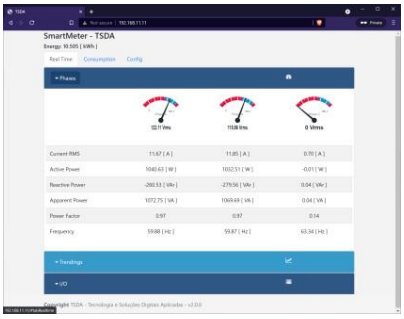
1. Description

The Smart Meter is a device for digitally measuring the quality of electrical parameters and mainly measuring the consumption of an energy source.

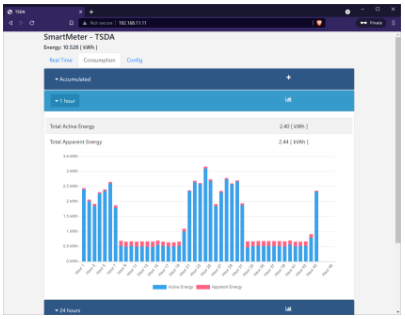
It is an important tool for real-time measurement of energy consumption, mainly for performance and cost analysis in general, it also performs the measurement of energy quality through parameters such as: power factor, phase angle, active/reactive/apparent power, frequency and others.

With a simple web interface it is possible to adjust settings, communication options and operating parameters, as well as being easy to install and can be fixed to the wall or DIN rail.

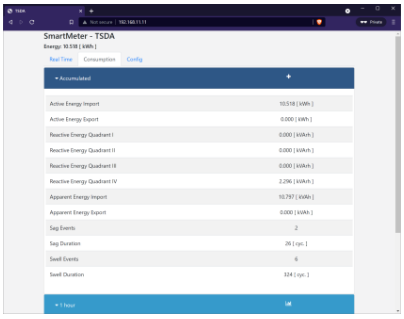
It has easy integration with telemetry and remote control systems through the embedded SNMP protocol, in addition to having an internal memory that allows the storage of 60 days of information.



Real-time quality and consumption analysis



Consumption history graph (60 days)



Total consumption

2. MAIN FEATURES

HIGHLIGHTS

- Class 1 accuracy according to IEC standard;
- SNMP Protocol;
- Compact design;
- Easy installation;
- Single phase, biphasic and triphasic.

CONSUMPTION AND EVENTS

- Imported active energy;
- Exported active energy;
- Imported apparent energy;
- Exported apparent energy;
- Reactive energy (quadrant I, II, III, IV);
- Overvoltage and undervoltage (with full duration);
- Accumulated consumption of the day/week/month;
- History of energy consumption and quality (up to 60 days).

PARAMETERS MEASURED IN REAL TIME (PER PHASE)

- RMS Voltage;
- RMS Current;
- Active Power;
- Reactive Power;
- Apparent Power;
- Power Factor;
- Frequency;
- Phase to phase current
- Total active energy Wh;
- Total reactive energy Wh.

REMOTE MONITORING

- Integrated web server;
- 6 I/O configurable for integration with other sensors and alarm, telemetry and control devices.

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3. TECHNICAL SPECIFICATIONS

SPECIFICATIONS	
Rated Input Voltage	0 a 300 [Vca] (50/60 [Hz])
Rated Load Voltage	< 2 [VA]
Rated Input Current	50 [mA]
Maximum Current per Phase	100 [A] (SM100S) e 600[A] (SM600S)
Phases Number	Single phase, Biphasic and Triphasic
PRECISION	
Voltage	0.5% ± 2 digits
Current	0.5% ± 2 digits
Frequency	± 0.1[Hz]
Power Factor	± 3 digits
Active Power [W]	1% ± 1 digit
Reactive Power [Var]	1% ± 1 digit
Apparent Power [VA]	1% ± 1 digit
Active Energy [Wh]	Class 2
Reactive Energy [Varh]	Class 3
Input Frequency	50/60 [Hz]
Wave Frequency	Sinusoidal
COMMUNICATION PORTS	
Port TCP/IP Ethernet 10/100 / Connector	01 / RJ45
GENERAL FEATURES	
External dimensions (W x H x D)	Rail DIN IP 40: 16 [cm] x 9 [cm] x 5 [cm] (WxHxD)
Weight [kg]	0,375[g] (with three TC – 0,765[g])
Dimensions (W x H x D)	158 [mm] x 85 [mm] x 30 [mm]
Optional Power Input	9 [Vcc] a 60 [Vcc]
Operating Temperature	0º a 65 [ºC]
Maximum humidity	80% uncondensed

4. FRONT PANEL AND CONNECTIVITY