



# Product Catalogue



[www.exemys.com](http://www.exemys.com)

Telemetry and Connectivity

# Who we are

We are a Technology company dedicated to the manufacturing of products of Telemetry, Connectivity and Acquisition, for monitoring dispersed and remote assets.

- The Company was founded in 1998 (Argentina)
- **ISO9001:2015** Certification (Quality)
- **MODBUS** organization member
- Exportation of products to more than 60 countries
- Incorporated into the Software Promotion Law
- Proprietary Know-How
- Products Certifications:
  - IEC 60950-1** (Electrical security)
  - INTI-ATEX** (Explosive Atmospheres)

[www.exemys.com](http://www.exemys.com)

ISO 9001:2015 CERTIFICATION



GESTION DE LA CALIDAD

RI-9000-6174

AF-0833411 OAA



60950-1:2005+A1



COMISIÓN NACIONAL DE COMUNICACIONES

H-24525

SOFTWARE LAW CERTIFICADON



MODBUS ORGANIZATION



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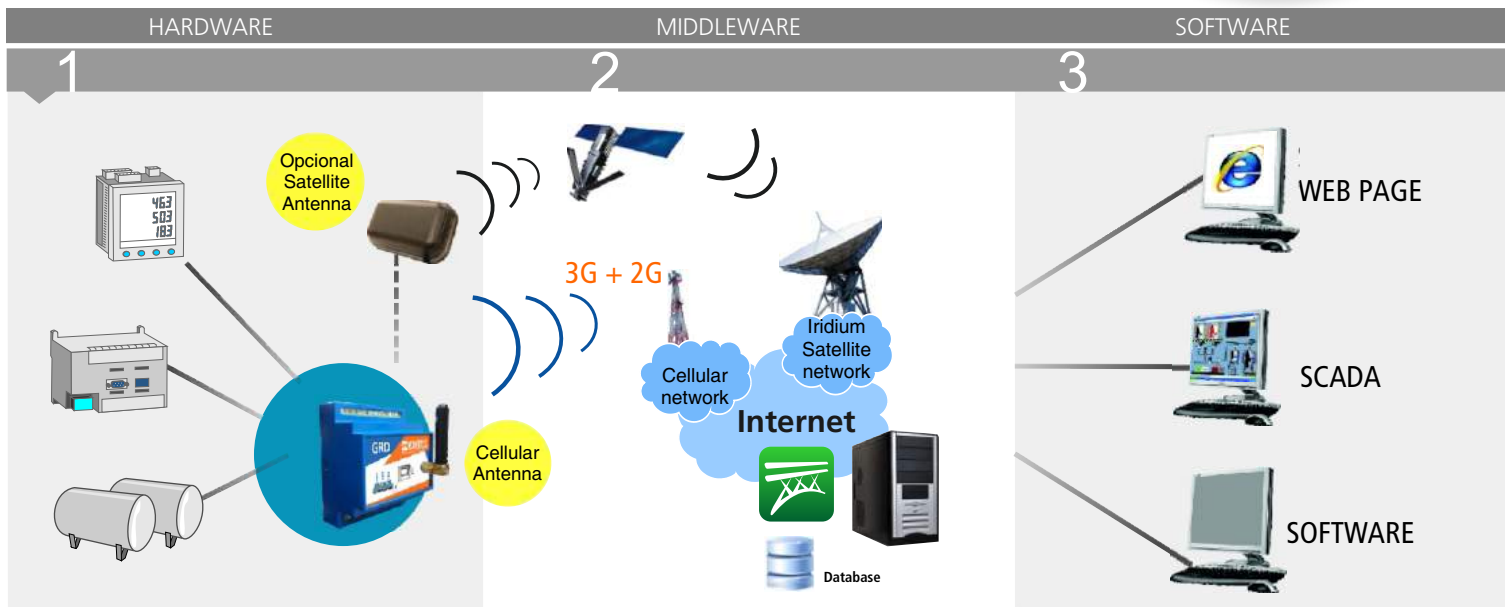
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## Device for monitoring and controlling with 3G + 2G Cellular and Programmable Logic GRD



The GRD family of products helps control and supervise any kind of equipment from distance, be it a control system or process system facilitating the implementation of the remote telemetry systems. Additionally it includes the possibility to load a text script to perform internal Logics.

- 3G + 2G cellular communication
- American and European Bands
- Satellite communication (optional)
- 4-20mA and 0-10V Inputs
- Digital Inputs
- Pulse counter Inputs
- Digital outputs
- Serial Ports



MODEL	Serial Port	Analog Inputs	Digital Input	Digital Output
GRD1620-XF-3G	1 RS232 1 RS485	---	---	---
GRD3621-XF-3G	---	2 0-1V/0-10V/4-20mA <a href="#">Configurables of Software</a> (1 PT100 input)	4 (4 for pulses up to 45Hz) <a href="#">Configurables of Software</a>	
GRD3625-XF-3G	1 RS232 1 RS485	4 0-1V/0-10V/4-20mA <a href="#">Configurables of Software</a>	6 (6 for pulses up to 45Hz) <a href="#">Configurables of Software</a>	
GRD3534-XF-3G	2 RS232/RS485	8 Configurables 0-1V/0-10V/4-20mA	16 (8 for pulses up to 1KHz)	8

## RTU for Cellular Telemetry with MQTT protocol

### GRD-MQ



The GRD-MQ family allows perform cellular telemetry using the MQTT protocol, widespread in the Industry 4.0

- MQTT Client
- 3G + 2G Cellular Communication
- American and European bands
- 4-20mA and 0-10V Inputs
- Digital Inputs
- Pulse Counter Inputs
- Digital Outputs
- Serial Ports



Remote asset to monitor and control



- 4-20mA
- 0-10V
- I/O Digital
- Modbus Port
- Pressure
- Temperature
- Flow
- Level

GRD



MQTT

CELLULAR NETWORK

MQTT

BROKER

MQTT.ORG

- Publication of events
- Records with date and time
- Remote Control using Subscription
- Remote configuration via Broker
- Remote Serial Port via Broker

MODEL	Serial Port	I/O Discretes	Analog Inputs	I/O Modbus Expansion
GRD1620-MQ-3G	1 RS232 + 1 RS485	---	---	YES
GRD3625-MQ-3G	1 RS232 + 1 RS485	6 Configurables 6 DI pulses 45 Hz	4 0-10V / 4-20mA	YES
GRD3534-MQ-3G	2 x RS232/RS485	16 inputs 8 outputs 8 DI pulses 1 KHz	8 0-10V / 4-20mA	YES

## Monitoring and Control with Ethernet TCP/IP

### cLAN



The cLAN helps control and upervise any kind of equipment from distance, be it a control system or process system facilitating the implementation of the remote telemetry systems.

Additionally it includes the possibility to load a text script to perform internal logics.

- Ethernet Port.
- Digital Inputs and Outputs
- Pulse count inputs
- 0-1V, 0,10V, 4-20mA Analog Inputs
- Time stamped Data Logging
- Logic control using SCRIPT programming
- Modbus TCP and Serial slave for direct SCADA connection.
- NMEA 0183 and MetPak (Gill Instruments) support
- Free Port (user protocol parsing using script programming)
- Satellite module antenna (optional)
- FTP client to send logged data
- I/O expansion using embedded Modbus Master
- Transparent remote Access to serial port.



Remote asset

- 4-20mA
- 0-10V
- Digital I/O
- Modbus port
- Pressure
- Temperature
- Flow
- Level



- Web Server
- SCADA
- Software



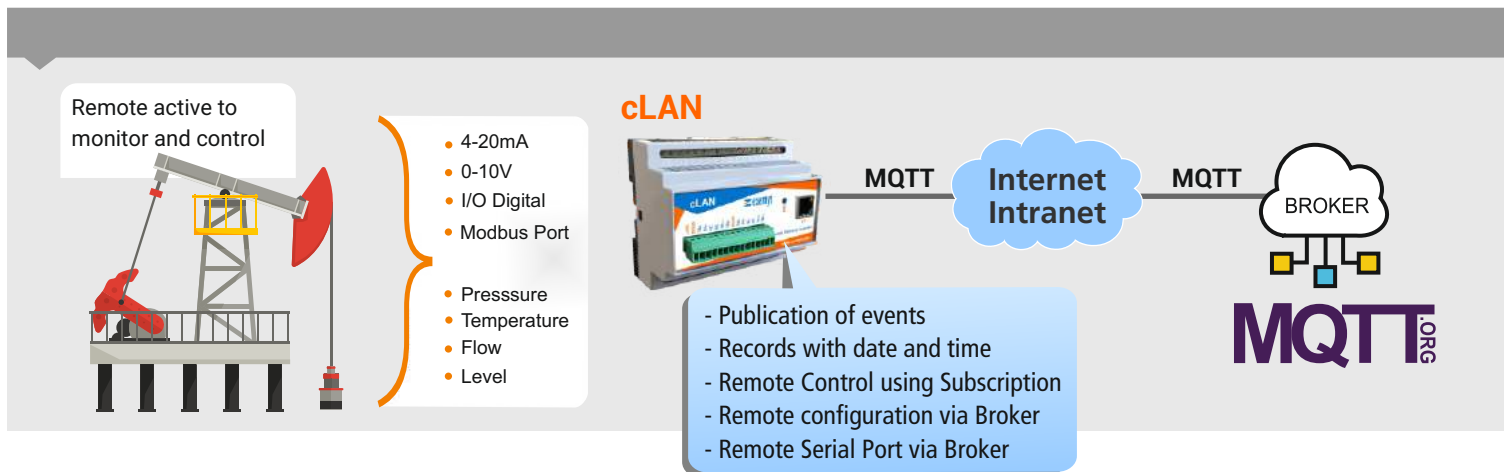
Part NUMBER	ETHERNET PORT	SERIAL PORT	DIGITAL INPUTS	DIGITAL OUTPUTS	ANALOG INPUTS
CLAN-1205-XF	10/100 Mbit	2 Ports: 1x RS232 + 1x RS485/422 Asilado	---	---	---
CLAN-1520-XF	10/100 Mbit	2 Ports RS232/485	---	---	---
CLAN-2205-XF	10/100 Mbit	2 Ports 1x RS232 + 1x RS485/422 Aislado	---	10 Configurables (10 for pulses)	---
CLAN-3524-XF	10/100 Mbit	2 Ports RS232/485	16 (8 for pulses)	8	---
ERD-1101-XF	10/100 Mbit	1 RS232/RS485	---	---	---
ERD-3404-XF	10 Mbit	1 RS232/RS485	---	---	8 diferenciales 4-20mA/0-10V

## RTU for telemetry with MQTT protocol

### cLAN-MQ



- Network communication with Ethernet TCP/IP port.
- Digital I/O. Pulse count inputs for meters.
- Analog inputs for Sensors, Transmitters or Transducers.
- Event log with date and time.
- Internal programming logic through SCRIPTS.
- Modbus slave Serial and TCP for direct connection to SCADA.
- Protocols NMEA 0183 and MetPak (Gill Instruments).
- Free Port (User-programmable protocol through scripts).
- I/O expansion through the Modbus Master protocol, specific to the equipment.
- Transparent encapsulation of serial communication protocols on MQTT.
- Remote configuration via MQTT.
- TLS 1.2 Encryption



MODEL	SERIAL PORT	I / O DISCRETES	ANALOG INPUTS	I/O EXPANSION
CLAN-1205-MQ	1x RS232 + 1x RS485 ISO/ RS422 ISO	---	8 0-10V / 4-20mA	YES
CLAN-2205-MQ	1x RS232 + 1x RS485 ISO/ RS422 ISO	10 Configurables (10 for pulses)	---	YES
CLAN-3404-MQ	1x RS232	---	8 differential 0-10V / 4-20mA	YES
CLAN-3524-MQ	2x RS232 / RS485	16 Inputs 8 Outputs 8 DI pulses 1 KHz	---	YES





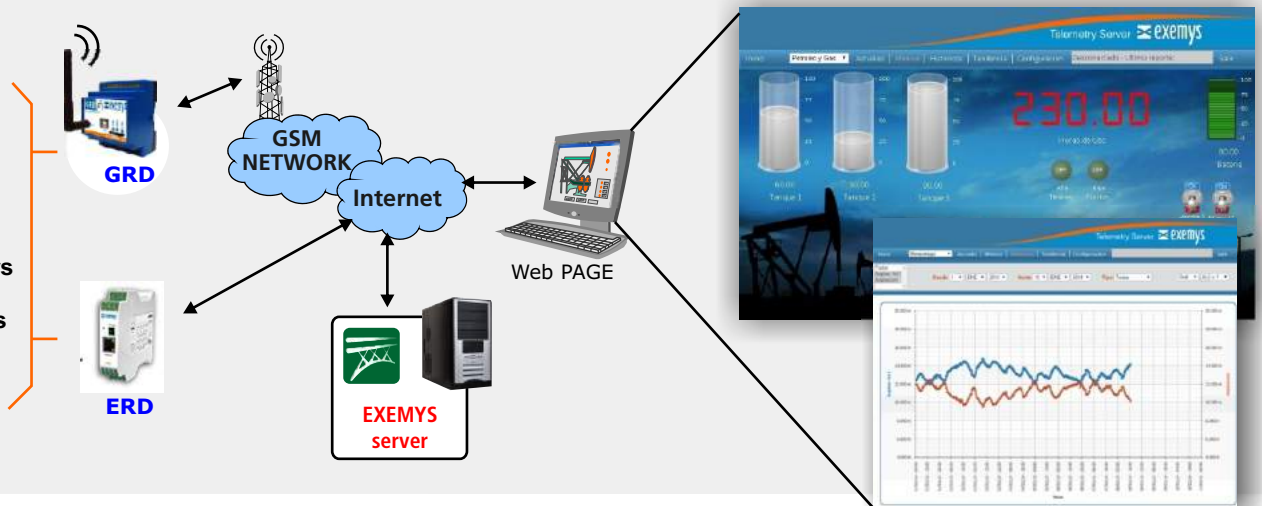
# Web Server



With this new server, you can implement immediately, using pre-designed web pages, all applications of cellular telemetry. Just connect sensors to the Exemys GRD Devices, and configure in minutes, your application.

- Immediate implementation of applications
- Avoid costly hosting services
- Simple Web access to all field devices
- Robustness and Reliability of a Datacenter

- Sensors
- Acquisition
- Transmitters
- PLCs, RTUs



## GRAPHIC OBJECTS



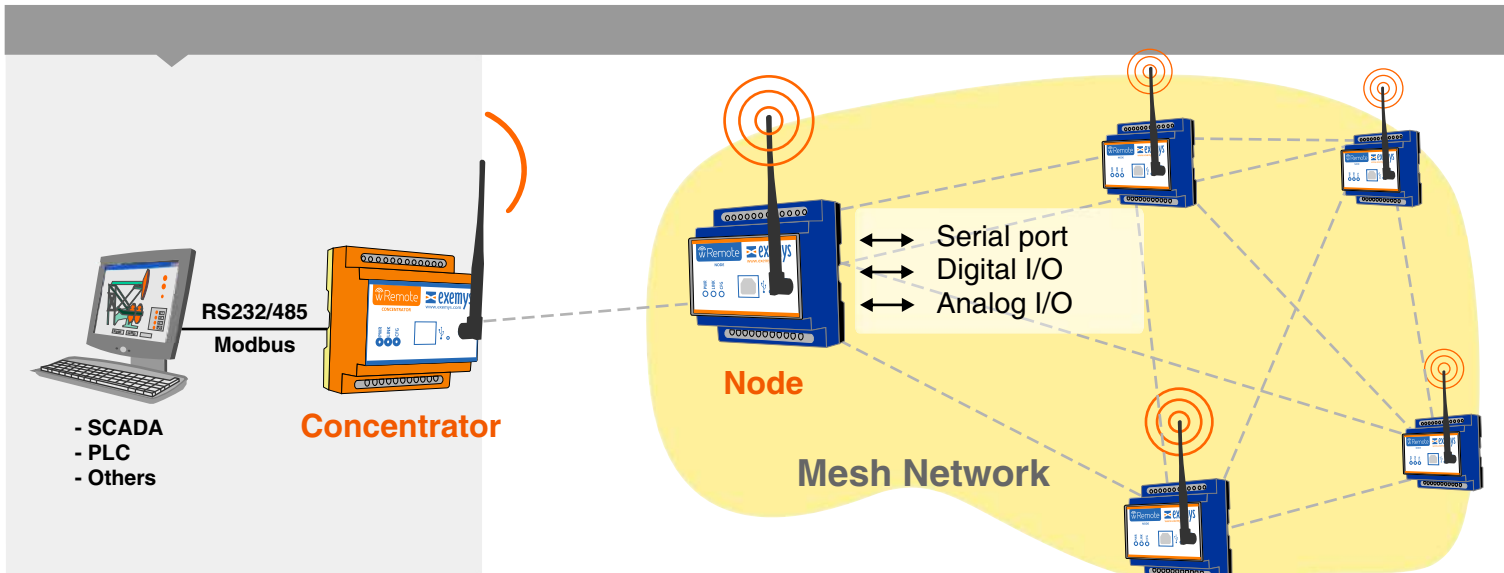
# ZigBee Wireless Telemetry System 2.4GHz

wRemote



wRemote is a new concept of Wireless Telemetry, based on mesh networking technology. The system was designed for industrial or open field, where you need to collect remote and dispersed information in a reliable and low cost per point.

- Models: Concentrator and Remote Nodes
- Suitable for industrial environments
- Communication IEEE 802.15.4 in 2.4GHz
- Mesh Network between devices
- Digital Inputs and Outputs
- Analog Inputs of 0-10V and 4-20mA
- Serial Port RS232/485 for Modbus slaves
- Port USB for Modbus slaves and configuration
- Access to I/O and Serial Port in Modbus



MODEL	FUNCTION	SERIAL PORT	EXTRAS	ANALOG INPUTS	Analog outputs	Digital Inputs	Digital Outputs	Node
wRemote-1000-CN	Concentrator	RS232/RS485	USB	---	---	---	---	50
wRemote-1500-ETH-CN	Concentrator	RS232/RS485	USB/ETHERNET	---	---	---	---	50
wRemote-3005-ND	Node	RS232/RS485	USB	4x Configurables 0-10V / 4-20mA	---	4	2	---
wRemote-5005-ND	Node	RS232/RS485	USB	2x Configurables 0-10V / 4-20mA	2x Configurables 0-10V / 4-20mA	4	2	---

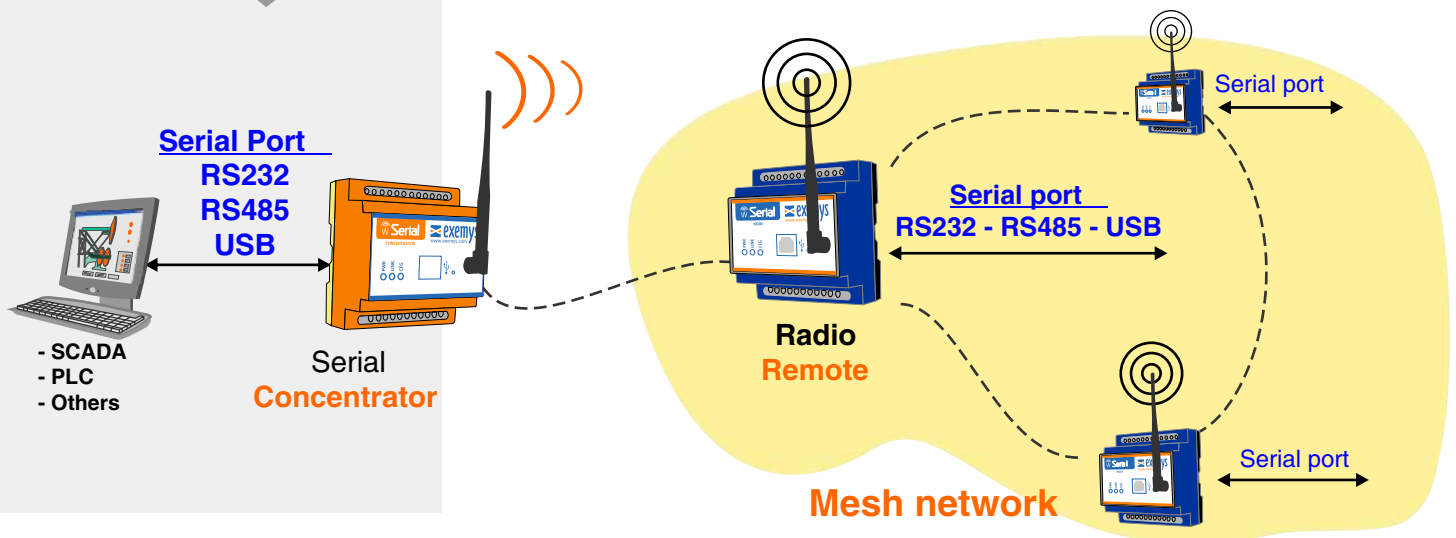
# Wireless Radio 2.4GHz Mesh network technology

## wSerial



wSerial is a new concept in Serial Radio, which introduces Mesh Networks technology to achieve not only point to point, but also multiple connections. The system was designed to be a real network of serial ports to industrial facilities where there is a need to gather information from remote and dispersed devices, reliably and inexpensively.

- Models: Concentrator and Remote Node
- Suitable for Industrial environments
- Communication IEEE 802.15.4 in 2.4G
- Mesh Network between devices
- Serial Port RS232/485/USB



MODEL	FUNCTION	SERIAL PORT	EXTRAS
WSerial-C	Concentrator	1x RS232/485	USB
WSerial-ETH-C	Concentrator	1x RS232/485	USB / ETHERNET
WSerial-N	Node	1x RS232/485	

# Wireless Tunnel with ZigBee radio technology

## wTunnel



The system was designed to be a true Point to Point Tunnel to reflect conditions and field values, reliably and at low cost.

- Communication IEEE 802.15.4 in 2.4GHz
- 2 Analog Inputs, 0-10V and 4-20mA
- 2 Digital Inputs
- 2 Digital Outputs
- 1 Serial Port RS232/485/USB



### wTunnel ))) ZigBee 2.4GHz ((( wTunnel

Serial	Serial port	↔	Serial port
Digital	Digital Inputs	→	Digital Outputs
	Digital Outputs	←	Digital Inputs
Analog To Digital	Analog	→	Digital Outputs
	Digital Outputs	←	Analog
Analog	Analog Inputs	→	Analog Outputs
	Analog Outputs	←	Analog Inputs

Model	Serial port	USB	Analog inputs	Analog outputs	Digital inputs	Digital outputs
wTunnel-2002	RS232/RS485	Si	---	---	2	2
wTunnel-3001	RS232/RS485	Si	2 Configurables 0-10V / 4-20mA	---	2	2
wTunnel-5003	RS232/RS485	Si	2 Configurables 0-10V / 4-20mA	2	2	2

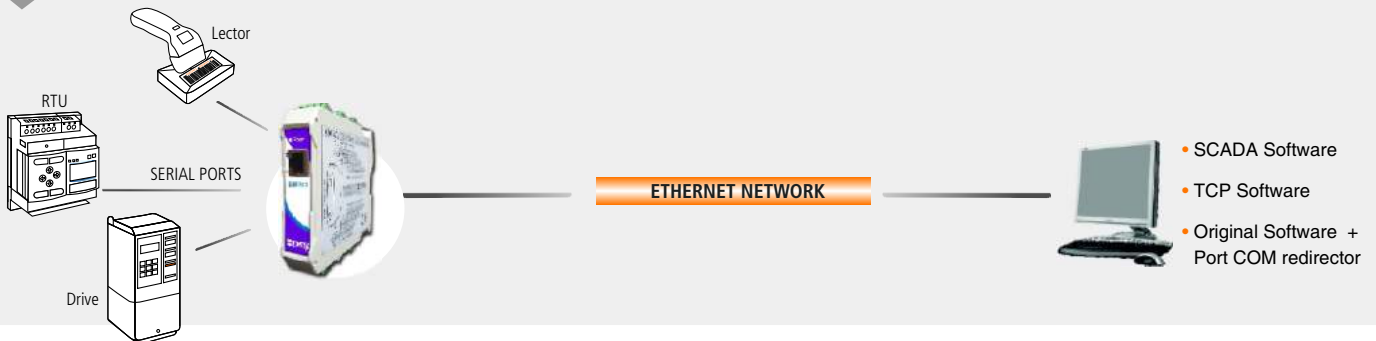
# Serial server to Ethernet Converter with Digital I/O

## SSE232-IA3



It is a device that can connect any serial device (RS232 / 485/422) to an Ethernet Network

- Converts serial ports to Ethernet TCP/IP or UDP/UP
- Up to 4 serial ports RS232 / RS485 / Rs422
- Serial port transparent Tunnel
- Ethernet I/O, with built-in digital inputs and outputs
- Multi-drop over Ethernet. One server, many clients.



Part number	DETAILS
SSE232-400-00-IA3-CF	4 RS232 ports with flow control
SSE232-4B0-00-IA3	4 configurable RS232/RS485 ports
SSE232-1C0-00-IA3-IS	1 configurable RS232/RS485 Isolated / RS422 isolated
SSE232-1C0-10C-IA3-IS	1 configurable RS232/RS485 Isolated / Rs422 Isolated + 10 configurable digital I/O

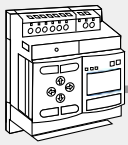
# Serial to ethernet converter

## SS232-1B00-00-LE



SSE232-LE is an Ethernet communication device that provides Ethernet connectivity to your legacy serial link (RS232/RS485). Now you can connect two devices linked with RS232/RS485 through an Ethernet network. Moreover, you will be able to gain access to these devices from a computer.

- Wide range power supply: 10-30 Vdc.
- 10/100 Base T Ethernet port
- RS232 on male Db9
- RS485 on terminal block
- DIN rail mounting
- Easy web-based password-protected configuration
- Statistics and monitoring by web
- Automatic link recovery after communication failures.
- SNMP protocol support



PLC

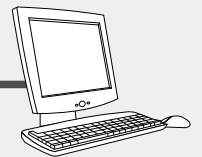
RS232/485



ETHERNET  
10/100 BaseT

Ethernet /  
Internet  
Network

ETHERNET  
10/100 BaseT



SCADA Software •  
TCP Software •  
Original Software + Port COM Redirector •

Part Number	ETHERNET	SERIAL PORTS	
		RS232 in DB9	RS485 in Bornes
SSE232-1B00-00-LE	10/100 BaseT	1 (*)	1 (*)

(\*) Solo un puerto serie configurable

# Serial Converter to WI-FI

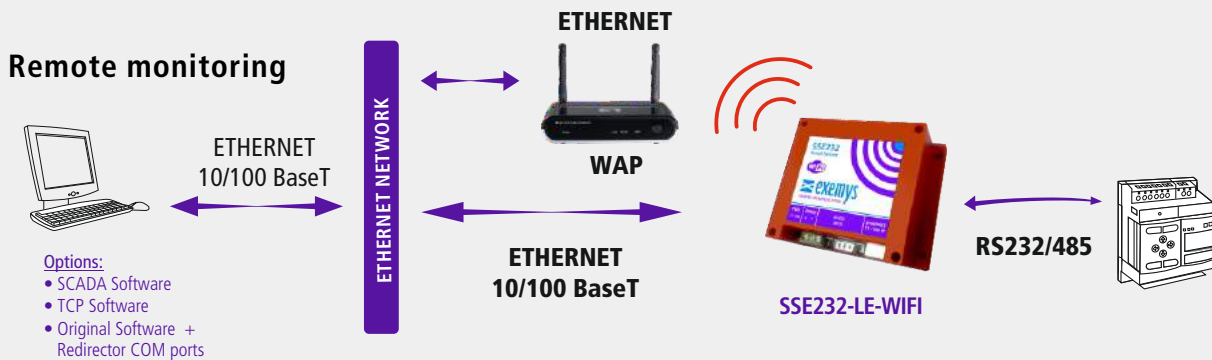
## SS232-LE-WIFI



You can communicate any device that has an RS232 or RS485 serial port, to a TCP / IP network, through its two communication ports, either Wi-Fi wireless or wired Ethernet.

- 1 Wi-Fi port with its antenna inside the device
- 1 Ethernet port 10/100 Base T
- 1 Serial port (RS232 or RS485)
- DIN rail mounting
- Easy web-based password-protected configuration
- Statistics and monitoring by web
- Automatic link recovery after communication failures.
- SNMP Traps
- Wide range power supply: +10 to +30Vdc

### EXAMPLE OF USE



Part Number	DESCRIPTION
SSE232-1B0-00-LE-Wifi	1 puort configurable RS-232 or RS-485.

## Serial to WiFi / ethernet Converter

### SS232-RM-WIFI



SSE232-RM-WiFi is a device that allows access to the information of any equipment that has a serial port, via wireless data transmission (Wi-Fi) or via Ethernet network

- Serial to Wi-Fi / Ethernet Converter
- Wifi 802.11 b/g communication
- 1 Serial port RS-232
- 1 Serial port RS-485
- Configuration and use Ethernet port
- Interchangeable antenna with connector RP SMA
- Encryption Security WEP, WPA y WPA2
- Statistics and monitoring by web
- +10 to +30VDC Power supply
- DIN rail mouting

SSE232-RM-WiFi



COM A  
RS232/485



ETHERNET 10/100Mbps  
(configuration port and use)

Part Number	DESCRIPTION
SSE232-1B0-00-RM-WiFi	1 serial port RS-232 / RS-485. 1 Ethernet port 1 WIFI port



# Modbus Serial (ASCII or RTU) to Modbus TCP

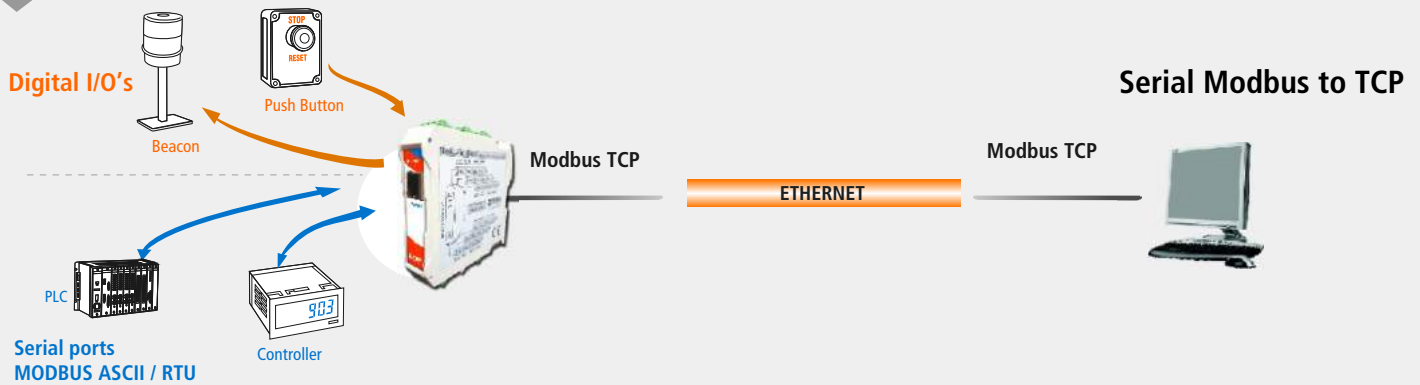
## EGW1-IA3-MB



The EGW1-MB module is a device used to connect any industrial equipment with MODBUS RS232 / 485/422 communication, to An Ethernet TCP / IP network.

It also has its own digital inputs and outputs. This Characteristic makes it different from similar devices, since it provides an integrated solution for control applications without the need to additional modules.

- Modbus TCP, ASCII, RTU Protocols.
- Modbus Master or Slave.
- Up to 16 Connections Modbus TCP Simultaneously.
- Selection of RS232/485/422 by software, up to 115 Kbps.
- Digital I/O's controlled by Modbus.
- Install and set up via serial, Telnet or a Web Browser
- Software for searching Exemys devices on the Network.
- DIN Rail mounting, temperature-resistant Industrial Case.
- Industrial terminal blocks.
- Wide range power supply 10 to 30 Vdc.



PART NUMBER	OBSERVATION
EGW1-4B0-00-IA3-MB	4 RS232/RS485 Ports configurables
EGW1-1C0-00-IA3-MB-IS	1 RS232/RS485 port cofigurable isolated / RS422 isolated
EGW1-1C0-10C-IA3-MB-IS	1 RS232/RS485 port cofigurable isolated / RS422 isolated + 10 Digital I / O configurables

# HART Converter to Modbus TCP / RTU / ASCII

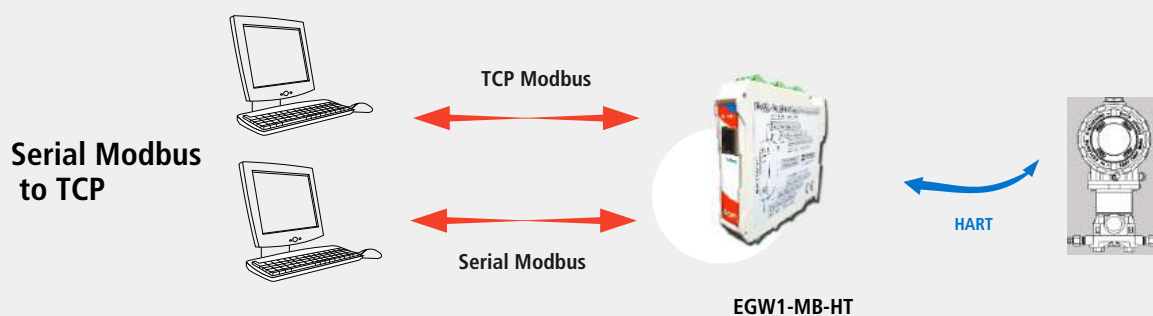
## EGW1-MB-HT



The EGW1-MB-HT- module is a device used to connect any industrial equipment with HART communication to one or more Modbus TCP or Modbus Series masters (RTU / ASCII)

The equipment has 3 independent Modbus ports. One Ethernet for Modbus TCP, one RS232 another RS485 opto-isolated for Modbus RTU / ASCII

- Modbus protocols TCP, RTU Y ASCII.
- Up to 16 simultaneous Modbus TCP connections.
- Modbus RS232 Port slave
- TCP/IP Modbus port
- Modbus RS485 slave port optoisolated independent of the RS232.
- Installation and configuration by Web browser.
- Software to search for Exemys devices in the network.
- DIN Rail mounting, temperature-resistant Industrial Case.
- Industrial terminal blocks.
- Wide range power supply 10 to 30 Vdc.



PART NUMBER	OBSERVATION
EGW1-110-3-IA3-MB-HT	3 Ports HART / 1 Port RS232 / 1 Port RS485 isolated
	1 Port 10/100 Mbps Ethernet

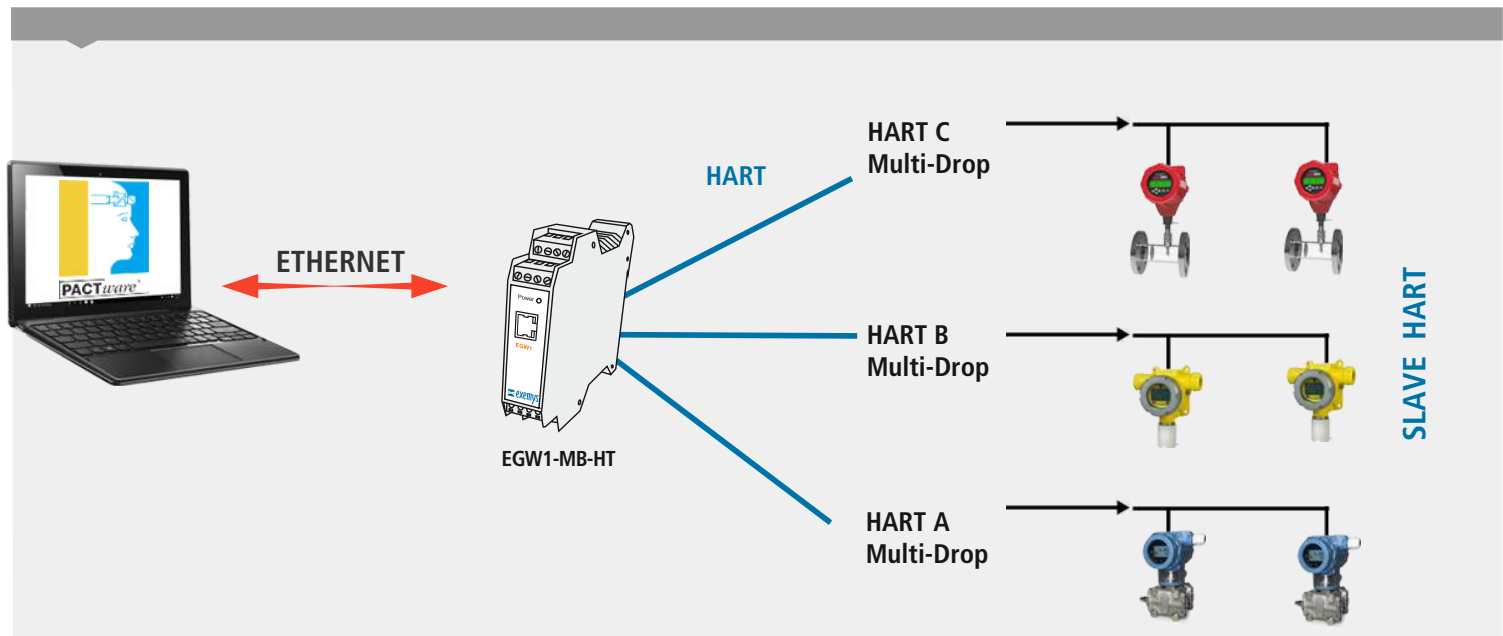
## Conversor HART to ETHERNET

### EGW1-MB-HT



The EGW1-IA3-MB module is a protocol converter HART to ETHERNET transparent.

- Compatible con PACTware®
- Allows remote configuration of HART devices
- 3 HART ports for multiple devices
- Modbus protocols TCP, RTU Y ASCII.
- Up to 16 simultaneous Modbus TCP connections.
- Modbus RS232 Port slave
- TCP/IP Modbus port
- Modbus RS485 slave port optoisolated independent of the RS232.
- Installation and configuration by Web browser.
- Software to search for Exemys devices in the network.
- DIN Rail mounting, temperature-resistant Industrial Case.
- Industrial terminal blocks.
- Wide range power supply 10 to 30 Vdc.



MODEL	DESCRIPTION
EGW1-110-3-IA3-MB-HT	3 Puertos HART / 1 Port RS232 / 1 Port RS485 isolated 1 Port 10/100 Mbps Ethernet

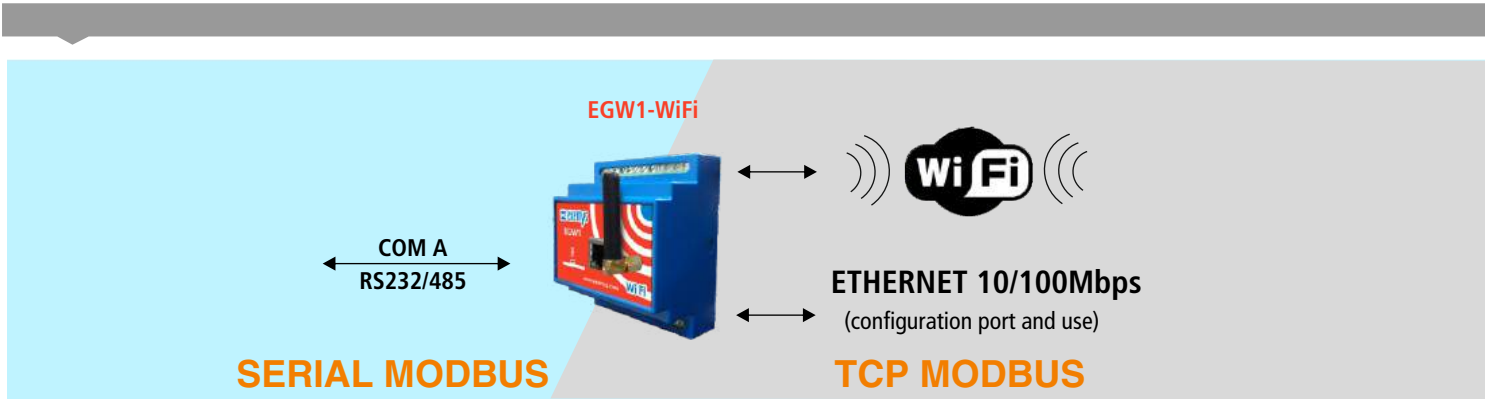
# Modbus Serial to Modbus TCP with Wi-Fi and Ethernet

## EGW1-MB-WIFI



Modbus Serial (ASCII or RTU) to Modbus TCP, protocol converter, with wireless data transmission (Wi-Fi) and Ethernet TCP / IP

- ☑ K mb` s q qc pg\_j rm K mb` s q RAN\* u gf U gDg\_l b Crf cpl cr
- ☑ K mb` s q RAN\* ? QA Q P RS N pmmamjq,
- ☑ K mb` s q K \_qrc pmp Qj\_t c,
- ☑ S n rm / 4 A ml l c argnl q K mb` s q RAN Q d s jr\_l cms qjw
- ☑ U Dgank k sl g\_rgnl 6. 0, / / ` -e,
- ☑ Qc pg\_j nmpx P Q-010 \_l b P Q-263
- ☑ Crf cpl cr nmpx dtp aml d s p\_rgnl \_l b s qc
- ☑ Qc as pgw u gf U CN\* U N? \_l b U N? 0 Cl apwnrgnl
- ☑ Qr\_rgrg q mds qc tg\_u c`
- ☑ U d c p\_l ec nmu cpqs nnjw/ . rm1. T ba,
- ☑ B Q P \_g k ms l rd e



### ORDERING INFORMATION

#### EGW1-1B0-00-RM-WiFi

- 1 Serial port RS232/485
- 1 Ethernet port
- 1 WiFi port

#### EGW1-1B0-6C-RM-WiFi

- 1 Serial port RS232/485
- 1 Ethernet port
- 1 WiFi port
- 6 digital I/O configurables

## Modbus write protection device

MBS

Protect your Modbus Slave devices, preventing them from being able to execute write commands, from a Master computer.

The write commands that the computer protects are:

- **0x05:** Force Single Coil
- **0x06:** Preset Single Register
- **0x0F:** Force Multiple Coils
- **0x10:** Preset Multiple Regs
- **0x15:** Write General Reference
- **0x16:** Mask Write 4X Register
- **0x17:** Read/Write 4X Registers

This way you can protect devices that are highly sensitive and which must be protected from malicious or erroneous external communication.



**EGW1-MB**  
(Modbus Serial to TCP + Protector)

**SGW1-MMP**  
(Multiplexor + Protector)

**SGW1-MBS**  
(Protector)



### ORDER CODES

#### 0 R G E X V 6 H U L H

- **SGW1-110-00-PS-MBS** (1 Port RS232, 1 Port RS485)
- **SGW1-200-00-PS-MBS** (2 Ports RS232)
- **SGW1-4B0-00-IA3-MMP** (4 configurable ports RS232/RS485)
- **SGW1-13B0-00-IA3-MMP-CF** (1 port RS232 with RTS + 3 ports RS232 or RS485)

#### 0 R G E X V 7 & 3

- **EGW1-1C0-00-IA3-MB-IS** (1 port RS232, RS485 or RS422 isolated)
- **EGW1-1C0-10C-IA3-MB-IS** (1 port RS232, RS485 or RS422 isolated + 10 digital I/O)
- **EGW1-4B0-00-IA3-MB** (4 ports RS232 or RS485)

## Ports Modbus Multiplexer and Converter

### SGW1-IA3-MMP



The SGW1-IA3-MMP, is a multifunction device that allows to perform the following functions:

1) Modbus Port Multiplexing (Masters and Slaves)

2) Conversion of Modbus ASCII data to Modbus RTU, with different Baud Rates and with RS232 or RS485 ports

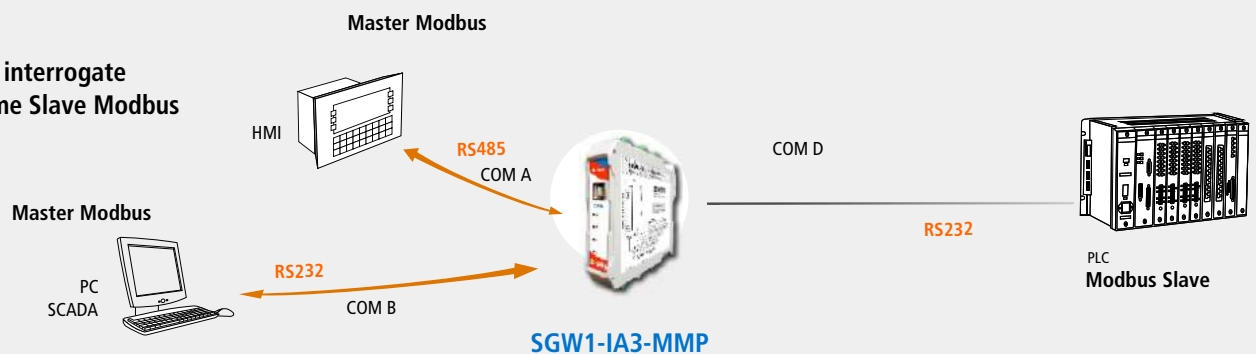
3) Exchange of Registers between Modbus Masters, by means of an exchange memory

- Up to 3 ports to connect Masters.
- Up to 3 ports to connect Slaves.
- No need of registers tables.
- DIN Rail mounting.
- Wide range power supply, 10 to 30 Vdc.
- Easy configuration.
- Industrial pluggable terminal blocks.
- USB Configuration



#### Example

2 Masters interrogate To the same Slave Modbus



MODELS	DETAILS
SGW1-4B0-00-IA3-MMP	4 RS232/RS485 ports configurables
SGW1-13B0-00-IA3-MMP-CF	1 configurable RS232 with RTS for radio control + 3 RS232/RS485 ports configurables

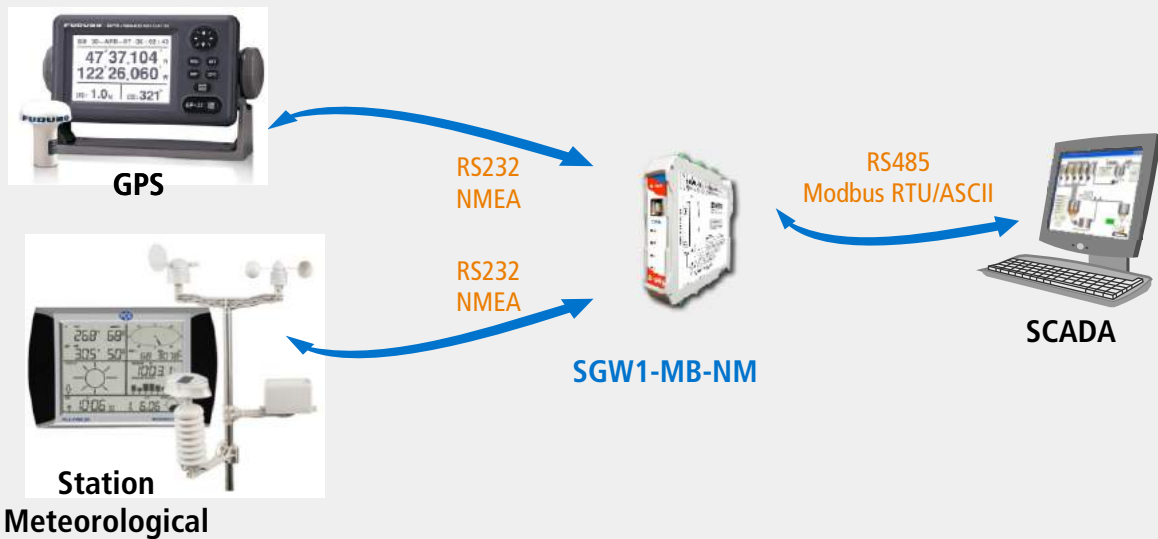
## Modbus RTU/ASCII to NMEA converter

### SGW1-IA3-MB-NM



Allows you to read NMEA 0183 data coming from a GPS or weather station using the industry standard protocol Modbus

- 2 RS232/ RS485 ports (1NMEA + 1 Modbus)
- Modbus protocols RTU and ASCII.
- Baud rates up to 115200 bps.
- Easy to install and set-up through a serial console
- DIN Rail mounting, temperature-resistant Industrial Case.
- Wide range power supply (+10 a 30Vdc)
- USB configuration



MODEL

SGW1-2B0-00-IA3-MB-NM

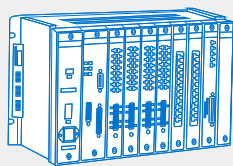
## Modbus ASCII/RTU to Hostlink Converter

### SGW1-IA3-MB-HL



SGW1-IA3-MB-HL converts an OMRON PLC (Hostlink® Protocol) into a Modbus ASCII/RTU Slave easily.

- DIN Rail mounting, temperature-resistant Industrial Case.
- 2 serial ports (1 Modbus + 1 Hostlink)
- Modbus ASCII and RTU protocols.
- Hostlink protocol configurable.
- Allows several Hostlink Slaves connected to only one SGW1-MB-HL.
- Baud rates up to 115200 bps.
- Easy to install and set-up through a serial console.
- Wide range power supply (10-30V DC).
- Easy Serial Ports Configuration.

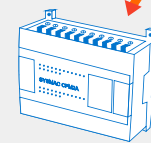


PLC Master

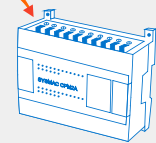
Modbus ASCII/RTU



Hostlink



PLC Slave Hostlink



PLC Slave Hostlink

#### MODELO

SGW1-2B0-00-IA3-MB-HL



## Analog acquisition modules, with serial communication



### RMS2-AI

Using RMS2-AI, it's possible to acquire in an accurate way, analog variables such as Voltage and Current, through serial protocols like Modbus ASCII/RTU .

It provides an integral solution to remote monitoring application, without the need to add additional modules.

#### 8 differential input channels:

\$ V S S F O U N B      C J U T  
7 P M U B H F 7 E D      C J U T

#### Configurable serial protocol

. P E V C T " 4 \$ \* 5 \* 6 3 T V M B



### RMS2-PT

Using the RMS2-PT, you can acquire PT100 sensor temperatures and transmit the acquired data through serial protocols like Modbus ASCII/RTU .

#### 8 input channels

- PT100 Temperature Sensors (2 and 3 wires)

#### Configurable serial protocol

- Modbus ASCII/RTU slave.

### RMS1-TC

Using RMS1-TC, You can acquire temperature variables, and transmit the acquired data through a serial communication. The serial protocols available to the device are Modbus ASCII / RTU or Hostlink (OMRON®)

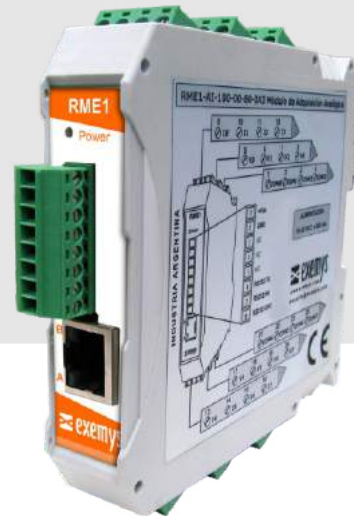
#### 8 differential input channels:

- Temperature, Thermocouples J,K,T,R,N,E,S (0.1 °C)

#### Configurable serial protocol

- Modbus ASCII/RTU slave.

## Analog Acquisition Modules with multiple Communication Protocols



### RME2-AI

With RME2-AI, you can acquire analog variables through the network in an accurate way. The devices can convert Current and Voltage. This variables can be read in five different ways simultaneously (Modbus TCP, Web Page HTTP, SNMP, CSV and XML).

**8 Configurable analog differential inputs:**

\$ V S S F O U      N "  
7 P M U B H F 7

**5 Protocols:**

. P E V C T S \$ 1  
8 F C B I H F    ) 5 5 1  
4 / . 1    7  
\$ 7 4    9 . -  
9 . -    ) 5 5 1



### RME1-PT

With RME1-PT, you can acquire temperatures from PT100 sensor. This variables can be read in five different ways simultaneously (Modbus TCP, Web Page HTTP, SNMP, CSV and XML).

**8 Configurable analog differential inputs:**

- PT100 sensor temperature

**5 Protocols:**

- Modbus TCP
- WEB page (HTTP)
- SNMP (v1)
- CSV / XML
- XML (HTTP)

### RME1-TC

With RME1-TC, you can acquire Temperatures from thermocouples. This variables can be read in five different ways simultaneously (Modbus TCP, Web Page HTTP, SNMP, CSV and XML).

**8 Configurable analog differential inputs:**

- Thermocouple J,K,T,R,N,E,S

**5 Protocols:**

- Modbus TCP
- WEB page (HTTP)
- SNMP (v1)
- CSV / XML
- XML (HTTP)

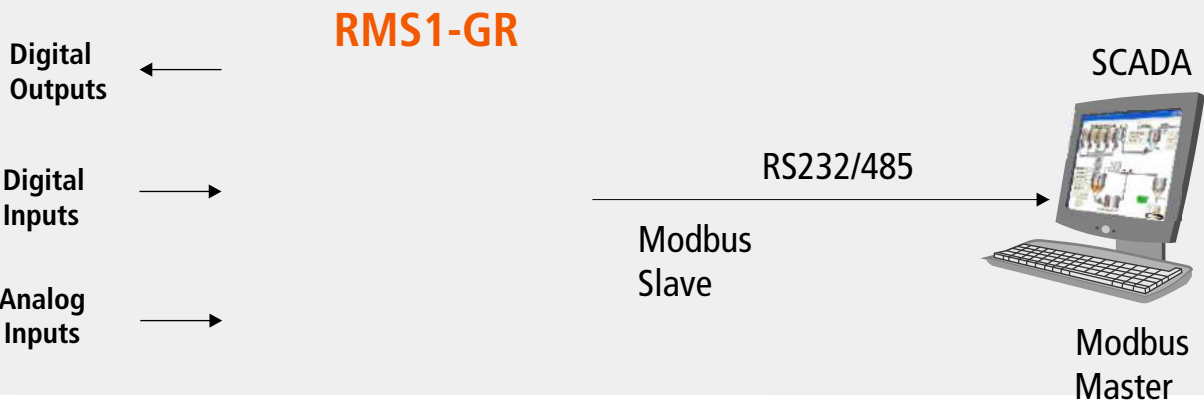
## Digital & Analog I/O in Modbus Serial

### RMS1-GR

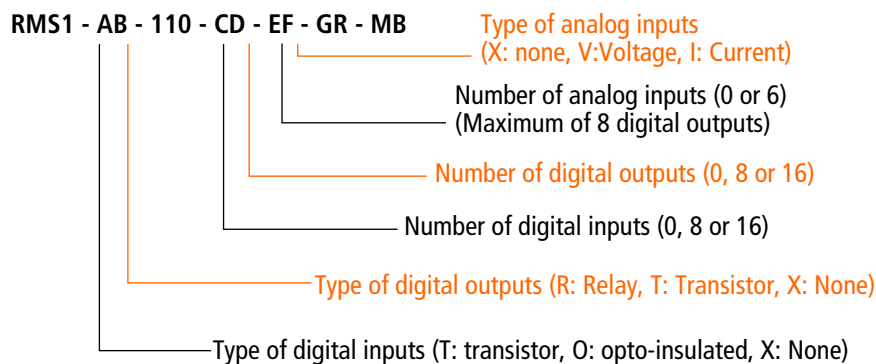


The RMS1-GR allows the expansion of the number of digital and analog inputs and outputs of any control or automation system handled from the Modbus Serial protocol (ASCII or RTU)

- Up to 16 Relay or Transistor outputs
- Up to 16 Transistor or Opto-Isolated inputs
- Up to 6 Analog Inputs (0-10V / 4-20mA)
- Power supply of 10 to 30Vdc
- RS232 or RS485 Serial Port.
- Simple configuration



#### ORDER CODE



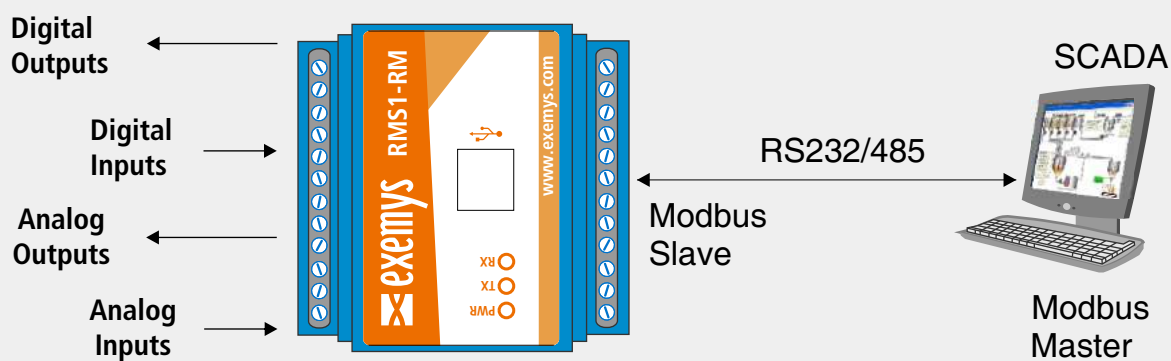
## Digital & Analog I/O Modbus Device

### RMS1-RM



RMS1-RM is a family of digital and analog input and output devices, with communication by Modbus Protocol (RTU/ASCII)

- 4 digital inputs (standard inputs and pulse count)
- 2 digital outputs
- Up to 4 analog inputs (0-10V and 4-20mA)
- Up to 2 analog outputs (0-10V and 4-20mA)
- Power supply of 10 to 30Vdc
- RS232/RS485 Serial Port
- USB port configuration
- Modbus RTU/ASCII slave
- Master mode to create I/O tunnel
- Dimensions: 70 x 90 x 65 mm (HxWxD).



Models	Ports	Digital Inputs	Digital Outputs	Analog Inputs 0-10V/4-20mA	Analog Outputs 0-10V/4-20mA
RMS1-TT-110-42-0X-RM-MB	1 RS232 1 RS485	4	2	---	---
RMS1-TT-110-42-4VI-RM-MB	1 RS232 1 RS485	4	2	4	---
RMS1-TT-110-42-2VI-2VI-RM-MB	1 RS232 1 RS485	4	2	2	2
RMS1-TT-110-42-2VI-2VI-RM-MB-BAT	1 RS232 1 RS485	4	2	1 entrada 0-14V/4-20mA 1 entrada 0-28V/4-20mA	2

# Serial Converter Rs232 to RS485/422

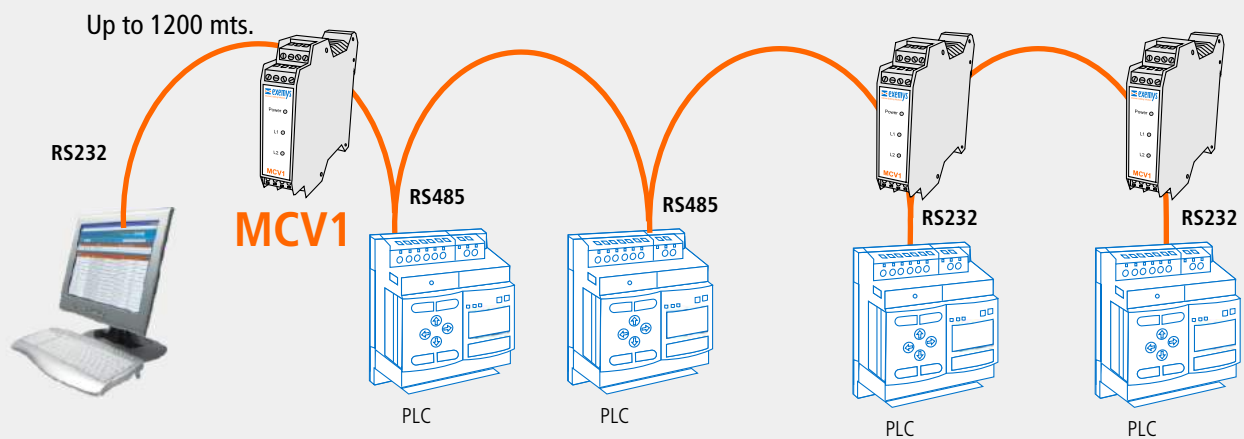
Galvanic Isolation

**MCV2-C485**



This converter has been design to communicate serially two or more equipments located one of another at long distances. It is good for industrial communication, in electrical noisy enviroments, thanks to their differential characteristic of the norm RS485/ RS422. It has practical removable terminals blocks and DIN rail assembly.

- Industrial fireproof case with assembly for DIN rail
- Industrial fireproof case with assembly for DIN rail Galvanic Isolation, up to 2500 Vrms (1 minute)
- DC Power input: +10 to +30 VDC.
- Leds indication for power and flow of information
- Polarity Resistors included
- Removable terminal blocks connectors
- Baud rate up to 115200 bps
- Up to 32 nodes
- Protection against surges, in line RS485 and RS422



### RS485 Isolator (Galvanic Isolation)

#### MCV2-A485

The isolator MCV2-A485 separates galvanically a RS485 port. It is optimal for communication in electrically noisy industrial environments.

- Galvanic Isolation, up to 2500 Vrms (1 minute)
- Automatic flow data control
- DC Power input: +10 a 30 VDC.
- Leds indication for power and flow of information.
- Removable terminal blocks connectors
- Baud rate up to 115200 bps
- 32 nodes on a single network.
- Surge protection for RS485 line
- Operating Temperature: -5 a 65 °C, storage temperature: -40 a 75°C
- Industrial fireproof case with assembly for DIN rail



RS485

RS485

### RS232 Isolator (Galvanic Isolation)

#### MCV2-A232

The isolator MCV2-A232 separates galvanically a RS232 port. It is optimal for communication in electrically noisy industrial environments.

- Galvanic Isolation, up to 2500 Vrms (1 minute)
- With RTS and CTS lines
- DC Power input: +10 a 30 VDC.
- Leds indication for power and flow of information
- Removable terminal blocks connectors
- Baud rate up to 115200 bps
- Operating Temperature: -5 a 65 °C, storage temperature: -40 a 75°C
- Industrial fireproof case with assembly for DIN rail

RS232

RS232

# Conversor RS232 a RS485 para Instrumentos de Campo (con aislación galvánica)

### MCV2-C485-CR

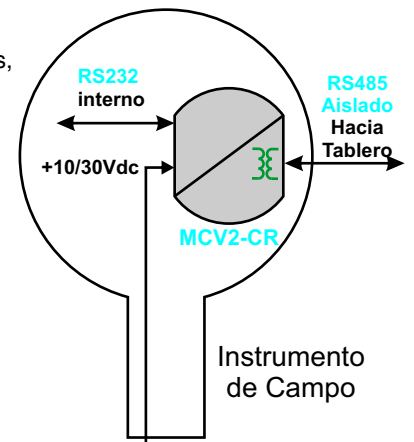


El módulo MCV2-C485-CR permite la conversión RS232 a RS485, para cualquier instrumento de campo que requiera además, aislación galvánica



Las campos eléctricos y electromagnéticos provocados por tormentas, motores o electrónica de potencia, perjudican muy a menudo a los instrumentos de campo.

El módulo MCV2-CR fue diseñado para evitar problemas de interferencia o daños, en los instrumentos de campo que poseen un puerto serial RS232 o RS485, gracias a su aislación galvánica.



# Aislador Serie RS485 para Instrumentos de Campo (con aislación galvánica)

### MCV2-A485-CR

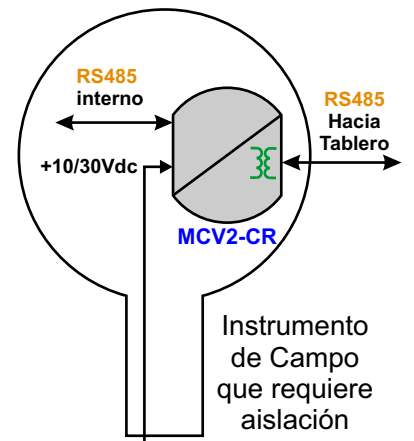


El módulo MCV2-A485-CR permite aislar un puerto serie RS485, para cualquier instrumento de campo



Las campos eléctricos y electromagnéticos provocados por tormentas, motores o electrónica de potencia, perjudican muy a menudo a los instrumentos de campo.

El módulo MCV2-CR fue diseñado para evitar problemas de interferencia o daños, en los instrumentos de campo que poseen un puerto serial Rs485.



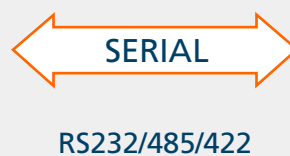
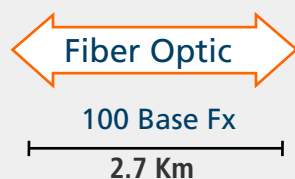
## Fiber optic to Serial

### MCV1-FO-SER



The MCV1-FO-SER is an Industrial Multimode Fiber Optic to Serial converter, that allows to extend the communications up to 2.7 Km And without interferences for electrical noise

- Serial Port: RS232, RS485, RS422 (Not simultaneous)
- Fiber Optic Port: Transmitter & Receptor
- Fiber Optic Connector: ST
- Power Supply: +10/30 Vdc. Power ON LED
- Case: DIN Rail Mountable, Fireproof
- Maximum Distance: 2.7 Km
- Baud rate: Up to 115200 bps
- Fiber Optic supported: Multimode 50/125 um or 62.5/125 um
- Wave Length: 820 nm
- Max. Current: 150mA @ 10V, 75mA @ 30V



#### ORDERING INFORMATION

MCV1-FO-SER-ST-MU (Multimode) (ST connector) 



## Ethernet Fiber optic (monomode & singlemode)

### MCV1-FO-ETH



MCV1-FO-ETH is an Industrial 10/100 Mbps Ethernet to fiber optics converter. It's commonly used to interconnect industrial devices PLC's, workstations, routers and servers. Its industrial enclosure and 10 to 30Vdc supply input makes it the best option for industrial applications.

- Operation Mode: Multimode or Singlemode
- Ethernet Port: 10/100 Base TX, RJ45 connector
- Fiber Port: 100 Base FX, ST or SC connector (Multimode) - 100 Base LX10, SC connector (Singlemode)
- Power Input: +10 a +30 Vdc / 200mA max.
- Operation temperature: 0 to 70° C
- Enclosure: DIN Rail Mount, Ignifuge
- Distance: 2 Km on Multimode and 10 Km on Singlemode
- Wave Lenght: 1300nm
- Protocol: CSMA/CD, Autocross over

Fiber optic

100 Base Fx

2 Km - Multimode

100 Base Lx10

10 Km - Singlemode



Ethernet

10/100 Base Tx



#### ORDERING INFORMATION

MCV1-FO-ETH-ST-MU (Multimode) (ST connector) 

MCV1-FO-ETH-SC-MU (Multimode) (SC connector) 

MCV1-FO-ETH-SC-SI (Singlemode) (SC connector) 



## Software



**Serial COM Port Redirector**  
(Windows)

The Serial/IP® COM Port Redirector creates virtual COM ports for applications to use networked serial servers, with no change to application software.



**Exemys Device Locator**  
(Windows)

It allows you to easily find and configure the Exemys computers connected to your LAN. It is not necessary to know the MAC address of the device to be able to configure it.



**Exemys GRD Config**  
(Android)



Aplicación para enviar SMS de configuración para equipos Exemys GRD. Permite enviar mensajes de configuración y solicitud de estado.



**Exemys USB Console**  
(Android)



It is a tool for USB communication with Exemys devices of the SGW1 families, RMS2 and RMS1-RM.



**Exemys Serial Console**  
(Android)



It is a tool for USB communication with Exemys devices of the SGW1, RMS2 and RMS1-RM families.



**Exemys Device Locator**  
(Android)



It is a tool to search and configure Exemys ethernet devices.



**Exemys wSerial Config**  
(Android)



It is a tool for configure wSerial devices.



**Exemys wTunnel Config**  
(Android)



It is a tool for configure wTunnel devices.

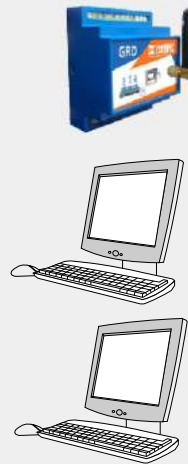
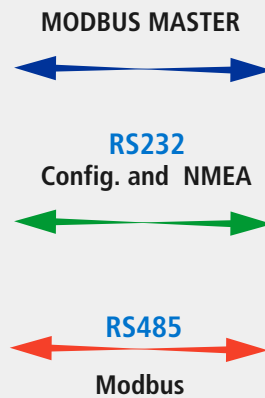
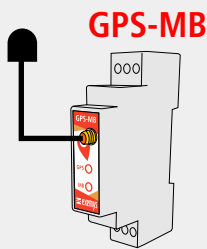
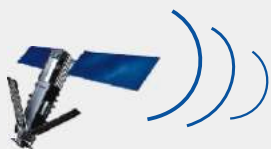
## GPS Industrial Modbus Slave

### GPS-MB



The GPS-110-MB-PS is an Industrial GPS with Modbus communication. It has two serial ports, one RS232 port for configuration and reading of NMEA sentences, and an RS485 Modbus Slave port to obtain all the data generated by the GPS (Latitude, Length, Speed, Hour, etc.) using modbus registers.

- GPS, Galileo and Glonass Constellations
- 1 RS485 Modbus port ASCII/RTU slave for GPS data
- 1 RS232 port for configuration and NMEA data 0183
- Leds Status Indicators
- With Magnetic Antenna and 3m long cable
- Power supply from +10 to +30 Vdc
- Industrial Assembly DIN-rail



### DATA GPS PROVIDED

- Latitude
- Length
- Altitude
- Geoidal Separation
- True Course
- Magnetic variation
- Speed
- Surface Speed
- GPS quality
- Number of Satellites
- Age differential GPS data
- Horizontal accuracy
- UTC date
- UTC Time
- Signal status
- Autonomous or differential mode



# Line protector RS485

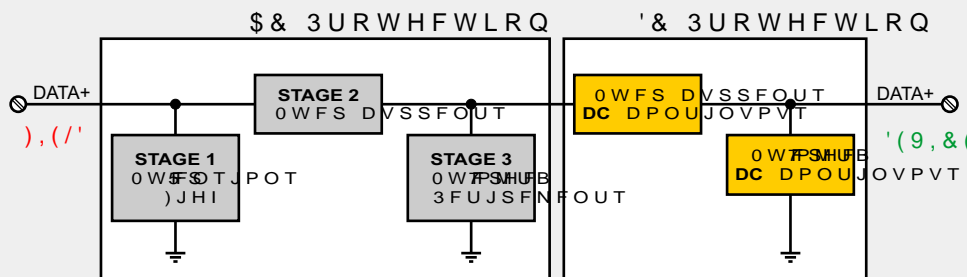
PS-485



Transient peaks and overvoltages in the data lines, will be produced by the induced energy caused by the conditions or by switching heavy inductive loads. The PS-485 module was designed to protect your electronic equipment, of these potentially destructive interferences.

- Protects from both Surges and Overcurrents
- It has a cascade protection circuit, with 3 stages
- Protects against Alternating Currents and also Continuous Alterations
- It is built with redundant, state-of-the-art components
- Automatic reset after alternating or direct current peaks

## INTERNAL SCHEME



## CHARACTERISTICS

- Protection against transient peaks: 265Vrms and 20KA-
- Protection against AC disturbances: 120 Vrms-
- Protection against DC disturbances: +- 24Vdc
- Meets minimum requirements of RS-485:
  - ESD (Electrostatic Discharges): IEC 61000-4-2 Level 4 (8KV per contact/15KV per air)
  - EFT (Fast Electrical Transients): IEC 61000-4-4 Level 3, 1KV, 20A
  - Current Surge/Lightning: IEC 61000-4-5 Level 4, 4KV, 95A

# Line Protector RS-232

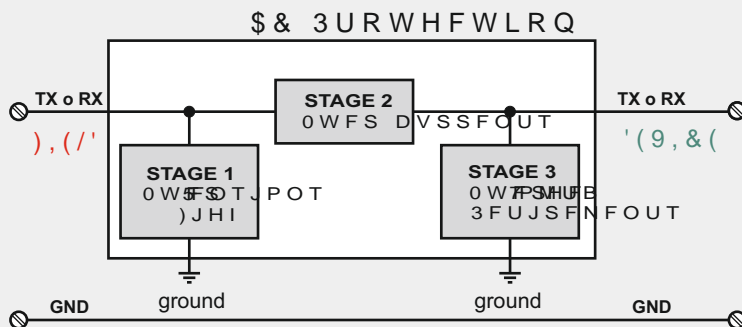
PS-232



The PS-232 module was designed to protect your electronic equipment, of these potentially destructive interferences

- Protects from both Surges and Overcurrents
- It has a cascade protection circuit, with 3 stages
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- It is built with redundant, state-of-the-art components
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## INTERNAL SCHEME

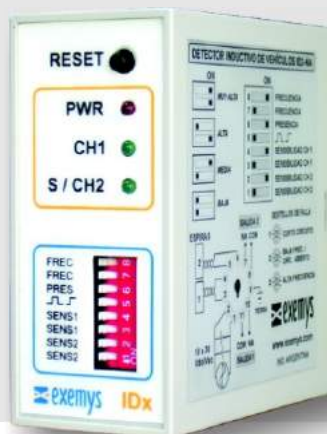


## FEATURES:

- Protection against transient peaks: 265Vrms and 20KA
- Protection against AC disturbances: 120 Vrms
- Meets minimum requirements of RS-485:
  - ESD (Electrostatic Discharges): IEC 61000-4-2 Level 4 (8KV per contact/15KV per air)
  - EFT (Fast Electrical Transients): IEC 61000-4-4 Level 3, 1KV, 20A
  - Current Surge/Lightning: IEC 61000-4-5 Level 4, 4KV, 95A

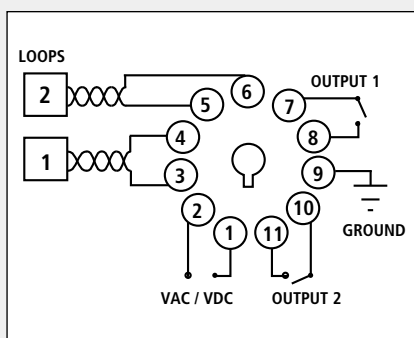
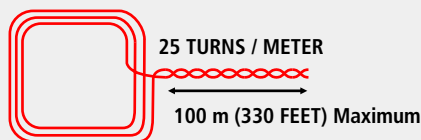
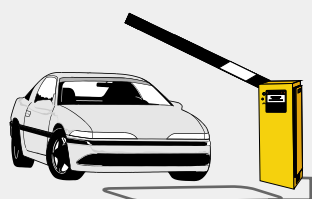
# Inductive vehicle detector

IDX



The principle of operation of the equipment consists of the detection of a metallic mass by means of the measurement of inductance of a detection coil. The coil is part of an oscillator circuit that generates a magnetic field. When this field is crossed by a vehicle, the oscillator frequency changes. This variation is detected by a microprocessor circuit that determines, based on the equipment configuration, if the exit signal must be generated.

- Microcontroller.
- 1 or 2 channels.
- Switching power supply.
- 4 settable sensibility levels.
- 4 settable frequency levels.
- Safe output in case of failure.
- Channel multiplexing.
- Advanced failure analysis.
- Auto-tuning.
- Optoisolated, relay, transistor or digital outputs (TTL).
- Output while present
- Drift compensation due to environmental fluctuations



### Applications:

- Toll stations
- Automatic barriers
- Intelligent traffic lights
- Traffic Access Control
- Vehicle counting
- Speed measurements
- Traffic flow's direction

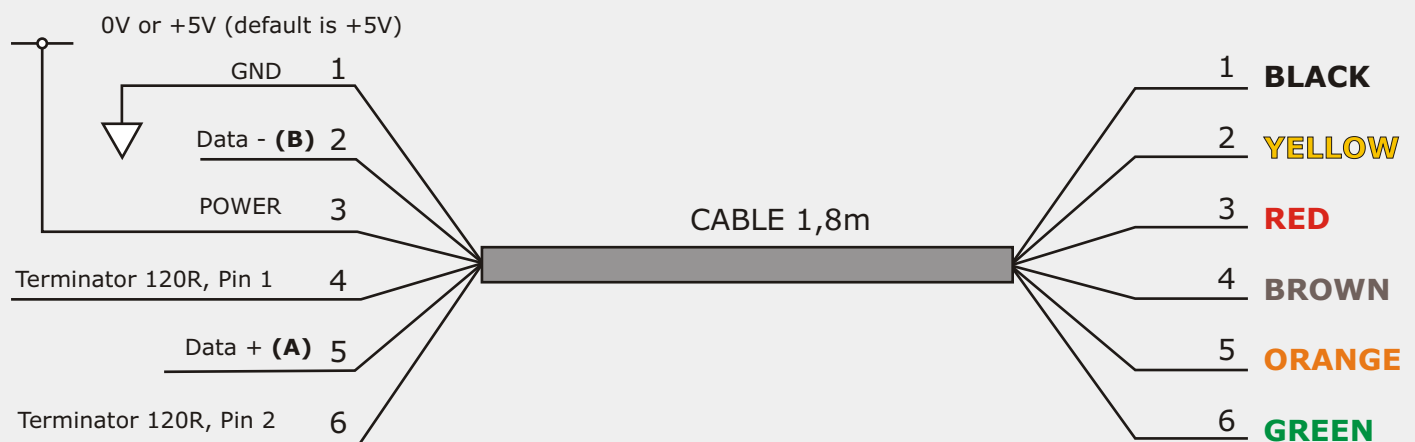
Model	Outputs	Channels
ID1-RL-0-NA-P	Normally Open Relay	1
ID2-RL-0-NA-P	Normally Open Relay	2
ID1-TR-0-NOFF-P	Transistor Normally OFF	1
ID2-TR-0-NOFF-P	Transistor Normally OFF	2
ID1-OP-0-NOFF-P	Optoisolated Normally OFF	1
ID2-OP-0-NOFF-P	Optoisolated Normally OFF	2

# USB to RS485 Converter

## USB to RS485



- USB Connector Direct to Cable Data+ (A) and Data- (B) RS485
- Electronically controlled USB protocol on the cable.
- Communication Interface EIA/TIA-485 from low consumption.
- UART supports 7 or 8 data bits, 1 or 2 stop bits and parity even/impar/marca/space and without parity.
- Visual indication of Tx and Rx by means of LEDs in transparent connector.
- Transfer speed between 300 baud 3 MBPS.
- It has 2 cables to connect resistance of termination.
- X-On / X-Off software handshaking
- USB 2.0 Compatible
- Operating temperature -40°C to +85°C.
- 1.80m cable
- FCC and CE compliant
- RoHS Compliant



CODE

USB-485-1800



Get the most value from Remote Assets  
with our products and solutions

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E-mail: [info@exemys.com](mailto:info@exemys.com)

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