 850/1900 MHz)
- AT+WMBS=4 (to switch to 900/1800 MHz)
- AT+WMBS=7 (to switch to 850/900/1800/1900 MHz)

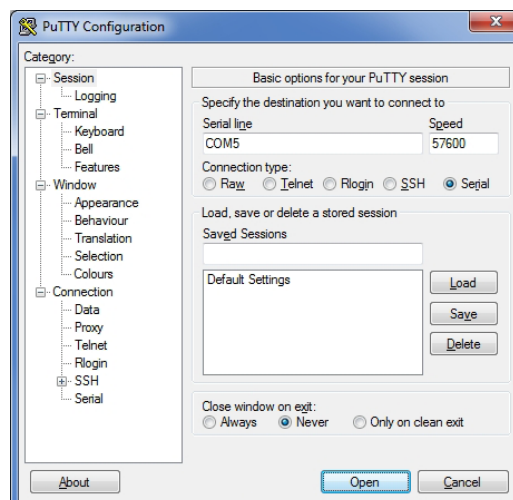
In order to customize the frequency bands of the modem, connect the modem directly to your computer via USB. If you are using a Windows™ PC and the modem is not displayed in the *Device Manager* under *Modems*, you require a driver file, which can be downloaded from the Sierra Wireless (<http://www.sierrawireless.com/>) website. On Linux™, in general no driver file needs to be installed.

1. After successfully connecting the modem to your PC, go to the *Device Manager* and open the properties of the modem by double-clicking on the *Sierra Wireless Device*. Go to the *Modem* tab to get the name of the *Port*, to which the modem is connected. Change the *Maximum Port Speed* to 57600 baudrate.



2. In order to change the frequency bands, a standard terminal program like *PuTTY* (<http://www.putty.org/>) can be used.

3. Open the program and enter the port name as *Serial line* and 57600 for the *Speed*. Open the PuTTY command window. In order to test the connection enter the command **at** and press Enter. If **OK** is shown in the command window, the connection is working correctly and you can change the frequency bands with the above mentioned AT commands.



4. Restart the modem after modification.