

M2M ROUTER PRO® PRODUCT FAMILY

Versatile and professional 3G, 4G LTE Cat.3, LTE 450 MHz Cat.4 router family with WiFi, Dual-SIM option and further expansions

DIN rail mountable, versatile, wireless industrial router family with Ethernet port and several expansion possibilities.

The device uses the open source OpenWRT® operation system supporting the web administration.

The following expansion options can be chosen: DUAL SIM expander, WiFi module, RS232/RS485, Wireless MBus or IO-expansion.

Communication

- Supporting the 3G, 4G LTE, LTE 450 (Gemalto[®], Telit[®] Cat.3, NTLM[®] Cat.4 miniPCle modules)
- Usage of Dual SIM cards (optional)
- Optional WiFi (for the connected devices)
- It can be extended with the listed modules
- Self-developed expansion modules to integrate
- Ethernet LAN/WAN

Software/Configuration

- Easy to use open source OpenWRT® software with webadmin interface
- Opportunity for the developers to implement and use self-developed system or applications
- Configurable by the local/remote web interface
- Firmware & software updates and parameterizing remotely by the M2M Device Manager® software

Security

- System monitoring, auto restart mode
- High availability
- Extended tests during the development
- Safety against network attack, traffic monitoring helps to reduce data usage



Application

- ▶ Wireless data transmission, routing
- ▶ Secondary/backup route
- ► Industrial M2M machines (to a Scada)
- ► Utility smart meters (remote readout)
- Safety camera, DVR



M2M Router PRO® Product Family



Industrial design Industrial metal case, fit to DIN rail.



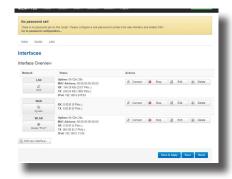
Communication

The router supports 3G, 4G LTE and LTE 450 MHz mobile network standards, static IP addresses. Transparent data route, supported TCP/IP.

Antenna

The routers are supplied with external antennas.

OpenWRT® system



Advanced services

- Stable IP connection with auto recovery
- Network services: DHCP, DNS, DynDNS, IP route, NAT, VPN/Tunnel, IPv4/IPv6, FTP, SNTP time handlink, NTP time service, for WiFi (optional): WPA/WPA2 encryption
- Technical support and expert consultancy
- Remote downloads of software updates, installing new applications.

Technical data

M2M Router PRO® Product Family		M2M Router PRO 3G®	M2M Router PRO 4G®	M2M Router PRO LTE 450 MHz®
Power Voltage		12V 2A (6-30VDC)		
Nominal Frequency		50-60Hz +/- 5%		
Communication Module	Mobile Standards	GSM/GPRS/EDGE/HSPA	GSM/GPRS/UMTS/HSPA+, LTE	LTE (LTE 450/800/1800/2600)
	Modem Type	Gemalto® EHS5-E Mini PCIe	Telit LE910-EUG Mini PCIe, Telit LE910 NAG Mini PCIe	NTLM 500 Mini PCIe
	Frequency (MHz)	GSM/GPRS/EDGE: 900/2100 (EHSS-US: 850/900) HSPA: 900/2100 (EHSS-US: 850/900)	GSM/GPRS: 900/1800 (NAG: 850/1900) UMTS: 850/900/2100 (NAG: 850/1900) LTE: 800(B20)/1800(B3)/2600(B7) (NAG: 700(B17)/850(B5)/AWS1700(B4)/1900(B2))	LTE: 450(B31)/800(B20)/1800(B3)/2600(B7)
	Speed (DL/UL)	HSPA Cat.8/Cat.6: 7.2/5.7 Mbps EDGE 237/237 kbps GPRS 85.6/85.6 kbps	LTE Cat.3: 100/50 Mbps HSPA+ Cat.20/Cat.6: 42/5.7 Mbps (NAG: 21/5.7 Mbps) 3G: 384/384 kbps 2G: 236/236 kbps	LTE Cat.4: 150/50 Mbps
	SIM Card	mini SIM	DUAL SIM	
	Antenna	1x 2G/3G (SMA, 50 Ohm)	2x 4G LTE (SMA, 50 Ohm)	2x LTE 450 (MIMO) (SMA, 50 Ohm)
Optional expansion modules	DUAL SIM	1x mini SIM: 25x15mm, 1x micro SIM: 15x12mm (for the mini PCIe module) (in case of network/communication trouble switches automatically to the netx mobile operator service/SIM card)		
	WiFi module	- 802.11 b/g/n 150 Mbps, WiFi Hotspot/Access Point/Client 2.4GHz, WPA/WPA2 encryption - WiFi antenna (SMA, 50 Ohm)		
	RS232/RS485	- RS232: serial port (D-Sub 9) - RS485: industrial data interface (4-pin terminal block)		
	RF868 module	Wireless M-Bus (for wireless sensors and meters), RF868 MHz antenna (SMA, 50 Ohm)		
Interfaces	Connection	- RJ45 (10/100 Mbps Ethernet LAN/WAN) - 2db USB slot - micro SD memory card slot		
User interface	Configuration	OpenWRT [®] local website (local/remote configuration) - M2M Device Manager (firmware/software refres, parameter modification)		
	Indication	3pcs, bi-color status LED		
Temperature, conditions	Operating	-40°C to +75°C		
	Storage	-40°C to +80°C		
	Humidity	0 to 95 rel humidity. non condensing		
Construction	Housing	Industrial aluminum case, mount to DIN-rail/wall		
	Protection	IP51		
	Dimension	95x45x130mm		
	Weight	210-270gr (depending on module version)		

