

## Three Phase Energy Meter

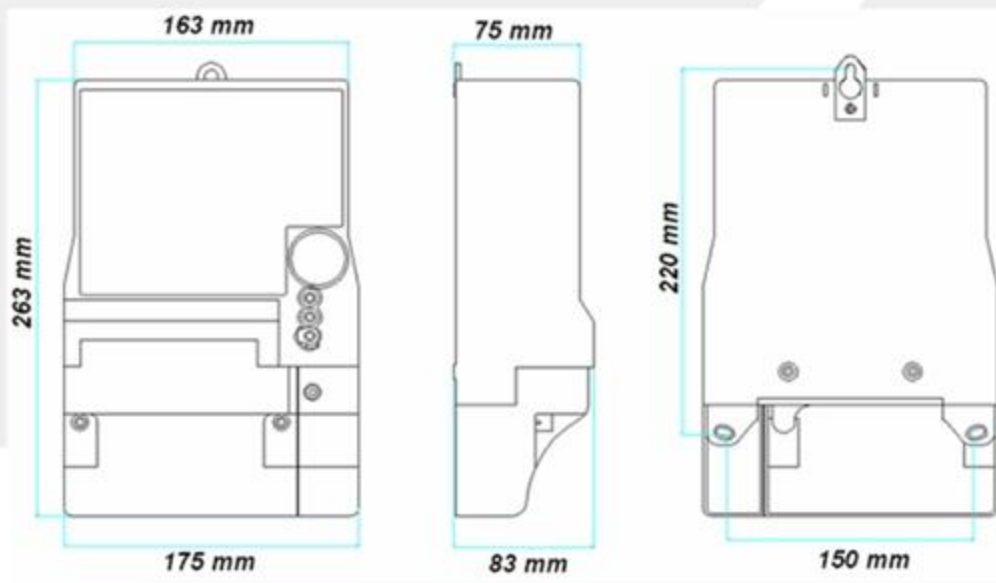
### **P2000-T**

(Upgraded from A1000 & A2000)

Certified by



- Measurement of Active, Reactive and Apparent electricity energy
- Maximum Demand Registration
- Load monitoring with Instantaneous Voltage, Current and Power Factor
- Load Profile recording
- TOU Control with flexible programming of up to 4 tariffs
- Internal real-time clock and calendar with battery backup
- Data storage in non-volatile memory
- Fully AMR (Automated Meter Reading) compatible
- Easily readable data indication on LCD display



### Measurement and Registration

- Energy: KWh, 4-Quadrant KVarh, KVAh
- Maximum Demand with time stamps
- Load profile recording

### TOU (Time of Use) Control

- Tariff switching                      Holidays, Weekend, & Seasons
- Number of tariffs                      4 tariffs
- Programmable Holidays              24 for 10 years
- Number of seasons                    Up to 10 tariff seasons
- Number of daily profiles              4 daily profiles
- Maximum Demand                      4 tariffs

### Data Storage

- Energy
  - Current [T1 ... T4, T $\Sigma$ ]
  - Last 16 months [T1 ... T4, T $\Sigma$ ]
- Max Demand
  - Current [T1 ... T4, T $\Sigma$ ]
  - Last 16 months [T1 ... T4]
- Load profile
  - Integration period: 1, 5, 10, 15, 20, 30 or 60 min
  - 420 days with integration period 60 min
  - 6 independently programmable channels

### Events Registration

- Power outages with date & time
- Phase failure recording with time stamps and energy data
- Per-phase voltage-loss with time stamps
- Voltage-under/over with time stamps
- Per-phase current-loss with time stamps
- Current imbalance with time stamps
- Voltage qualification ratio
- Last meter programming date & time
- Reverse current flow and overload indication on LCD

### Communications

- Optical Port                              IEC 62056
- Infrared interface                      Optional
- RS 232/485                                IEC 62056

### Display

- Cyclic data indication automatically or by buttons
- Data indication on LCD during power outages
- 8 digit LCD

### Security

- Meter programming protected by sealed push-button
- Up to 3 levels of meter access passwords

### P2000-T Technical Specifications

#### Ratings

- System                                      3P 3W, 3P 4W
- Accuracy class                            Class 0.2S, 0.5S, Class 1
- Standard                                    IEC 62053-22, and 23
- Reference voltage Un                      3 x 58/100...240/415V
- Reference (maximum) current  
CT Operated                                1(10)A, 5(20)A
- Current threshold  
CT Operated                                0.001 lb
- Reference Frequency                      50/60 Hz
- Power consumption:
  - in voltage circuit                        < 0.8W; < 1 VA
  - in current circuit                         < 0,05 VA
- Temperature ranges:
  - Working                                    -30°C to +70°C
  - Storage                                    -45°C to +85°C
- Humidity:                                    <= 95%

#### Internal real-time clock with backup batteries

- Time-keeping accuracy                 < 0.5 Sec / 24Hours
- Clock operating with battery            > 15 years
- Clock synchronization through AMR software

#### Inputs and Outputs

- Electric pulse output (SO)              4 programmable channels
- LED test output                            400 - 16000 imp/kWh
- Verification pulse output                Active and Reactive
- 1Hz pulse output                         Duty cycle 50%
- Push-buttons                                Display browsing
- Programming protection

#### Case and Dimension Sizes

- Case Materials                            Reinforced Polycarbonate
- UV Stabilized Cover                      Reinforced Polycarbonate
- Insulation                                    Protective Class II
- Dimensions (mm)                         263 x 175 x 83
- Weight                                        About 1.5 Kg
- Water-proof                                 IP51, IEC 529

### Accompanied Software

Bluestar Metering Program will be provided on request or with meters purchasing. This Windows-based application can be used to program meter's parameters, read meter's data and load profile curves.