



# Zelisko Non Conventional Instrument Transformer up to 72.5 kV

Smart Grid Sensor Solution For Wind Turbines

Suitable for Several Installation Configurations :

- GIS in turbine tower
- GIS in transition piece
- GIS split between tower and transition piece

Voltage Sensor with F-type HV NKT - plug connection



Bay with T-connectors



Voltage Sensor

High- Precision Measurement through combination of Zelisko Low-Power Voltage Sensors (Upto 72.5kV) with the VMA Voltage Amplifier the Sensor Technology can be applied for Class 0.2 Tariff Metering Solution

## Non Conventional - Instrument Transformer

	LPVT	VT
Datasheet:	UW1072-1	VGM72
Insulation level:	72.5 / 140 / 325 kV	72.5 / 140 / 325 kV
Rated frequency:	50 Hz / 60 Hz	50 Hz / 60 Hz
Rated voltage:	max. 66kV / $\sqrt{3}$	max. 66kV / $\sqrt{3}$
Rated secondary voltage:	3,25/ $\sqrt{3}$ V	100V/ $\sqrt{3}$ or 110V/ $\sqrt{3}$
Standard:	IEC61869-6/IEC61869-11	IEC61869-6/IEC61869-3
Rated Accuracy class:	0,2 / 0,5 / 1 / 3P / 6P	0,2 / 0,5 / 1 / 3P / 6P
Rated Output Burden:	-	25VA(0,2) / 75VA(0,5)
External Conditions:	Operation: -25°C to +40°C or -40°C to +40°C Storage: -40°C to +80°C	
Burden: (Input Impedance)	10 M $\Omega$ $\pm$ 5%, 75 pf $\pm$ 10%	-
Connection Cable / Interface:	Customer Defined	Customer Defined
Cable Connector type:	EN50181 type F	EN50181 type F

## IEC International Standards

IEC 61869-2: Additional requirements for current transformers  
 IEC 61869-3: Additional requirements for voltage transformers  
 IEC 61869-6: Additional general requirements for low-power instrument transformers  
 IEC 61869-10 (IEC 60044-8): Additional requirements for low-power passive current transformers  
 IEC 61869-11 (IEC 60044-7): Additional requirements for low-power passive voltage transformers

## VOLTAGE METERING AMPLIFIER - VMA

MORE FLEXIBILITY FOR METERING IN SMART GRID APPLICATIONS



## ZELISKO VMA

The Zelisko VMA is an active high-precision voltage amplifier with 3 Channels. In Combination with Zelisko low-power voltage sensors it converts the output volt ages from 3.25/ $\sqrt{3}$  V to 100/ $\sqrt{3}$  V or 110/ $\sqrt{3}$  V. Therefore, the use of Zelisko sensor technology is no longer limited to metering equipment with built-in low-voltage inputs.

## ADVANTAGES

- Precise true analog voltage metering according to IEC 61869-11, Accuracy class 0.2
- Immediate operation without additional on-site calibration
- Independent amplification of up to three sensor signals
- Simple installation on DIN top hat rails
- No requirement for equipment with low-voltage inputs
- Attestation of accuracy through calibrated measurement and calibration Certificate according to ISO/IEC 17025