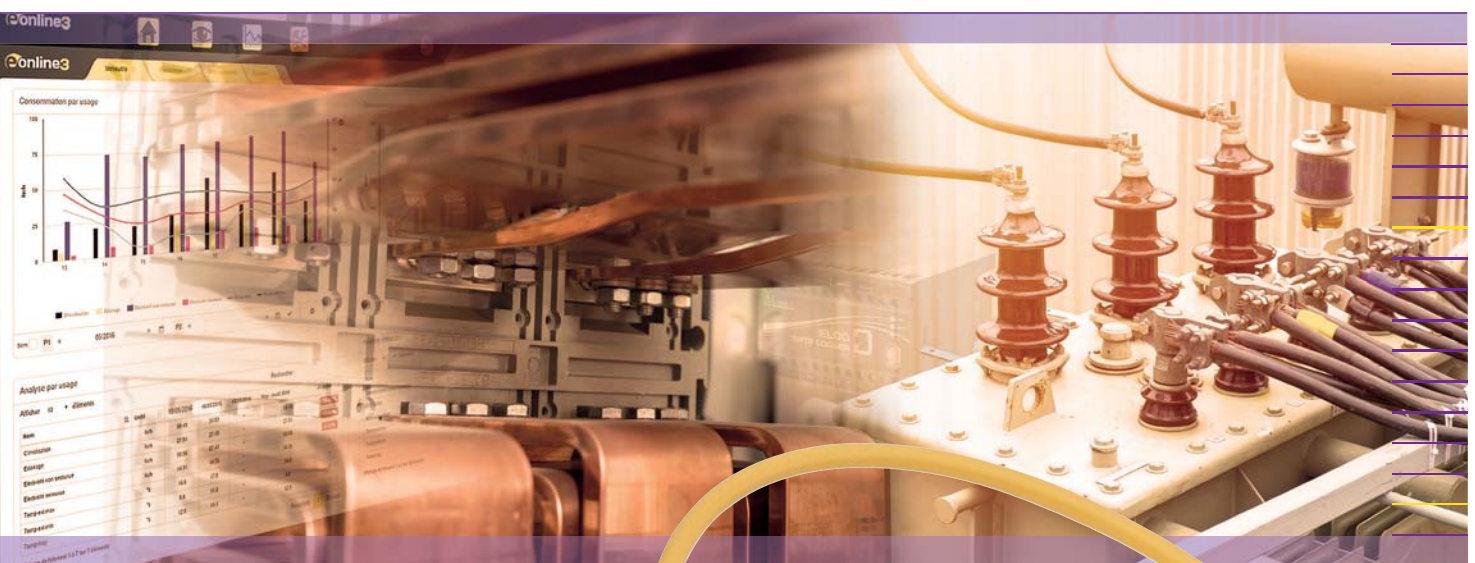


# ULYS FLEX Modbus



## Metering solution on Rogowski coils

Quick set-up

Reduced installation costs

Wide dynamic range for measurement  
(0.3 A to 20,000 A)

RS485 Modbus RTU communication

ISO 50001



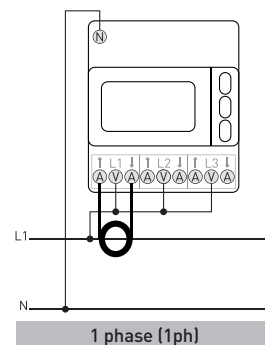
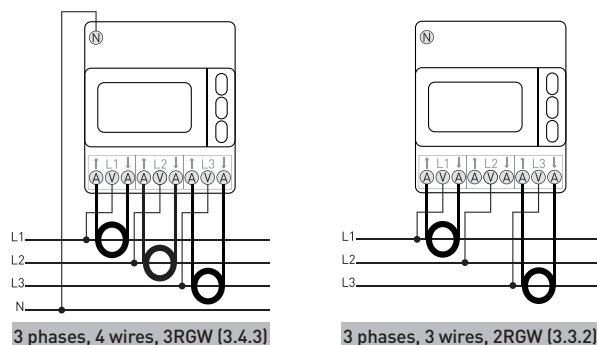
Measure up



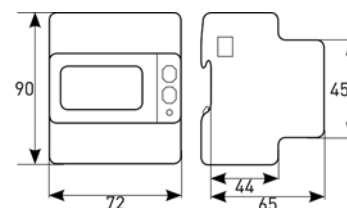
## Specifications

AUXILIARY POWER SUPPLY	
Voltage range	85 ... 265 V <sub>AC</sub>
Safety	300 V CAT III
Maximum consumption	1,6 VA - 1W
Type-T fuse (for mounting on exterior)	250 mA
Frequency	50/60 Hz
VOLTAGE MEASUREMENT	
Voltage range	3x10/17 ... 3x285/495 VAC — 50/60 Hz
Safety	300 V CAT III
Minimum voltage for FFT calculation	20/35 VAC (multiplied by the VT ratio) with direct connection
CURRENT MEASUREMENT	
Maximum value	3 selectable ratings (FSA = Full Scale Ampere): 500 A (700 A max.), 4,000 A (5,600 A max.) or 20,000 A (28,000 A max.)
Inrush current (IST)	0.3 A for FSA 500 A, 1 A for FSA 4,000 A, 10 A for FSA 20,000 A
Minimum for FFT calculation	70 A for FSA 500 A, 400 A for FSA 4,000 A, 1,500 A for FSA 20,000 A 2 % accuracy of harmonics ± 2 digits
ACCURACY	
Voltage	± 0.2 % of reading in the range 10 % FS ... FS (FS = Full Scale)
Current	± 0.4 % of reading in the range 5 % FS ... FS
Power	± 0.5 % of reading ± 0.1 % FS (PF=1)
Frequency	± 0.1 % of reading ± 1 digit in the range 45 ... 65 Hz
Active energy	Class 1 compliant with IEC/EN 62053-21
Reactive energy	Class 2 compliant with IEC/EN 62053-23
SCREEN & KEYPAD	
Display	Backlit LCD, 43 x 29 mm — 3 lines, 4 digits + symbols
Keypad	3 keys + 1 protected button
COMMUNICATION PORT	
Type	Optically-isolated RS485
Protocols	MODBUS RTU/ASCII
Baud rate	300 ... 57,600 bps
DIGITAL OUTPUT (DO)	
Type	Passive, optically-isolated, polarized electronic output
Maximum values (compliant with IEC/EN 62053-31)	27 VDC - 27 mA
Energy pulse length (for DO in Pulse mode)	50 ± 2 ms ON time
Maximum frequency	8 pulses per second (8 Hz)
Maximum reaction time (for DO in Alarm mode)	1 s
CABLE DIAMETER ON TERMINAL BLOCKS	
Measurement terminal block (A & V)	1.5 ... 6 mm <sup>2</sup>
Terminal blocks for digital output, power supply and RS485 port	0.14 ... 2.5 mm <sup>2</sup>
DIMENSIONS & WEIGHT	
L x H x W, weight	72 x 90 x 65 mm, max. 436 g
ENVIRONMENTAL CONDITIONS	
Operating temperature	- 25 °C ... + 55 °C
Storage temperature	- 25 °C ... + 75 °C
Max. humidity (without condensation)	80 %
Altitude for product operation	< 2,000 m
Vibrations or shocks (sinusoidal amplitude)	50 Hz ± 0.075 mm
Ingress Protection - front panel	IP51 (for mounting in a box or cabinet with equivalent or higher protection)
Ingress Protection - terminal blocks	IP20
Pollution degree	2
Installation and use	Indoor
COMPLIANCE WITH STANDARDS (FOR THE PARTS APPLICABLE TO THE INSTRUMENT)	
Directives	2066/95/EC, 2004/108/EC
Safety	EN61010-1, EN 61010-2-030, EN 61010-2-032
Electromagnetic Compatibility (EMC)	EN61326-1, EN 55011, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4 EN 61000-4-5 EN 61000-4-6, EN 61000-4-11, EN 61000-6-2

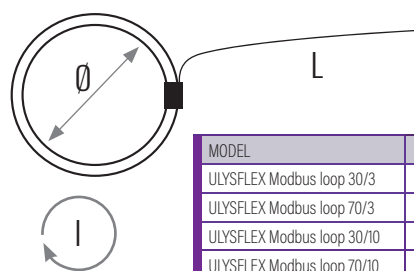
## Connection



## Meter dimension (mm)



## Dimensions of Rogowski coils



MODEL	l (cm)	Ø (cm)	L (m)
ULYSFLEX Modbus loop 30/3	30	10	3
ULYSFLEX Modbus loop 70/3	70	22	3
ULYSFLEX Modbus loop 30/10	30	10	10
ULYSFLEX Modbus loop 70/10	70	22	10

## To order

REFERENCE	DESCRIPTION	PRODUCTOS ASOCIADOS
P01331046	ULYSFLEX Modbus loop 30/3	ULYS submeters
P01331047	ULYSFLEX Modbus loop 70/3	ELOG DATA LOGGER
P01331048	ULYSFLEX Modbus loop 30/10	E.ONLINE 3 software
P01331049	ULYSFLEX Modbus loop 70/10	Radio Frequency solutions

## Advantages

- Installation on busbars or conductors with large dimensions or cross-sections
- Possibility of inserting the flexible coils in confined spaces
- Mounting of ULYSFLEX Modbus without cutting off the electrical feeder
- Guarantee of the accuracy class over a wide range for current measurement (5 % to 100 % of full scale)

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