

INDUSTRIAL M2M ROUTER

eWON Flexy 10X and 20x series

Highlights

- Flexible WAN interface: LAN, 2G, 3G, WiFi, ADSL, PSTN,...
- Flexible Field interface supporting numerous PLC protocols
- Easy to setup and use through embedded web pages
- Easy deployment using file transfer or SD card
- High performance for data processing
- Alarm management with notification (SMS, e-mail, FTP put or SNMP trap)
- Datalogging up to 1,000,000 points
- Robust industrial design (24 VDC, DIN Rail mounting)
- Temperature range: -25°C +70°C

Typical Applications

- Remote access
- Remote metering & monitoring
- Remote management

Flexy 101/201



Flexy 102/202



Flexy 103/203



The eWON Flexy is the first modular Industrial M2M Router available on the market. It has been designed to satisfy the following key requirements:

- Flexible WAN, allowing a single product to address different Internet connectivity needs (Ethernet, WiFi, 3G, LTE,...) and securing the investment in case of technology shift (e.g. the move from 2G to 3G)
- Flexible Field, providing easy connection to a wide range of external devices, including various field protocols
- Flexible Apps, embedding alarms, datalogging, remote access, routing and web HMI applications with easy web-based configuration and programming tools for customization
- Flexible Price, from a low-end M2M gateway to address very simple facilities/sites, to a high-end M2M router for remote access to complex machines.

The eWON Flexy is fully compliant with Talk2M, the first industrial cloud connectivity service hosted by eWON on multiple servers worldwide, and with eFive, a VPN server appliance, for real-time control applications.



Ethernet to Serial Gateways	MODBUS TCP to MODBUS RTU; XIP to UNITELWAY; EtherNet/IP™ to DF1; FINS TCP to FINS Hostlink; ISO TCP to PPI, MPI (S7) or PROFIBUS (S7); VCOM to ASCII
Data Acquisition Protocols	MODBUS/RTU, MODBUS/TCP, Unitelway, DF1, PPI, MPI (S7), PROFIBUS (S7), FINS Hostlink, FINS TCP, EtherNet/IP™, ISO TCP, Mitsubishi FX, Hitachi EH, ASCII. Stored in 700 internal tags
Alarms	Alarms notification by email, FTP put and/or SNMP traps. 4 Thresholds : low, lowlow, high,highhigh + deadband and activation delay. Alarm logs in http and via FTP, Alarm cycle: ALM, RTN, ACK and END
Datalogging	Internal data base for data logging (real-time logging and historical logging up to 1,000,000 points). Retrieval of the database with files transferred by FTP or email.
Router	IP filtering, IP forwarding, NAT, Port forwarding, Proxy, Routing table, DHCP client
VPN Tunnelling	Open VPN 2.0 either in SSL UDP or HTTPS
VPN Security	The VPN security model is based on using SSL/TLS for session authentication and the IPSec ESP protocol for secure tunnel transport over UDP. It supports the X509 PKI (public key infrastructure) for session authentication, the TLS protocol for key exchange, the cipher-independent EVP (DES, 3DES, AES, BF) interface for encrypting tunnel data, and the HMAC-SHA1 algorithm for authenticating tunnel data
Programmable	Script interpreter for Basic language, embedded Java 2 Micro Edition environment
Synchronization	Embedded real-time clock, manual setup via http or automatic via NTP
File Management	FTP client and server for configuration, firmware update and data transfer
Website	Embedded web interface with setup wizards for configuration and maintenance (no extra software needed). Basic authentication (login/password) and session control for security. Possibility of uploading custom web GUI. Compatible with viewON2 web HMI.
User Flash Disk	30MB available for user application
Maintenance	SNMP V1 with MIB2 and/or via FTP files
Mechanical characteristics	Din Rail Mounting Dimensions: 80 (Height) x 89 (Depth) x 134 (Width) mm; Weight: < 500 g
Electrical (common)	Power supply 12 - 24VDC +/-20%, LPS Consumption: depending on the extension card installed (see Installation guide on our website) 2x digital input: 0/24VDC; 1.5kV isolation 1x digital output: open drain (MOSFET) 200mA@30VDC; 1.5 kV isolation
Environmental	Temperature Operating: -25°C to +70°C, 10 to 95% relative humidity (non-condensing) Storage: -40°C to +70°C, 10 to 95% relative humidity (non-condensing) Vibration level of sinusoidal vibrations according to IEC61131-2 (3.5mm displacement/1g peak acceleration) Shock level according to IEC61131-2 (15 g peak acceleration)
Certifications	CE, UL, R&TTE
Warranty	2 years

Standards & Directives

Type tests	<p>Temperature - Operating & Storage tested according to: IEC 60068-2-1 Cold test IEC 60068-2-2 Dry heat test IEC 60068-2-14 Change of temperature IEC 60068-2-30 Cyclic damp heat test</p> <p>Vibration & shocks tested according to: IEC 61131-2 tests of programmable controllers IEC 60068-2-6 Vibration (sinusoidal) IEC 60068-2-64 Vibration (broad-band random) IEC60068-2-27 Shock</p>
Environmental	<p>Conform to: 2011/65/EU RoHS directive 1907/2006 REACH regulation</p>
EMC	<p>Conform to: 2004/108/EC EMC directive 1999/5/EC R&TTE directive(1) FCC regulation</p> <p>According to standards: EN55022 ITE Emission Class A EN55024 ITE Immunity: EN61000-4-2; EN61000-4-3; EN61000-4-4; EN61000-4-6; EN61000-4-8 R&TTE Art 3.1b(1) EMC EN 301 489-1; EN 301 489-7; EN 301 489-24 R&TTE Art 3.2(1) RF Spectrum EN 301 511; EN 301 908-1; EN 301 908-2 FCC CFR 47: Part 15 Subpart B – Class A; Part 22 Subpart H(1); Part 24 Subpart E(1); Part 27(1)</p>
Safety	<p>UL 60950-1 CSA-C22.2 No 60950-1-07 IEC/EN 60950-1 UL certified (File number # E350576) CB certificate n° DK-29479-M1-UL</p>

Notes: (1) when applicable for extension card with embedded GSM modem

Product ref.

Base modules	
FlexyX0Y00_00MA	<p>x = 1 for Flexy 10X series, the M2M Data Gateway (no routing WAN/LAN/Serial) x = 2 for Flexy 20X series, the M2M Router (routing WAN/LAN/Serial)</p> <p>y = 1 for 4 x RJ45 LAN Ethernet 10/100 base Tx (integrated Switch); 1.5kV isolation y = 2 for 1x SUBD9 serial port RS232/422/485 + 1x RJ45 Ethernet 10/100 base Tx; 1.5kV isolation y = 3 for 1x MPI/PROFIBUS port isolated (12Mbits) + 1x RJ45 Ethernet 10/100 base Tx; 1.5kV isolation</p>
Extension cards	
FLA3301	<p>Dual serial ports 1x SUBD9 serial port RS232/422/485 1x SUBD9 serial port RS232</p>
FLB3202	<p>3G+ GSM Pentaband UMTS/HSUPA modem (800/850, 900, AWS1700, 1900, 2100 MHz) - 7.3 Mbit/s down, 2 Mbit/s up Quad band GPRS/EDGE (850, 900, 1800, 1900 MHz)</p>
FLX3101	<p>Ethernet WAN 1x RJ45 Ethernet 10/100 base Tx; 1.5kV isolation</p>
FLB3204	WIFI: Ask about availability
FLB3502	ADSL: Ask about availability
FLA3501	PSTN: Ask about availability
FLB3205	CDMA: Ask about availability

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