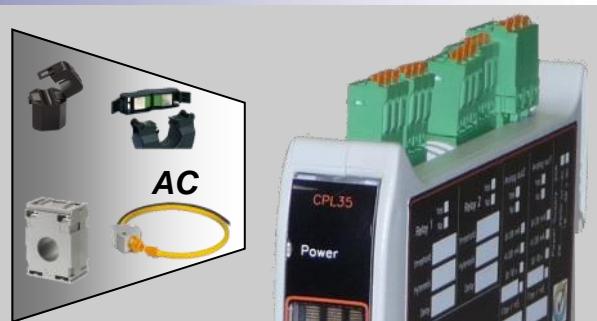




- Continuous or alternative RMS measures:**

- Single-phase or balanced three-phase 0...440 Hz
- PWM, wave train,
- Phase angle variation,
- All high level harmonics signals



- multi-sensor for current measurement:**

- Shunt, transformer, Rogowski coil,
- Hall effect sensor or direct input 1A/ 5A



- Programmable:**

- Voltmeter, ammeter, wattmeter, varmeter, power factor, Cos phi, frequency meter

- 4 digits measure display**

- U, I, Cos, P, Q, Hz

- Up to 2 isolated analog outputs and 2 relay outputs**

- Wide range universal ac/dc power supply**

The CPL35 is a converter for measuring, monitoring and retransmission of electrical parameters. Implementation is fast by simple configuration of transformer ratio or shunt sensitivity. The various output options allow a wide range of application: measurement, protection, control.

**Measurement:**

- DC or AC, single-phase or balanced three-phase network (configurable TP, CT ratio or shunt sensitivity),
- 2 voltage calibers: 150V, 600V others on request up to 1000V,
- 3 current calibers: 200mV (external shunt), 1A or 5A internal shunt,
- Hall effect current sensor (+/-4V input)
- active (P), reactive (Q), apparent (S) powers,
- cos φ (power factor), frequency 1Hz.....440 Hz,
- configurable integration time from 10 ms to 60 seconds for the measurement in slow waves train applications.

**Front face:**

- 4 digit alphanumeric LED matrix display for the measurement,
- 2 red LEDs to display the status of relays,
- 2 push buttons for:
  - \* The complete configuration of the device
  - \* Selecting the displayed value (U, I, Cos, P, Q, S, Hz)
  - \* Setting of alarm thresholds, .....

**Relays (/R option):** Up to 2 configurable relays:

- In alarm, monitoring measure selection (U, I, Cos, P, Q, S, Hz),
- Threshold, direction, hysteresis and delay individually adjustable on each relay (on & off delay),
- HOLD function (alarm storage with RESET by front face).

**Analog output (/S option):** Up to 2 isolated analog outputs:

- Measuring type and range to monitor: (U, I, Cos, P, Q, S, Hz),
- Analog output type and range (0 .. 10V, 0 ... 4 ... 20mA),
- One bipolar signal (+/-10V) by association of the two outputs,
- Response time (filter), limitation set ... for each outputs

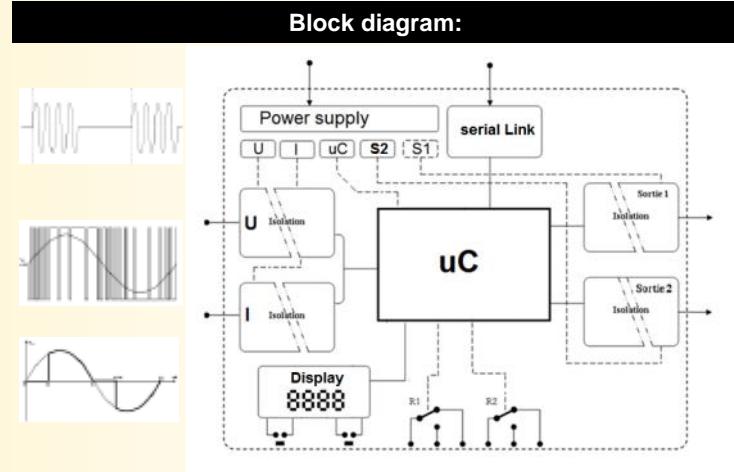
**Configuration:**

The device can be configured via the front face or via the serial RS232  
(USB cable -> 3.5 jack supplied separately)

- Firmware update is possible via this USB link.

**Realization:**

- Housing width 23 mm, DIN rail mounting (symmetrical),
- protection rating: IP20,
- pluggable connectors,
- Pivoting front face (buttons and serial access),
- Conformal coating.



Version and order code:	
<b>CPL35</b>	Converter with 1 analog output
<b>CPL35/R1</b>	+ 1 relay
<b>CPL35/R2</b>	+ 2 relays
<b>CPL35/S2</b>	2 analog outputs
<b>CPL35 - Rogo :</b>	Input for Rogowski coil. Type: Rogoflex LT (Up to 2000 Arms)
<b>CPL35 - Hall :</b>	Input for split core Hall effect sensor. Type: HcO (Up to +/- 1200Adc + ac)
<i>Note : Options can be combined.</i>	
<b>DPL35/R1</b>	1 relay without analog output
<b>DPL35/R2</b>	2 relays without analog output

INPUT			ANALOG OUTPUT (S1 and S2)		
TYPE ac/dc voltage Input impedance Overload Measurement Threshold Power consumption	RANGE 150 V, 600 V 500 Kohms - 2Mohms 1500V during 3 s 0.5% of caliber 0.12 W	ACCURACY +/- 0.3% caliber  +/- 4V for Hall effect sensor (+/-15V sensor supply)	TYPE current : permissible load: voltage: output impedance:	RANGE 0 ... 4 ... 20 mA 0.....850 Ohms 0 ... 10 V 500 Ohms (internal shunt 0.1%)	ACCURACY +/- 20 µA +/- 10 mV
ac+dc current Input impedance Overload Measurement Threshold Power consumption Frequency	250mV, 1A / 5 A 0.05 ohms: 5A / 0.25 ohms: 1A 6 x IN during 3 s 0.5% of caliber 1.25 W 1Hz....440 Hz	+/- 0.3% caliber +/- 4V for Hall effect sensor (+/-15V sensor supply) +/- 0.2 %	Universal: standard: low voltage:	(2 not polarized versions: standard or low voltage) 21Vdc, 55Vac....to.....265Vac/dc, 3VA 12Vdc....to.....30Vdc, 3VA	
Other calibers on request. Note: use transformer for higher range in AC.					
METROLOGY			ENVIRONMENT		
(the accuracies are given in percentage of full scales)			Operating temperature	-20 / 60 °C	
Active or dc power	+ / - 0.5%		Storage temperature	-40 / 85 °C	
Reactive power	+ / - 1% (in % of apparent power)		Drift (% of full scale)	< 0.03 % / °C	
Cos phi	+ / - 0.5%		Relative humidity	85 % not condensed	
(conditions: Freq 45/65 Hz, power factor > 0.7, peak factor 1.4; calibers U / I 10 to 90%)			Weight	~ 250 g	
measures / response time:			Protection	IP20 (option IP65 front)	
integrator response time programmable from 10ms to 60s.			Dielectric strength	1500 Vrms continuous	
			MTBF (MIL HDBK 217F)	Inputs/Power/Outputs/Relays > 3 000 000 Hrs @ 25°C	
			Service life	> 200 000 Hrs @ 30°C	

Electromagnetic compatibility 2004/108/CE / Low Voltage Directive 2006/95/EC

Immunity standard for industrial environments EN 61000-6-2	Emission standard for industrial environments EN 61000-6-4
<a href="#">EN 61000-4-2 ESD</a>	<a href="#">EN 61000-4-8 AC MF</a>
<a href="#">EN 61000-4-3 RF</a>	<a href="#">EN 61000-4-9 pulse MF</a>
<a href="#">EN 61000-4-4 EFT</a>	<a href="#">EN 61000-4-11 AC dips</a>
<a href="#">EN 61000-4-5 CWG</a>	<a href="#">EN 61000-4-12 ring wave</a>
<a href="#">EN 61000-4-6 RF</a>	<a href="#">EN 61000-4-29 DC dips</a>



## WIRING AND OUTLINE DIMENSIONS:

