

OVERCOMB-36

Single Phase Pole Metering unit (LPIT)

This combined sensor (LPIT) has been specially designed for outdoor measurement applications, current and voltage, on MV lines up to 36 kV.



APPLICATIONS

MV sensors are a key component of smart grid distribution networks, for the surveillance of MV network conditions by monitoring significant points of the grid.

Their reliability, accuracy and compact size enable comply with the most demanding MV distribution-automation applications.

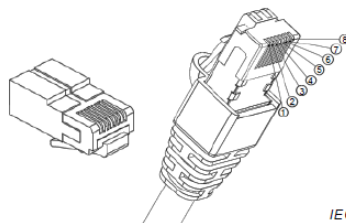
- > Component of modern FLISR schemes (Fault Location, Isolation and Service Restoration).
- > Voltage and current measurement for switching equipment such as Load Break Switches or disconnectors.
- > Any application that requires measurement of voltage and current in overhead lines, such as power quality, energy losses control, etc.

Ideal complementary component in deploying advanced functionalities in the network, changing MV grids into Smart Grids.

MAIN FEATURES

- > Compact dimensions.
- > Simple installation in outdoor applications.
- > Resistive divider with linear response for voltage measurement (LPVT) and low power current transformer (LPCT) for current measurement.
- > Accuracy and high reliability in a wide range of temperatures.
- > "Plug and measure". No on-site calibration required.
- > Protection and measurement functions using the same sensors.
- > Complete range of tests applied to guarantee the maximum safety.
- > Silicon housing of primary element in voltage sensor (LPVT) and Cycloaliphatic Epoxy Resin (CEP) of current sensor (LPCT).
- > According IEC 61869-6, -10, -11.
- > ANSI, IEEE standards upon request.

8 way, shielded, free connector (RJ45)
IEC 60603-7-1



RJ45 Pin out	PIN:	1	2	3	4	5	6	7	8
Passive LPCT		S1	S2						
Passive LPVT								a	n

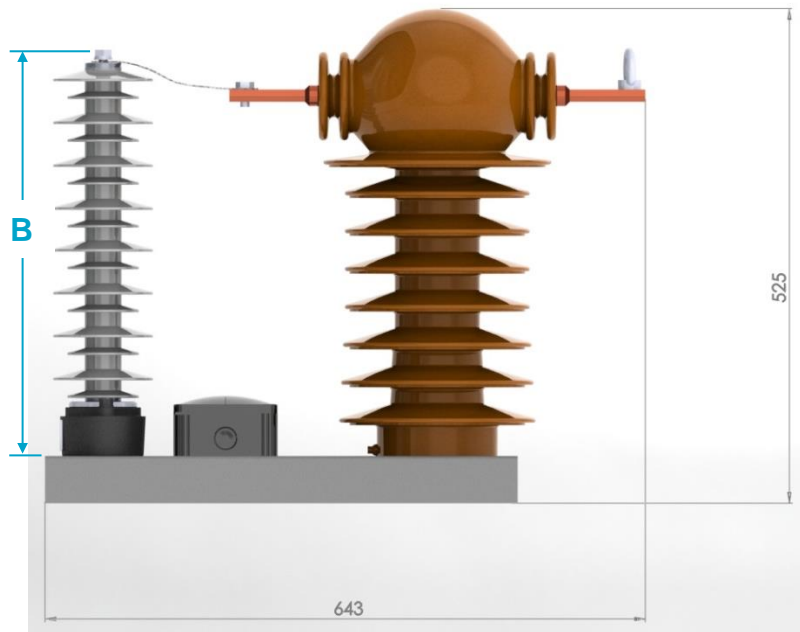
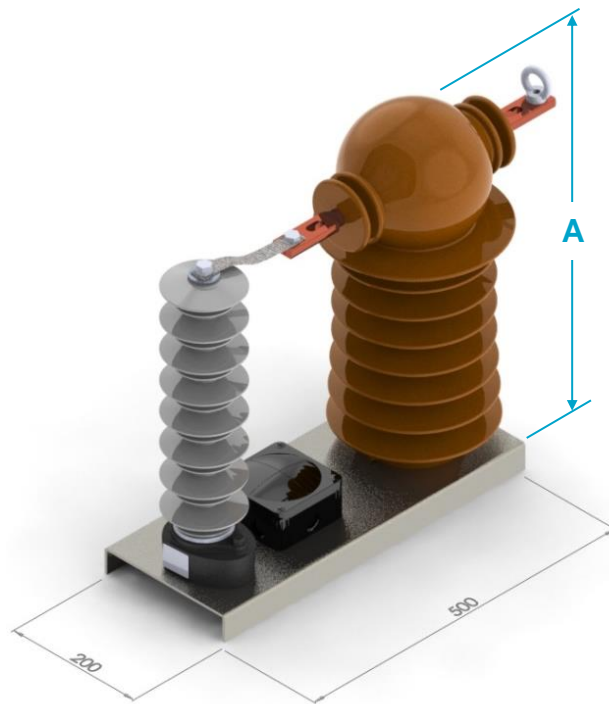
TECHNICAL SPECIFICATIONS

Electrical Characteristics		
Highest voltage for equipment (U_m)		36 kV
Rated insulation level	Dielectric strength	70 kV
	Lightning impulse (BIL)	175 kVp
Partial discharges		<50pC at 43.2 kV
LPVT		
Voltage ratio (*) ($K=U_{PR}/U_{SR}$)		$30000/\sqrt{3} \div 3.25/\sqrt{3}$
Accuracy (IEC 61869-11)	Class 0.5P	0.5% / 20' (0.8 \div F _V U _{PR})
	Class 1P	1% / 40' (0.8 \div F _V U _{PR})
Rated burden (R_{br})		2 M Ω (other burden upon request)
Voltage factor (F_V)		1.2 U _N / 1.9 U _N 8 h
LPCT		
Rated transformation ratio (*) ($K_r: I_P @ U_{sr}$)		500 A @ 225 mV
Rated extended primary current (I_{epr})		750 A
Rated accuracy class (IEC 61869-10)		Class 0.5 / 5P 10000 A Class 0.5S / 5P 10000 A
Rated short-time thermal current (I_{th})		32 kA
Rated dynamic current (I_{dyn})		2.5 I _{th}
Rated Burden (R_{br})		2 M Ω (*)
Rated phase Offset (ϕ_{or})		0° (proportional LPCT)
Operation conditions (*)		Temperature from -25°C to +60°C
Storage conditions (according to EN60870-2-2 Class C3)		Temperature from -25°C to +75°C Relative humidity from 10 to 100%
Frequency (f_r)		50 Hz / 60 Hz

*Other values upon request

Mechanical Characteristics		
Materials LPVT	Insulation	Silicone
	Circuitry	Polyamide 6
RoHS compliant 2002/95/EC		

Mechanical characteristics		
Materials LPCT	Insulation	Cycloaliphatic resin
	Circuits	Polyamide 6
RoHS according 2002/95/EC		

DIMENSIONS


	A	B
Height (mm)	460	360
Leakage distance (mm)	1177	1130
Weight (kg)	15	2