

Version 29

EOLIS 3000

Dual process input





Universal power supply



Hot-swappable plug in and out



Sensor power supply



ModBus RTU

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Presentation

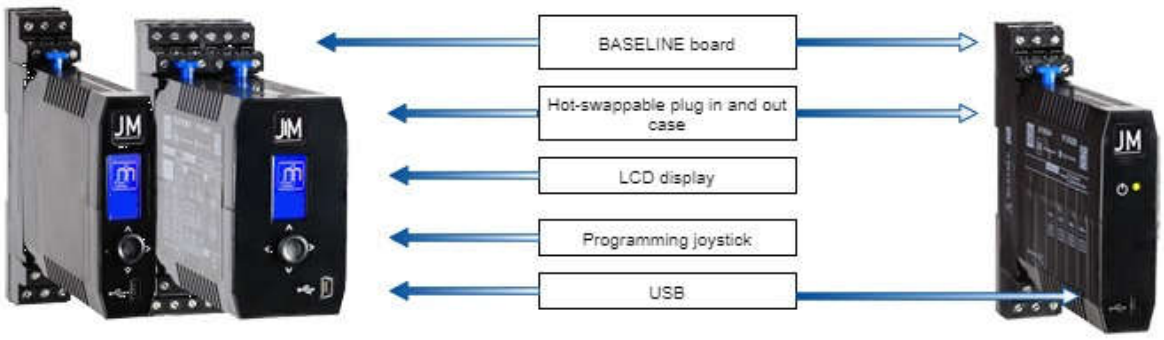
The INDEPENDENTLY ISOLATED TWO-CHANNELS design of the EOLIS 3000 allows the realization of two converters in a 22.5mm box.

EOLIS 3000 is a converter of process inputs, resistive inputs, PT100 2 wires, or 2 analog outputs and holds up to 4 relays and a communication port RS485 Modbus RTU.

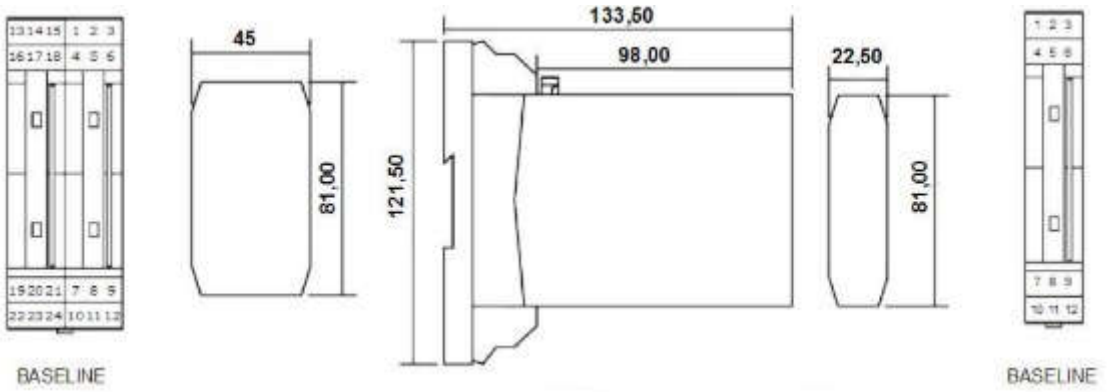
EOLIS 3000 is guaranteed for 5 years.

Range

Converter with graphic display	**Inputs** Current, Voltage, RTD, resistance 2 wires	**Outputs**				**Communication**	**Case width (mm)**		Converter without graphic display
		Number of Analogs		Number of Relays					
	2 inputs	1	2	2	4	RS485 USB	22,5	45	
EOLIS 3000P0	✓					✓	✓		EOLIS 3000T0
EOLIS 3000P2	✓	✓	✓			✓	✓		EOLIS 3000T2
EOLIS 3200P0	✓			✓		✓		✓	EOLIS 3200T0
EOLIS 3200P2	✓	✓	✓	✓		✓		✓	EOLIS 3200T2
EOLIS 3400P0	✓				✓	✓		✓	EOLIS 3400T0
EOLIS 3400P2	✓	✓	✓		✓	✓		✓	EOLIS 3400T2



Dimensions



Dimensions : Width : 22,5 or 45 mm - Height : 81 mm - Depth : 98 mm

BASELINE boards are to be ordered separately

22,5 mm Case : Reference BL01ALV ; 45 mm Case : Reference BL02ALV

For multi-converter boards, please consult us.

Factory setting

EOLIS 3000P

Channel 1	Channel 2	Relays (2 RT or 4T)
Input : 4-20mA	Input : 4-20mA	Triggering of Alarms: high
Output : 4-20mA	Output : 4-20mA	Threshold : 5000
Display : 0-10000	Display : 0-10000	
Pilot function : not activated	Pilot function : not activated	

Communication speed : 9600 bauds, Slave address : n°1

EOLIS 3000T

Channel 1	Channel 2	Relays (2 RT or 4T)
Input : 4-20mA	Input : 4-20mA	Triggering of Alarms: PLC
Output : 4-20mA	Output : 4-20mA	Threshold : 5000
Display : 0-10000	Display : 0-10000	
Pilot function : activated	Pilot function : activated	

Communication speed : 38400 bauds, Slave address : n°1

Other settings on demand

Inputs - Outputs

Input gauges

Current (continuous)	Standard scales : 0-20mA ; 4-20mA Adjustable scales : From 0mA to 22mA
Voltage (continuous)	Standard scales : 0-100mV ; 0-10V Adjustable scales : From 0mV to +110mV, From 0V to 11V
Resistance	0-200Ω ; 0-1KΩ ; 0-10KΩ ; 0-50KΩ
PT 100 – PT 1000 2 wires	Standard scales : -210°C … 850°C Adjustable scales : start and end of scale offset
Sensor supply	Sensor 2 wires 24Vdc ; 24V-26mA max

Output gauges

Output 1 & Output 2 Current	Standard scales : 0-10mA ; 4-20mA Adjustable scales : From 0 to 20mA
Output 1 & Output 2 Voltage	Standard scales : 0-10V ; 0-5V ; 1-5V ; 2-10V Adjustable scales : From 0 to 10V
Output Relay	Relay 2RT or 4T (R on demand) : 2A-250Vac
Communication	Isolated USB in Front Panel / Isolated RS485 Modbus RTU

Characteristics

Display	
Type	LCD backlit
Color	Blue
Number of characters	5
Numbers of lines	5
Programming joystick	5 positions
Inputs characteristics	
Current input impedance	4,75Ω
Voltage input impedance	>10 MΩ
RTD Input impedance resistance 2 wires	Current : <0.32 mA
Output characteristics	
Permissible impedance on the current output 1 & 2	<1kΩ
Permissible impedance on the voltage output 1 & 2	>1kΩ
Isolation	
Supply / Input(s)-Output(s)-Relay-RS485-USB	4200Vrms, 50Hz, 1mn
Input(s) / Output(s) / RS485 / Relay	2500Vrms, 50Hz, 1mn
Input x / Input y	2500Vrms, 50Hz, 1mn
Output x / Output y	2500Vrms, 50Hz, 1mn
USB / Input 2	Without
USB / Input 1-Output(s)-RS485-Relay	2500Vrms, 50Hz, 1mn
Auxiliary source	
Voltage supply	22-240Vdc or 90-230Vac 50/60Hz

General characteristics	
Class of precision	0,1
Input analog / digital conversion	24 bits
Output analog / digital conversion	16 bits
Response time	<180ms
Thermal drift	<50ppm
Residual ripple on current output	<20µA
Residual ripple on voltage output	<10mV
Maximum of consumption	<10VA
Operating temperature	-10°C … +60°C
Storage temperature	-25°C … +80°C
Protection factor	IP20 Black self-extinguishing polyamide housing V0

Options listing

Option	Device code
Tropicalization in 22,5mm or 45mm case	EOLIS 3XXXXX-T
Auxiliary source 20-60Vac	EOLIS 3XX9XX

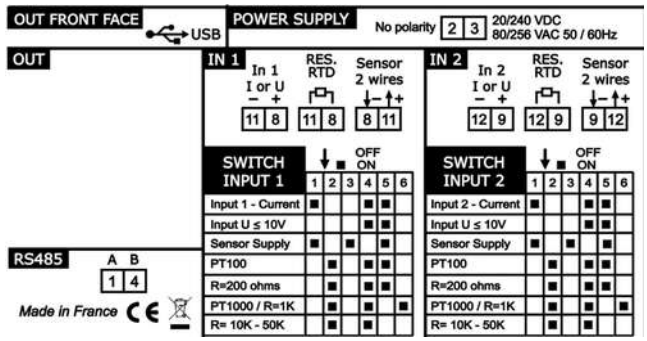
Functions

Display functions	
LCD display	Graphic display by LCD screen
LED indicators	1 green LED on devices without display
5 positions joystick	Allows you to configure the parameters displayed on the front panel screen
Programming lock	Locking of the programming on the front panel or by the IXLOG software Unlock by long press on the joystick.
Programming	Programming via joystick on the front panel, or via USB with IXLOG software
Memory Mini / Maxi	Storage of the maximum and minimum value of the measurement on each input channel
Customizing the display	Resolution, Comma, Contrast adjustment, Display off
Input	
Inputs display	The display allows to visualize the input in physical value and in programmed value
Adjustable input scale	Allows to zoom on the input either in manual or automatic mode
Offset	Manual adjustment of the input offset
Cut Off	Threshold below which the input is considered as null
Smart functions	
Sensor signal loss	Translates the sensor signal loss on : • the display, • each of the analog outputs, • the digital output, • the status of the relays
Filtering	Integration of the measurement over the defined time
Calculation mode	Rule calculation (+, -, x, /), result on input 3
Square root	The output(s) are function of the square root of the input
Pilot function/simulation	The pilot function makes it possible to act on the display value influencing the output(s), independently of the input The Pilot function is activated either by the digital link (RS485 or USB) or by the joystick on the front panel
Segmentation in 99 points	Linearization in 99 points (free choice for each point), allows to create an output function by segmentation of the signal of each input channel

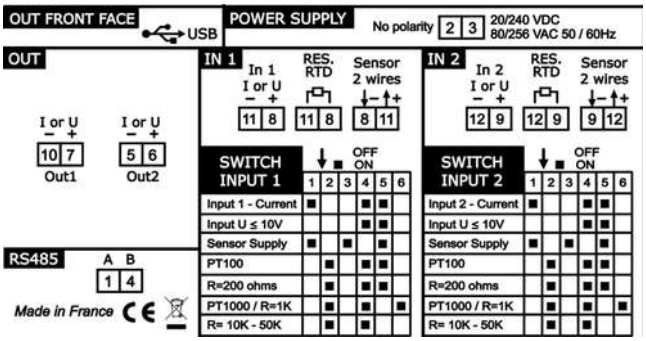
Outputs	
Visualization of the outputs	The display allows to visualize the outputs, in physical value and percentage; as well as the status of the relays
Outputs assignment	Assignment of outputs to inputs or to the control function, independently for each channel
Adjustable output scale	Allows you to zoom in on the outputs
Outputs limitation	Possibility to limit the value of the outputs - High limit and Low limit
Relays assignment	Assignment of relays to inputs or to the control function, independently for each channel
Thresholds	Single or band mode, with positive or negative safety Adjustment of thresholds, hysteresis and time delay (independent on rise or fall) Direct access to the thresholds
Acknowledgement of alarms	Independently for each alarm
Storage of alarms and/or relay status	Independently for each alarm
Links and communication	
RS485 MODBUS RTU	RS485 MODBUS RTU bidirectional digital link allowing to : • recover the measurements and transmit them in digital format • configure and control the device
Digital bus	Access to the digital bus via the USB socket (when converters are used on the interface boards)
USB front	USB front panel to connect directly to the USB port of a PC for programming via the IXLOG software
Mapping of Modbus addresses	Mapping of Modbus addresses, allowing you to choose your own variable address

Wiring

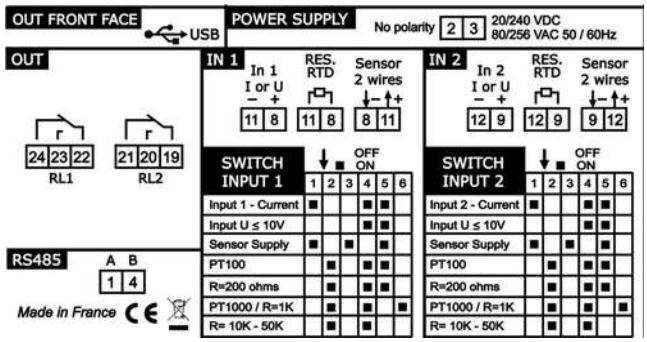
EOLIS 3000P0



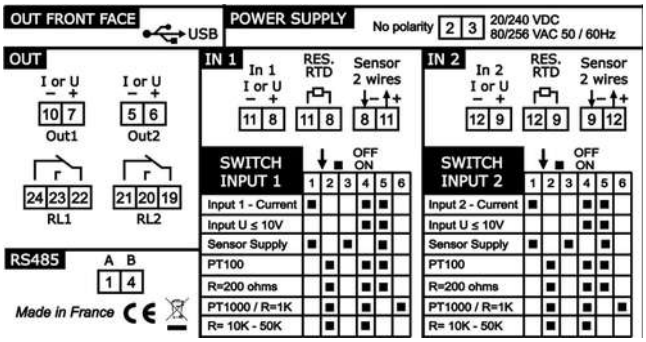
EOLIS 3000P2



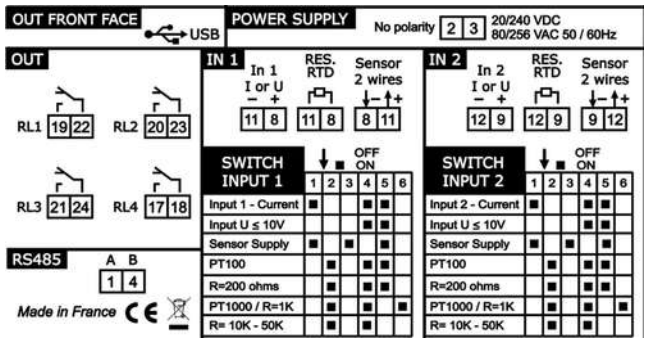
EOLIS3200P0



EOLIS3200P2



EOLIS3400P0



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