

# Power Analyzers Datasheet



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# 1. INTRODUCTION

## 1.1. General Features

Power Analyzer is able to measure and monitor currents of 3 phases, phase-neutral and phase-phase voltages, frequency, active and reactive powers, apparent powers,  $\cos \phi$  and power factor values. In addition, it records active and reactive energy consumptions.

The demand and peak values for those measured quantities can be monitored via the analyzer.

Many settings (Current Transformer, Voltage Transformer etc.) related to the device can be made through the menu screens.

In the models with communication property, all read parameters can be monitored remotely via standard Modbus protocol and various adjustments can be made.

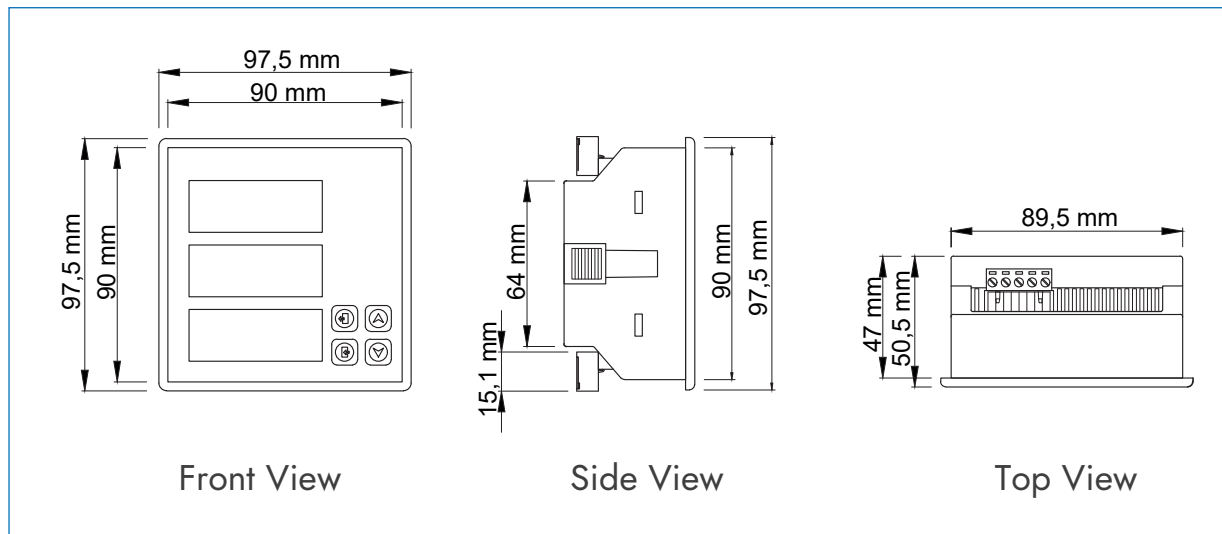
In the models which have relay output feature, relay outputs can be managed according to many different parameters (Current, Voltage, Active and Reactive Power,  $\cos \phi$ , PF etc.) which set through device menu.

## 1.2. Technical Features

- Microprocessor based.
- It supports RS-485 Standard Modbus RTU protocol communication channel.
- The operating ambient temperature of the device is between  $-10^{\circ}\text{C}$  and  $+55^{\circ}\text{C}$ .
- The power consumption of measuring input is under 1 VA.
- The line voltage between phase-phase can be adjusted between 190-36200V.
- The measurement voltage between phase-phase is between 100-480 V AC (45-65 Hz) and the measurement voltage between phase-neutral is 10-280 V AC (45-65 Hz).
- The current transformer ratio can be adjusted between 5/5 and 10000/5.
- Optionally, it can be used with CT30 type current transformers.
- To adjust polarity direction of the current transformers there are three different modes as automatic, manual and reverse.
- The working frequency is 45-65 Hz.

- Minimum measurement values are 2 mA and 10 V.
- The measurement precision is %1.
- It periodically records the peak values of energy, demand and all parameters in non-volatile memory. Even if the energy is cut off, it continues to record the values where it left when the device is open again.
- Demand measurement time can be adjusted to between 1-60 minutes.
- Active, reactive powers and all electrical parameters can be monitored remotely through RS-485 communication channel.
- The peak values of energy, demand and all parameters can be reset in device menu.
- The power consumption in our Power Analyzer: It is 5-10.5 VA in the version with relay output and is between 4.5-9 VA in the normal version.
- Our Power Analyzer can optionally have two 5A relay outputs.
- In our Power Analyzer, there are three 4-digit 7 segment displays.
- The sizes of Power Analyzer are (width-length-depth) 97.5 x 97.5 x 50.5 mm.
- Our Power Analyzer operates under 85-265 V AC voltage.
- Our Power Analyzer has IP20 protection class.
- Our Power Analyzer has current, voltage, active power, reactive power,  $\cos \phi$ , power factor, maximum and minimum peak values, average, demand, total power, phase-phase, frequency, apparent power, THDI, export, control outputs, menu, RS-485 communication (Com) and k (x1000) LEDs.

### 1.3. Technical Drawing



### 1.4. Connection Diagram

