

**Your remote sites  
at your fingertips ?**



**Industrial  
M2M Router &  
Data gateway**

The eWON Flexy is the first industrial modular M2M router and data gateway designed for OEMs and system integrators. The flexibility allows to link remote devices in an environment where communication technologies are constantly changing but also to communicate universally with the most varied field equipment, regardless of the protocol used.

**Flexy**

[www.ewon.biz](http://www.ewon.biz)

# Flexy-ble Industrial M2M Router

# Build your Flexy

"2 product families, 3 base modules, unlimited possibilities"

## FLEXY PRICE

## PROTECT YOUR INVESTMENT

### Flexy 10x, the M2M Data Gateway

A low-cost version, designed for large deployment, the Flexy 10x includes all classical eWON features except routing capabilities between WAN, LAN and RS232/422/485 sides. The main applications with the Flexy 10x are data monitoring and data collection. The Flexy 10x family includes the following base modules.

### Flexy 20x, the M2M Router

The Flexy 20x includes routing and gateway capabilities between WAN, LAN and RS232/422/485 fieldbus. It allows full remote access to devices located on the LAN side or on the Field side of the Flexy. The Flexy 20x family includes the following base modules.



### Your Flexy

- Flexy 101/201 : with a Switch 4x Ethernet LAN Port 10/100MB
- Flexy 102/202 : with an Ethernet 10/100MB port and an RS232/422/485 port
- Flexy 103/203 : with an Ethernet 10/100MB port and an MPI port

### Base modules



Flexy 101/201



Flexy 102/202



Flexy 103/203

### Extension cards



①



②



③



④



⑤



⑥

#### ① DUAL SERIAL PORTS

Connect any RS232/485/422 devices for remote access applications or data acquisition using eWON Flexy I/O servers library.

#### ③ 3G+ HSPA

Pentaband modem for worldwide connectivity using a 2G, 3G or 3G+ cellular network with up to 7.3 Mb/sec download and 2 Mb/sec upload.

#### ⑤ PSTN

Industrial PSTN modem V92 (56.000 bps) for landlines connections.

#### ② ETHERNET WAN

WAN Ethernet access to connect your industrial assets to the Internet.

#### ④ WIFI

802.11 b,g,n WiFi client for WAN access to Internet.

#### ⑥ ADSL

Industrial ADSL 2/2+ VPN router for remote connectivity over standard ADSL (annex a), including improved range and data throughput rate.

## FLEXY WAN

### Keeping up with the evolution of communication technology

Select the best way to connect your industrial device to the Internet: cellular, LAN, landlines, WiFi. This flexibility is one of the key factors for the success of your project. The eWON Flexy lets you adapt to technology shifts (e.g. the move from 2G to 3G) by just adding/changing the WAN extension card. All of this with limited impact on your budget.

## FLEXY FIELD

### Connecting the machine end

Thanks to a wide range of field interfaces (RS232, RS485, RS422, MPI, Ethernet) supporting numerous industrial protocols, the eWON Flexy is able to connect to a wide range of industrial devices. The Flexy concept allows you to upgrade easily to new technology, preventing the need to reinvest in a completely new product.

# Flexy-ble Apps

# Activate your Flexy Apps

"Your M2M application designed in minutes"

- FAST TIME-TO-MARKET**
- REDUCE DEVELOPMENT TIME**
- SCALABLE SERVICES**



## SECURE VPN REMOTE ACCESS

The eWON Flexy embeds VPN capabilities and compatibility with Talk2M and eFive. This allows highly secure remote access for remote monitoring, troubleshooting and application tuning. The Flexy 20x adds routing capabilities that allows remote access to any serial or Ethernet devices behind the eWON Flexy. It enables PLC remote maintenance, remote IP camera, remote HMI monitoring, etc.



## DATA ACQUISITION

The eWON Flexy is able to perform local data acquisition using the serial or Ethernet port. The data acquisition process is built around a tagged database in which each tag is associated with an I/O server. The eWON Flexy is able to perform data acquisition with the following protocols: Modbus RTU, Modbus TCP, Uni-Telway, EtherNet/IP, DF1, FINS TCP, FINS Hostlink, ISO TCP, PPI, MPI, Profibus, Mitsubishi FX, Hitachi EH, ASCII.



## ALARM MANAGEMENT AND NOTIFICATION

The eWON Flexy provides full support for alarm triggering, acknowledgment, status and traceability. Alarm thresholds (4x) and parameters (activation delay, deadband value) can be set on every tagname. The complete alarm cycle (ALM, RTN-return to Normal, ACKnowledgment, END) is traced and available for monitoring and analysis. Alarm notification can be performed by email, SMS, SNMP trap and/or put FTP.



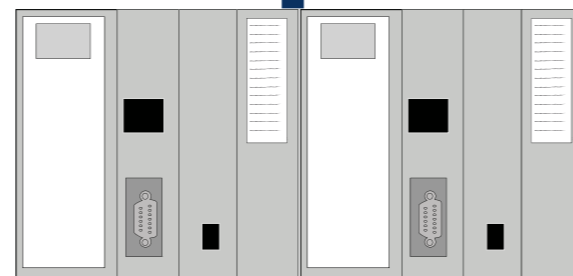
## DATA LOGGING AND RETRIEVAL

Continuous data logging and buffering can be performed on every tagname. Each tagname can be logged on fixed interval or on change (with deadband). eWON stores tag data values (+timestamp) in its internal database (up to 1,000,000 time stamped points) for statistical analysis and later review (historical logging) or to analyze recent trends (real-time logging). The datalogging files can be easily retrieved by FTP, HTTP or as an e-mail attachment.



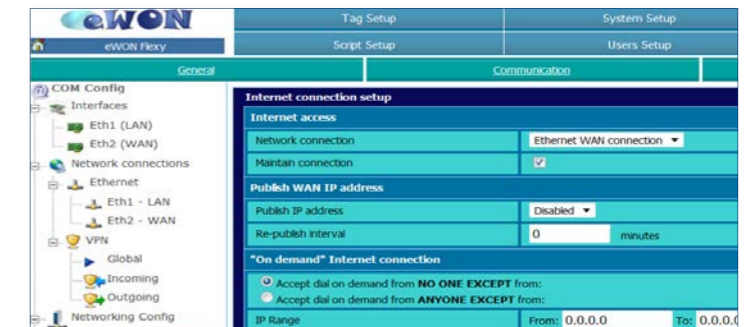
## WEB SERVER HMI

The eWON Flexy has an integrated web server for configuration and monitoring purposes. The eWON Flexy provides a highly cost effective HMI, viewable wherever you are through any standard Web browser interface.



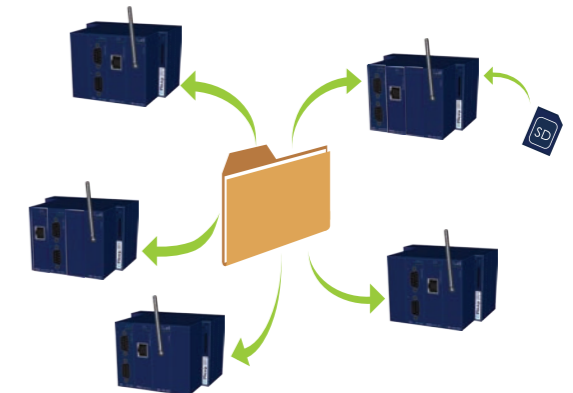
## EASY CONFIGURATION

All the data services applications are easily set up by eWON web page configuration. No external software or programming tools are required to configure and build applications. An application with data acquisition, alarming, datalogging and data retrieval by HTTPS can be performed in just a few hours!



## EASY DEPLOYMENT

All configuration and application parameters are available in a text file that allows centralized device management. eWON Flexy can be remotely updated by remote file swap or local SD card upload.



## PROGRAMMABLE

The eWON Flexy can be fully scripted using BASIC scripting language or JAVA to design from simple to sophisticated automated tasks such as:

- Reading and writing data via the serial port for industrial devices with proprietary protocols
- Sending e-mail messages; uploading and downloading FTP files
- Replying to incoming SMS messages
- Managing TCP/IP routing tables and features
- Dynamically updating the eWON unit configuration

JAVA and BASIC script are intended to be used for deploying large eWON based applications, since this provides flexibility and scalability.



The eWON Partner program is designed to educate and produce qualified partners who are able to assist you in the customization and programming (JAVA, BASIC) of your eWON Flexy.

Looking for a specific driver?

[www.ewon.biz/partners](http://www.ewon.biz/partners)

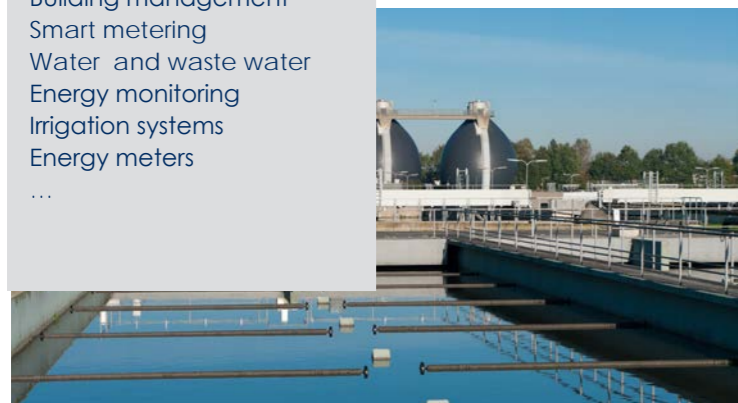
# Flexy-ble Architecture

# Connect your Flexy

“You will always find the right way to connect your remote devices”

## TALK2M – THE FREE CONNECTIVITY CLOUD SOLUTION

Talk2M is the first secure industrial connectivity service in the cloud. With servers spread out all over the world, Talk2M offers a highly reliable, efficient and secure solution for connecting to machines remotely. Talk2M gathers thousands of accounts and manages thousands of connections per day including a full audit trail connection tracking.



### YOUR APPLICATION

- Industrial machines
- Cleantech machines
- Photovoltaics
- Building management
- Smart metering
- Water and waste water
- Energy monitoring
- Irrigation systems
- Energy meters
- ...

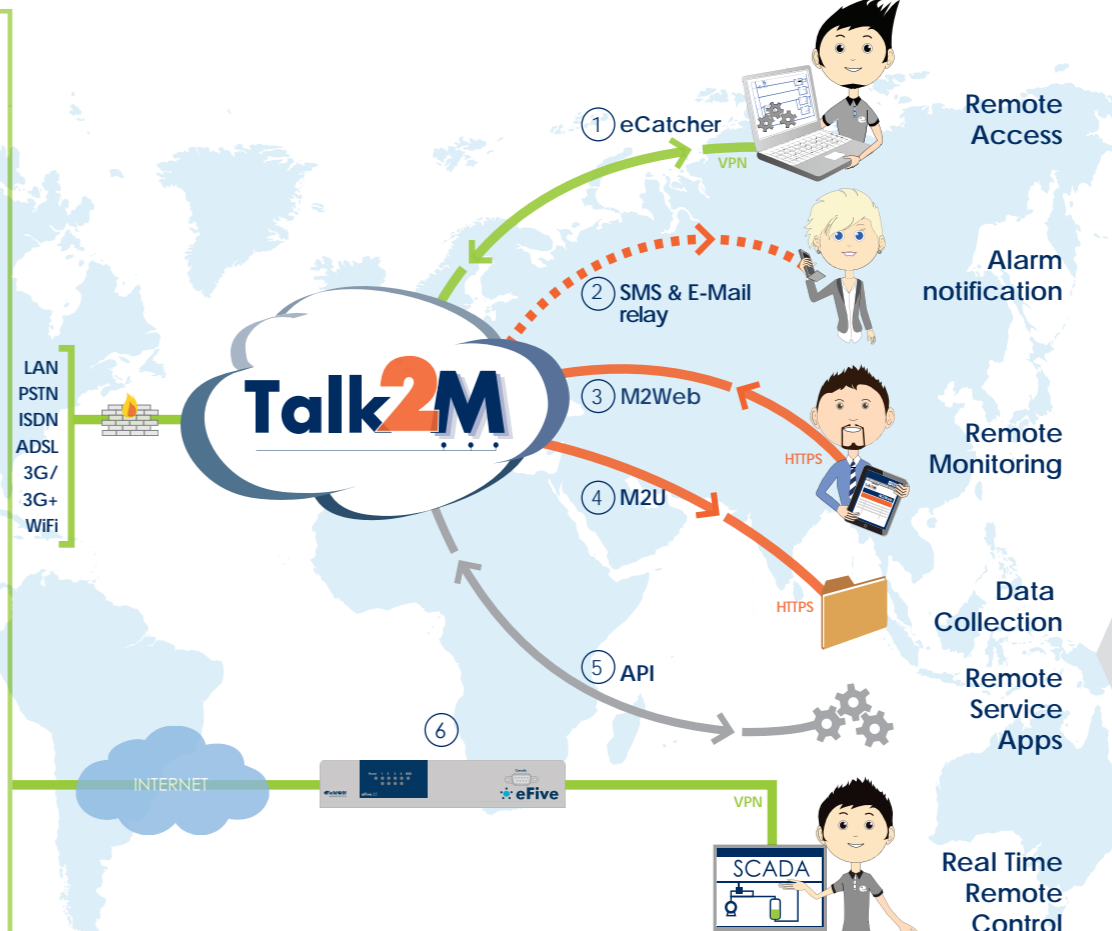
### Field Connectivity



### M2M Routers & Data Gateways



### Cloud-based Remote Connectivity



### M2M Services

### Your eWON Partner

Dedicated apps developed by our eWON Partners are available on [www.ewon.biz/partners](http://www.ewon.biz/partners). Want to become a partner? Join our developer community and access our dedicated program.



### 1 ECATCHER - REMOTE ACCESS "ON-DEMAND"

Secure VPN connection to reach any serial or Ethernet devices: upload projects, gain remote use of an HMI, debug the PLC program and, if necessary, download new settings or program.

### 4 M2U-REMOTE DATA COLLECTION IN PUSH MODE

Secure HTTPS link to retrieve data

### 2 SMS & E-MAIL RELAY

Add E-Mail and text messaging capabilities to your PLC and machines. From now on, you can receive alerts by SMS without having an eWON router equipped with a cellular modem, and receive E-Mails via Talk2M's SMTP server.

### 5 M2WEB HTTPS API

Allows stateless HTTPS requests to the remote device connected to Talk2M. The M2Web HTTPS API allows to:

- Send commands to a remote site
- Designing mobile Apps for remote monitoring
- Accessing remote web services
- Gathering data from remote site

### 3 M2WEB-REMOTE MONITORING

Secure mobile web access from your iPad, iPhone or any Android device.

### 6 EFIVE – REAL TIME REMOTE CONTROL

VPN server and firewall for permanent connections, eFive makes the perfect bridge between your remote PLC and your SCADA.

# Compose your eWON Flexy



## Base modules

	The M2M Data Gateway			The M2M Router		
	Flexy 101	Flexy 102	Flexy 103	Flexy 201	Flexy 202	Flexy 203
<b>Product Ref.</b>						
<b>Routing WAN/LAN/Serial</b>	NO			YES		
<b>Switch 4x Ethernet LAN 10/100Mb,</b>	•			•		
<b>1 x RS232/422/485 port 1 x LAN 10/100Mb port</b>		•			•	
<b>1 x MPI/Profibus port 1 x LAN 10/100Mb port</b>			•			•
<b>Historical logging</b>	996.147 time stamped points					
<b>Power Supply</b>	12-24 VDC +/-20%, LPS					
<b>Temperature range</b>	-25°C to +70°C					
<b>Marking</b>	CE cRUus E350576					
<b>Warranty</b>	24 months					
<b>Mechanical characteristics, Standards &amp; Directives</b>	see Datasheet <a href="http://www.ewon.biz/flexy">www.ewon.biz/flexy</a>					



## Extension cards

		Product ref.	Description
<b>WAN</b>	3G+ GSM	FLB3202	Pentaband UMTS/HSUPA modem 7.3 Mbit/s down, 2 Mbit/s up
	Ethernet WAN	FLX3101	1 x 10/100Mb Ethernet port
	WIFI	FLB 3204	802.11 b,g,n WIFI client
	ADSL	FLB 3502	ADSL 2/2+(annex a) Modem
	PSTN	FLA 3501	V92(56.000 bps) Modem
	CDMA	FLB 3205	Ask about availability
<b>FIELD</b>	Dual serial ports	FLA3301	1 x RS232/422/485 serial port 1 x RS232 serial port
	...	...	Consult factory for other field cards

### Head Office

22 Av. Robert Schuman  
1400 Nivelles  
Belgium  
Tel: +32 67 895 800  
[info@ewon.biz](mailto:info@ewon.biz)

### North American Office

2345 Murray Ave, suite #305  
Pittsburgh, PA 15217  
USA  
Tel: +1-412-586-5901  
[info@ewon.us](mailto:info@ewon.us)

### Japan Office

Dai 2 Izumi Shoji Bldg. 4 F,  
2-6 Kojimachi 4-Chome,  
Chiyoda-Ku, Tokyo 102-0083  
Japan  
Tel: +81-3-6821-1655  
[info@ewon.co.jp](mailto:info@ewon.co.jp)

The Ewon Cosy is an industrial remote access gateway that is designed to offer scalable and secure remote access to machines in the factory.



Machine Builders, Line Builders, and System Integrators can troubleshoot machines, debug PLC programs, upload projects, and gain remote control of an HMI or an IP camera, all without going on site. This drastically reduces support costs for them and their customers.

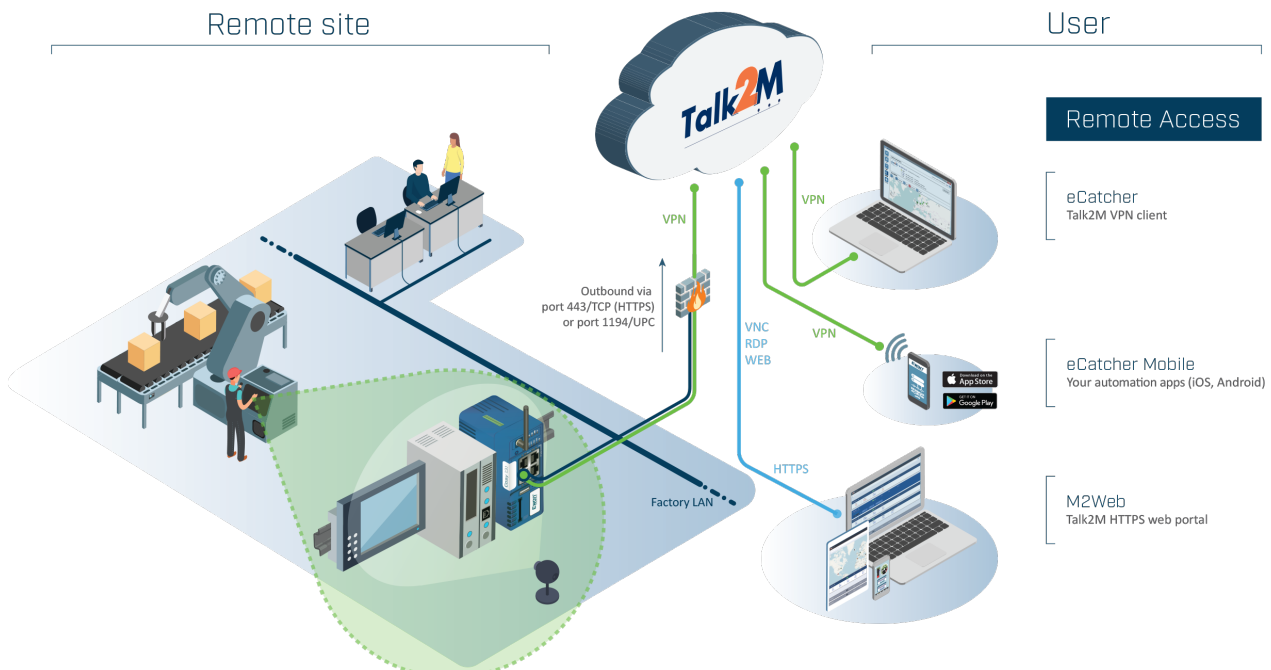
The Ewon Cosy establishes a secure VPN connection from the machine to anywhere in the world via Talk2M, a cloud-based remote connectivity solution. The router seamlessly communicates on the local area network with the PLC and the HMI, and allows remote connection from a computer, tablet, or smartphone. Ewon Cosy and Talk2M make connectivity easy, and don't require the user to be an IT expert to take advantage of the time and cost saving advantages.

## Highlights

- Integrated WiFi or Cellular options, including 4G versions for Europe (EU), North America (NA) or Japan (APAC)
- Firewall friendly outbound connection
- Standard ports used: 443 (HTTPS), 1194 (UDP)
- Possible to configure the Digital Inputs to control internet connection with external key switch or to send alarm notification
- SD card option for easy commissioning
- USB connectivity for micro-PLCs
- 24 VDC power supply and DIN rail mount

## Typical Applications

- Remote access to PLC, IPC, HMI or IP camera
- PLC remote Service and Support



Standards & Directives	
WAN Ethernet	Up to 3 ports, 10/100 Mb Ethernet
LAN Ethernet	Up to 4 ports, 10/100Mb Ethernet
Field interface	Up to 10 USB 2.0 connections, female connector 2.0
SD card reader	YES, for Cosy commissioning (firmware upgrade, backup, Talk2M registration)
Router	IP filtering, IP forwarding, NAT, Port forwarding, Proxy, Routing table, DHCP client/server
Internet	Outbound connection for Talk2M using HTTPS (port 443 or UDP 1194)
VPN Tunneling	OpenVPN either in SSL UDP or HTTPS
Talk2M	Talk2M Free+ or Talk2M Pro, natively supported
VPN Security	Communications between the remote user and the Ewon are fully encrypted using the SSL/TLS protocol, thereby ensuring data authenticity, integrity & confidentiality. All users and Ewon units are authenticated using x509 SSL certificates and end-to-end traffic is encrypted using strong symmetric & asymmetric algorithms that are part of the SSL/TLS protocol cipher suite.
Synchronization	Embedded real-time clock, manual setup via http or automatic via NTP
File Management	FTP server for configuration, firmware update
Web-based configuration	Embedded web interface with setup wizards for configuration and maintenance (no additional software needed). Basic authentication (login/password) and session control for security.
Mechanicals	Dimensions: 108 x 99 x 42 mm (H x D x W) Weight: 191 gr DIN rail or wall screw fixing system
Power supply	12-24 VDC +/-20%, LPS
Extended Temperature Range	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)
Hardware	1xDO: open drain ( MOSFET) 200mA; isolation 1.5kV, 2xDI: 0 to 24VDC; 1.5 kV isolation
Marking	CE, cULus listed, FCC
Warranty	36 months

Features for the EC6133G (cellular 4G EU)	
Bands	4G: B1, B3, B7, B8, B20 3G: B1, B8 Automatic fallback to 3G w
Antenna Connector	Type SMA - Female
Antenna	not included in the delivery
Weight	202 gr

Features for the EC6133H (cellular 4G NA)	
Bands	4G: B2, B4, B5, B12/B13 3G: B2, B5 Automatic fallback to 3G
Antenna Connector	Type SMA - Female
Antenna	not included in the delivery
Weight	202 gr

Features for the EC6133F (cellular 4G-APAC, only Japan certified)	
Bands	4G: B1, B3, B5, B7, B8, B18, B19, B21, B28, B38,B39, B40,B41 3G: B1, B5, B6, B8, B9, B19,B39 Automatic fallback to 3G
Antenna Connector	Type SMA - Female
Antenna	not included in the delivery
Weight	202 gr



Features for the EC6133D (cellular 3G)	
Frequencies	GSM/GPRS/EDGE Quad-Band (850, 900, 1800, 1900 MHz) - HSPA+ UMTS Pentaband module (800/850, 900, AWS 1700, 1900, 2100 MHz)
Antenna Connector	Type SMA - Female
Antenna	not included in the delivery
Weight	202 gr

Features for the EC 6133C (WiFi)	
WAN Connectivity	Ethernet or WiFi 802.11 b/g/n
Frequencies	Channels: 1 to 11(inclusive)
Security	WPA2, WPA and WEP
Antenna Connector	RP-SMA female connector
Antenna	Included in the delivery; frequency: 2.4GHz; impedance: 50 Ohms; gain: 2.0dBi
Weight	199 gr

Standards & Directives	
Type tests	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 Vibration & shocks tested according to: IEC 60068-2-27 Bumps IEC 60068-2-64 Vibration (broad-band random) IEC 60068-2-6 Vibration (sinusoidal)
CE	Compliant with: EMC directive 2014/30/EU RE directive 2014/53/EU RoHS directive 2011/65/EU REACH regulation 1907/2006 According to standards: EMC: ITE; emission Class A EN55032; EN55024 EN301489-1; EN301489-7; EN301489-17; EN301489-24; EN301489-52 Spectrum: EN301511; EN301908-1 & -2 EN300328 Health: EN62311 Safety: EN60950, EN62368
FCC	Compliant with CFR 47, part 15B Class A; 15C; 22H; 24E; 27
IC	Compliant with IC (Industry Canada) RSS-132; RSS-133; RSS-139; RS-210
Japan	This equipment has the Type Approval Certification based on the Radio Law
Safety	Conform to: EN60950-1; UL60950-1; CSA-C22.2 n° 60950-1-07 UL listed: file number# 350576 CB Certificate n° DK-42240-A1-UL, DK-72992-UL

Part Number	Description
EC61330	Industrial Gateway COSY131 WAN/LAN/USB
EC6133C	Industrial Gateway COSY131 WAN/LAN/USB + WIFI
EC6133D	Industrial Gateway COSY131 WAN/LAN/USB + Cellular 3G
EC6133G	Industrial Gateway COSY131 WAN/LAN/USB + Cellular 4G EU
EC6133H	Industrial Gateway COSY131 WAN/LAN/USB + Cellular 4G NA
EC6133F	Industrial Router COSY131 WAN/LAN/USB + Cellular 4G APAC

