

## **5CTA**

Single Phase & Three Phase ESMR5 Meters





# A **Smart Metering** platform with **LTE cellular technology**

Along with ZIV's meter management software, the user can configure the meter: events, TOU, synchronization schema, and many more. **5CTA** smart meter can be operated using DLMS/COSEM application data. This implementation is adapted to different data model depending on the interface.

- ✓ Robust automated meter reading (AMR) solution for DNOs
- ✓ Energy measurement, load profile and Time of Use (TOU) features
- ✓ Multiple communication interfaces:



- An interface to communicate with the customer (wireline).
- wireless M-Bus communication to gather data from other meters (water, heat or gas meters).
- 3 LTE telecommunications to share information with the central system using the DLMS protocol.
- 4 Optical port for service configuration and maintenance.



#### **Main Applications**

- Instantaneous measurement of voltage, current and power factor per phase, as well as instantaneous network frequency.
- Provide meter present reads (electric and non-electric data) to other service modules through P1 interface.
- Load profile recording including not only electrical energies, but also non-electrical measurements (e.g m3 gas).
- Versatile Time of Use (TOU) module with up to 4 seasons, 4 weekly profiles, 4 types of days and 2 tariff rates
- · Remote communication through P3 interface.
- · Time synchronization.
- Event recording. Event and alarm recording with broad set of manageable events.
- Power Quality recording. Voltage variations outside the established thresholds and long term voltage interruptions.
- · Self-diagnosis and monitoring.

### **Equipment Interfaces**

- P3 interface for remote reading. LTE module.
- P2 interface for communication with non-electrical meters. Wireless M-BUS module.
- P1 interface for communication with OSM (Other Service Module), wired interface with a RJ12 connector.
- P0 interface. Service and Maintenance optical port.
- HMI for local reading and LEDs for status indication and accuracy testing.

#### **Technical Information**

	Three Phase	Single Phase
Active Energy accuracy	Class B (EN 50470-3)	
Verification test constant	1000 pulses / kWh	
Current reference value	3 x 5 A	5 A
Starting current	10 mA	
Maximum current	100 A	80 A
Power absorbed by the current circuit (Iref)	<0.1 VA	
Voltage rated values	3 x 230 V	230 V
Consumption	<10 VA (*)	
Specified operating range	-25°C to +55 °C	
Optical port	According to IEC 62056-21	
P1 port	2 wires / RJ12 connector	
P2 port	Built-in Wireless M-BUS module	
P3 port	Built-in LTE module. CAT1	
Dimensions (mm)	165 x 250 x 71.5	134 x 209 x 49

