



Pulse concentrator

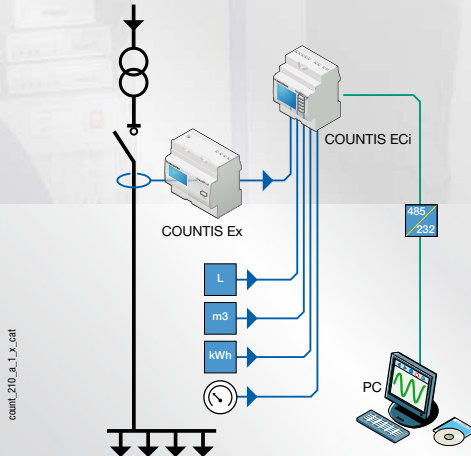
➤ Function

The **COUNTIS ECix** is a multi-fluids pulse concentrator communicating via an RS485 link using JBUS/MODBUS®. Through 7 insulated on/off inputs and 2 analogue inputs (COUNTIS ECi3 version), it counts the number of pulses from different energy meters (water, air, gas, electricity...) and transmits this information to a PC equipped with ENERGY REPORTING software or to a PLC.

➤ Conformity to standards

- | | |
|-----------------|------------------|
| • IEC 61010-1 | • IEC 61000-4-8 |
| • IEC 61000-4-2 | • IEC 61000-4-11 |
| • IEC 61000-4-3 | • IEC 60068-2-6 |
| • IEC 61000-4-4 | • IEC 60068-2-11 |
| • IEC 61000-4-5 | • IEC 60068-2-30 |
| • IEC 61000-4-6 | |

➤ Applications



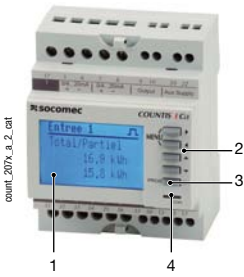
In the knowledge that electricity is not the only energy consumption source, COUNTIS allows centralising of other units such as water, air or gas.

ENERGY REPORTING software, via the **COUNTIS ECix** concentrator and its RS485 link JBUS/MODBUS® protocol, allows centralising all these consumptions whilst guaranteeing an optimal accuracy and ease of exploitation (Windows environment).

The **COUNTIS ECix** provides:

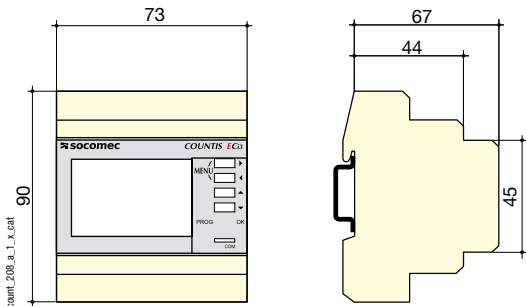
- Easy to use: a wide LCD screen with 4 lines and 5 direct access keys.
- 7 partial, overall, daily, weekly or monthly totalisers to account for the kWh or other type of quantities (liters, cubic meters, Euros...).
- Status of the 7 inputs (to centralize dry contacts information from the installation).
- 2 analogue inputs 0/4 ... 20mA to centralize the analog sensor value (flow, pressure...)
- The 7 logical inputs and the 2 analogue inputs can reconstitute an average value as required over a period of 8, 10, 15, 20 or 30 minutes. Stored in 10-minute segments for 170 days.
- A configurable logical output (configurable alarm, logical equation...)

➤ **Front panel**



1. Backlit LCD screen.
2. Navigation keys.
3. Validation pushbutton in programming mode.
4. Communication status indicator (COM).

➤ **Case**



Type	Modular
Number of modules	4
Dimensions W x H x D	73 x 90 x 67 mm
Case protection index	IP20
Front protection rating	IP51
Display type	LCD
Terminal blocks type	Fixed
Rigid cable connection section	1 ... 10 mm ²
Flexible cable connection section	0.5 ... 6 mm ²
Weight	215 g

➤ **Characteristics**

Auxiliary power supply	
Self supplied	no
Alternating voltage	110 / 400 VAC
Direct voltage	120 / 300 VDC
Tolerance	± 10 %
Frequency	45 / 65 Hz
Consumption	5 VA
Insulation voltage	3.5 kV

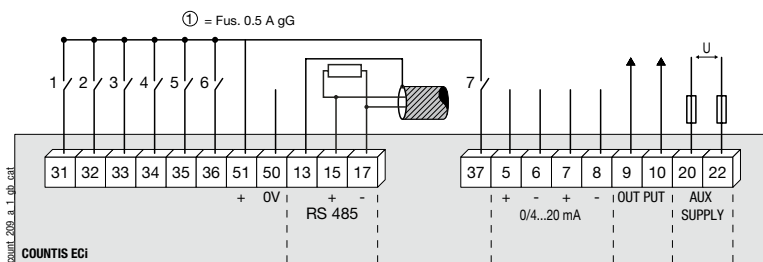
Communication	
Link	RS-485
Type	2 ... 3 half duplex wires
Protocol	JBUS/MODBUS® in RTU mode
JBUS/MODBUS® speed	9600 ... 38400 bauds

On/off inputs	
Number	7
Control voltage (integrated)	10 ... 30 VDC
Minimal signal width	10 ms
Maximum signal width	2 s
Minimum length between 2 impulses	30 ms
Edge triggering	rising

Analog inputs	
Number	2
Current	25 mA
Accuracy	0.5 %
Response time	500 ms
Input resistance	200 Ω
Absorbed power	0.1 VA

Operating conditions	
Operating temperature	-10 ... +55 °C
Storage temperature	-20 ... +70 °C
Relative humidity	95 %

➤ **Terminals and connections**



- 31: on/off input n°1.
- 32: on/off input n°2.
- 33: on/off input n°3.
- 34: on/off input n°4.
- 35: on/off input n°5.
- 36: on/off input n°6.
- 37: on/off input n°7.
- 5-6: Analogue input n°1
- 7-8: Analogue input n°2
- 9-10: Output
- 20-22: Power supply
- U=110...400 VAC ± 10%

51-50: Inputs internal/
external power supply

13-15-17: RS 485 link

➤ **References**

	COUNTIS ECI2	COUNTIS ECI3
Auxiliary power supply U_s	Reference	Reference
230 / 400 VAC	4853 0000	
230 / 400 VAC + 2 analogue inputs		4853 0001
Description of accessories	Reference	Reference
Panel mounting kit	192J 8015	192J 8015