

# eco-ETH.RS4

## ISOLATED CONVERTER / GATEWAY FROM RS485 TO ETHERNET



Ethernet



### APPLICATIONS

- CONTROL AND MONITORING OF PLCs, CNCs AND OTHER SYSTEMS
- INDUSTRIAL AUTOMATION, BUILDINGS, ..
- CONTROL OF INFORMATION DISPLAYS AND OTHER PUBLIC SERVICES



- MULTI-CLIENT GATEWAY FROM MODBUS RTU TO MODBUS TCP
- ETHERNET 10/100Mb/s
- POSSIBILITY OF UP TO 10 CLIENTS CONNECTED BY ETHERNET
- FIXED IP or THROUGH DHCP ASSIGNMENT
- RS485 UP TO 115200Bits/s (Maximum 247 slaves)
- 1500V ISOLATION BETWEEN RS485 SERIAL, POWER AND ETHERNET
- INTERNAL CONFIGURATION MENU BY WEB SERVER (IP, baud, parity, ..)
- FRONT LED INDICATION (Communication, Power, Error, ..)

# CHARACTERISTICS

## ENVIRONMENTAL

Working temperature	<b>-20.. +60°C</b>
Storage temperature	<b>-40.. +85°C</b>
Non-condensing humidity	<b>10.. 90%</b>
Warm-up time	
Temperature coefficient	



This simple module allows connection from equipment with RS485 to Ethernet networks. Through RS485 we can connect up to 247 devices and up to 10 clients via Ethernet.

The configuration (ip, baud, parity, ..) It is done through web browsers standard available on the pc.

Simple installation format via din rail.

The module is powered at 24VDC. It has insulation between all parts.

## ISOLATION

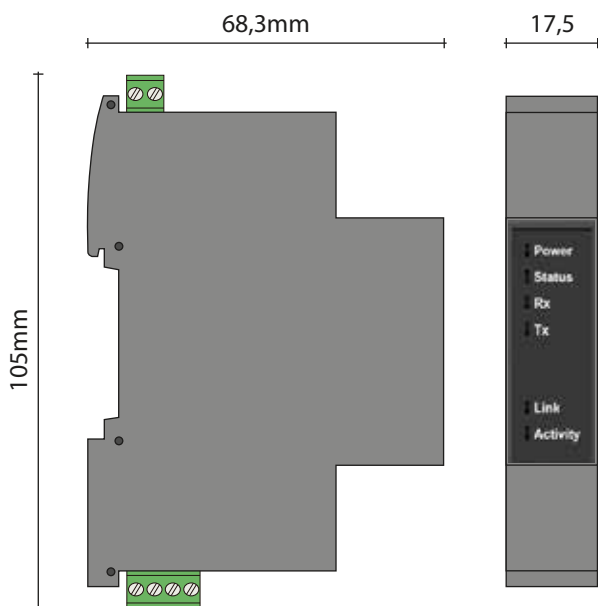
Ethernet / RS485	<b>1500V</b>
Ethernet / Power	<b>1500V</b>
RS485 / Power	<b>1500V</b>



EMC 2014/30/EU (electromagnetic compatibility)
DBT 2014/35/EU (low voltage directive) for industrial environments.
<b>CE</b> Interference immunity according to EN 61000-6-2.
Disturbance emission in accordance with EN 61000-6-3.
Installation category II. Pollution degree 2 EN 61010-1.

## POWER SUPPLY

Voltage	<b>24VDC</b>
Margins	<b>10.. 40VDC</b>
	<b>19.. 28VAC</b>
Consumption	<b>&lt; 1,5W</b>







## FORMAT

<b>IP20</b> protection
Combustibility class <b>Vo</b> according to <b>UL94</b>
Ergonomic Box. EN50022 quick rail assembly
Material Polyamide <b>PA6.6</b>
RS485 connection: screw terminals screw tightening torque (M3) 0.5Nm
Ethernet connection: RJ45 connector
Connection cable: $\leq 2.5\text{mm}^2$ , 12AWG 250V/12A
Weight <b>70 grs</b>


# CONFIGURATION

## SWITCH

	COMMUNICATION PARAMETERS USER PARTICULARS
	DEFAULT COMMUNICATION PARAMETERS (192.168.178.29/115200/8/N/1) (factory)
	DHCP ENABLED <small>dynamic host configuration protocol, to integrate the equipment into a system that automatically assign network addresses</small>
	STARTING MODE FOR FIRMWARE UPDATE



- We power the equipment at 24VDC.
- Connect an uncrossed Ethernet cable directly to the PC.
- With switch 1 ON and 2 OFF we access, using a browser (Google Chrome is recommended), through the factory "gate" that is always available (<http://192.168.178.29/>)  
\* if there were any communication problems, it would be necessary to configure the network card manually: TCP / IPv4 protocol  
IP: 192.168.178.30  
Mask: 255.255.255.0
- In the menu that appears we change the parameters and press "set" and "flash & restart". In this way we create our "particular access door" in user memory. The team will return a report with the new values.
- Once the parameters have been changed, we turn off the equipment, put both switches to OFF, We turn on and we can access our parameters through our own address (<http://192.168.XXX.XX/>)
- If at any time we do not remember the recorded parameters, we do it again. the entire process through the factory "door".

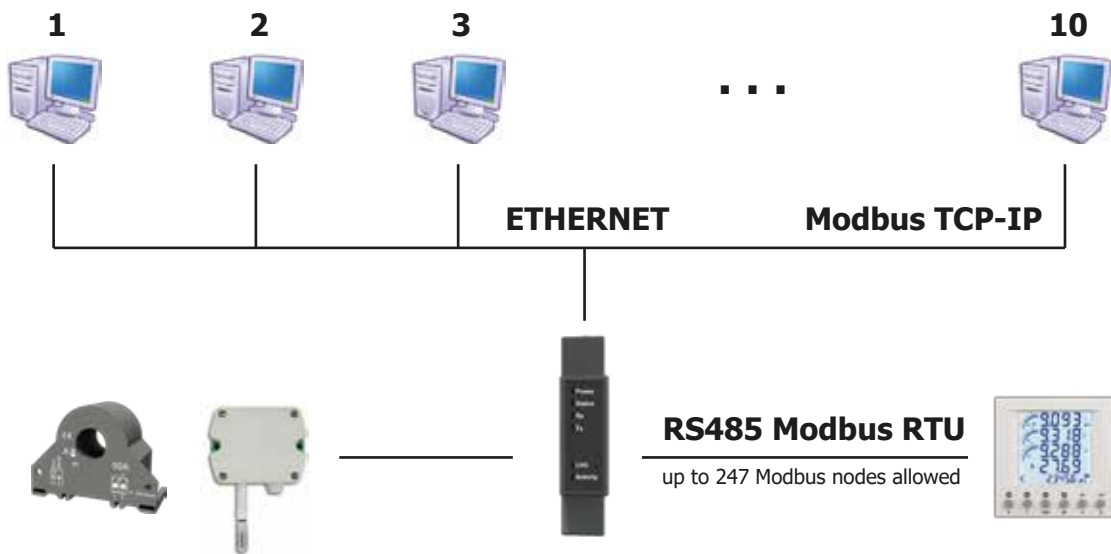
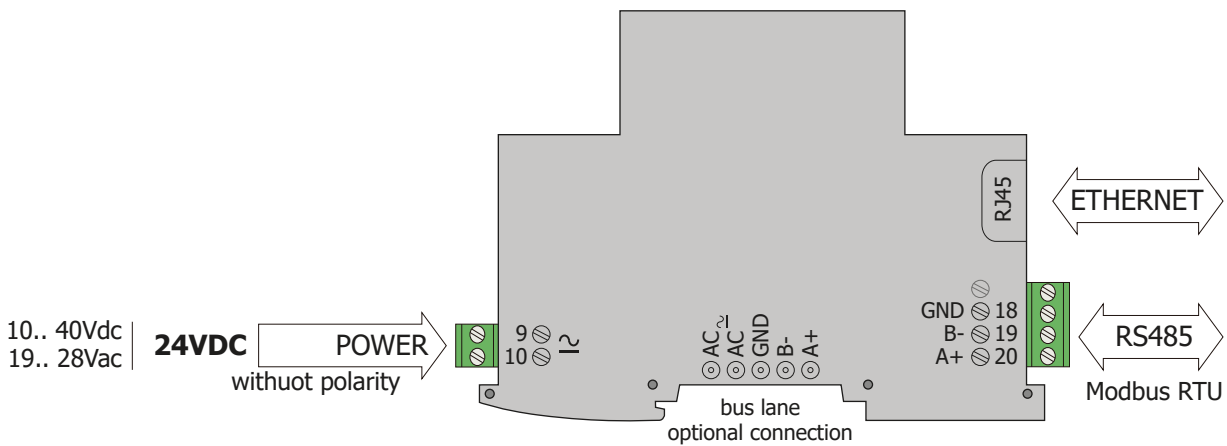


Welcome	<h3>Modbus TCP Setup</h3>
Modbus TCP Setup	192.168.178.29 IP Address
Modbus RTU Setup	255.255.255.0 IP Mask
Flash and Restart	0.0.0.0 Gateway
	REV001.1 Hostname
	502 TCP Port
	<input type="button" value="Set"/>

\* If we need to know the Mac of the computer, we access cmd in Windows and in c: we write the command "arp -a" that will return the IPs of the computers connected to their Macs.

Welcome	<h3>Modbus RTU Setup</h3>
Modbus TCP Setup	115200 Baud Rate
Modbus RTU Setup	<input checked="" type="radio"/> None <input type="radio"/> Even <input type="radio"/> Odd ...Parity
Flash and Restart	1000 Timeout (ms.)
	<input type="button" value="Set"/>

# CONNECTION



# OPERATION - LEDS

	<b>Power</b>	● fixed	Power OK
	<b>Status</b>	☀ fast flashing	Communication in process
		● slow flashing	Waiting for communication
<b>RS485</b>	<b>RX</b>	● flashing	The system is receiving data via RS485
	<b>TX</b>	● flashing	The system is sending data via RS485
<b>ETHERNET</b>	<b>Link</b>	● fixed	Connected to Ethernet network
	<b>Act</b>	☀ flashing	Activity on the Ethernet network

