PRIMATA
Tecnologia Eletrônica

Technical Specifications

P80

Standard Energy Meter Test Equipment

(Wireless Transmission)

Presentation

The **Standard Energy Meter Test Equipment P80 (Wireless Transmission)** is designed for fast and highly accurate testing in **consumer units**. Developed by **PRIMATA ELETRÔNICA**, it meets the demands of the concessionaires of energy and other users **regarding testing electronic and electromechanical meters**.

Portable, robust, and easy-to-use, the **P80 Standard Energy Meter** performs accurate tests using the consumer unit's own load, without any power interruptions, meeting the **0.2% accuracy class**. It operates **wireless** via smartphone or tablet, allowing real-time test execution, management, and customization of field test data.

The **P80 Standard Energy Meter** allows users to **fully manage accuracy tests**, enabling parameterization, execution, and real-time testing. It also allows customization of many mandatory field test information (such as service order, customer, and location data) through user access control and user profile.

Applications

- ✓ Tests of electronic and electromechanical meters meeting 0.2% accuracy class;
- ✓ Inspection of potential technical and non-technical losses in energy meters.;
- ✓ Cut-off and reconnection tests of consumer units;
- ✓ Measurement of electrical parameters;

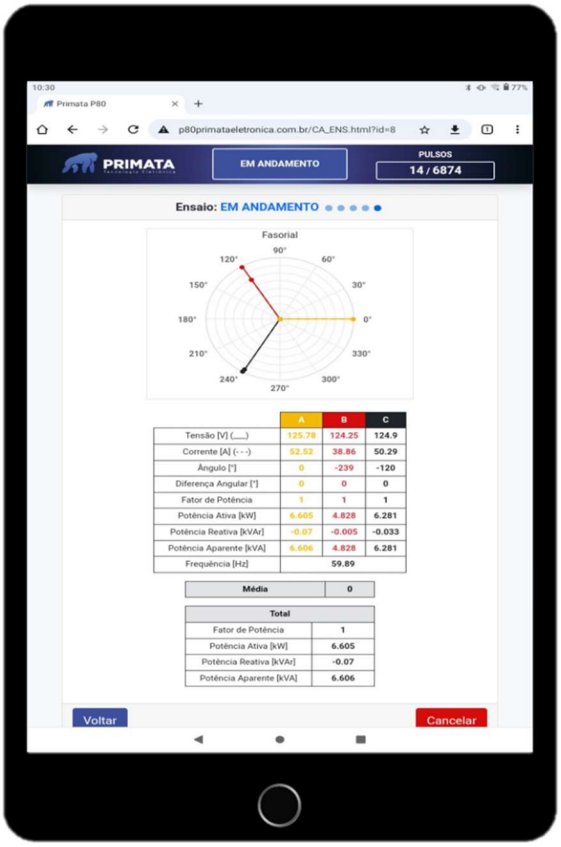
Electrical Parameters

- ✓ RMS Voltage (A, B and C);
- ✓ RMS Current (A, B and C);
- ✓ Phase angle;
- ✓ Angular difference;
- ✓ Power factor (single-phase and three-phase);
- ✓ Active, reactive and apparent powers (single-phase and three-phase);
- ✓ Frequency (A, B and C);
- ✓ Active and Reactive energy;

Features

- ✓ Modern and remote interface via Wi-Fi network, accessible through a smartphone or tablet[1] (Android or iOS) using a web browser (Chrome, Internet Explorer, Edge, Firefox, and Safari);
- ✓ Real-time electrical parameters measurement and test results;
- ✓ Tables and Phasor Diagram of electrical quantities;
- ✓ Storage of reports in memory;
- ✓ Export of test results to other file formats;
- ✓ Automatic generation of the Electric Energy Meter Verification Report.

[1] Smartphone or tablet not included with the equipment.



Electrical Characteristics

Power supply	
Supply voltage	Maximum: 520 Vac (Phase-Phase) Minimum: 70 Vac (Neutral-Phase)
Power phase	Any of the phases
Consumption (fed by the 3 phases)	4.0 Wh in 127 V or 5.0 Wh in 220 V
Auxiliary power	127Vca or 220Vca
Frequency	45Hz to 65Hz
Protection circuit	Yes
Clock-calendar	With rechargeable NiCd battery (200 days autonomy without power)
Full scale (voltage)	520 Vac (Phase-Phase)
Full scale (current)	200A Other scales available upon request
Accuracy Class	0.2% (Wh) 0.4% (VArh)
Maximum error (%)	Accuracy Class / Power Factor
Types of connection	Single-phase, 2-phase, 3-phase (Star), Delta (open and closed) and Indirect Measuring (using VTs and CTs)
Input pulse – Optical Sensor	Yes (maximum frequency 100Hz)
Input pulse – Manual Device	Yes
Output pulse for calibration (Wh and VArh)	Yes (maximum frequency 10kHz)
Communication	Wi-Fi (802.11 b/g/n standard and WPA, WPA2 security)
Memory type	Internal and circular
Memory capacity	Up to 100 tests results
Environmental operating conditions	
Level of protection	IP 65
Temperature	-10 to 60 °C
Humidity	10 to 90% without condensation
Altitude	Up to 2000m
Temperature Coefficient	50ppm/°C
Isolation of connectors	600 Vca

Main Programmable Parameters

Information	Test Parameters	Test Information	Equipment Calibration
Meter Type	✓		
Meter Class	✓		
Connection Type	✓		
Energy Type	✓		
Measurement Type	✓		
Counting Method	✓		
Termination Type	✓		
Constant	✓		
Service Order		✓	
Customer Code		✓	
Responsible		✓	
Address		✓	
City		✓	
Consumer Unit		✓	
Meter Model		✓	
Meter Manufacturer		✓	
Meter Serial Number		✓	
Nominal Voltage [V]		✓	
Nominal Current [A]		✓	
Frequency [Hz]		✓	
Identification Code		✓	
Year of Manufacture		✓	
Other Remarks		✓	
Time			✓
Certificate			✓
Calibration Date			✓
Laboratory			✓
Energy Type			✓
Constant			✓
Number of Readings			✓

Mechanical Characteristics

Dimensions (H x W x D)	90 x 155 x 220 mm
Weight (without accessories)	1580 g
Portable	Yes
Mounting Support	Yes
Box	
Material	Thermoplastic with UV protection, high impact resistance and self-extinguishable
Level of protection	IP 65

Items Supplied with the Product

- ✓ Voltage clips **P10 – Dolphin Clip – CAT III 1000V / 32A** (4 clips):
  - Neutral, Phase A, Phase B and Phase C;
- ✓ Current transformers (3 CTs), rigid (clamp type):
  - Phase A, Phase B and Phase C;
- ✓ Input pulse – Optical sensor;
- ✓ Elastic adapter for optical sensor;
- ✓ Input pulse – Manual device;
- ✓ Auxiliary power cable;
- ✓ Calibration cable;
- ✓ Hardcase;

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