Proven technology, highest precision and communication modularity make the MT860 the best solution for production and transmission applications. This multi-functional device meets modern market demands with extended functionalities:

- No power reading via optical port
- Anti-tampering features
- Voltage cut, sag and swell detection
- Power quality monitoring
- Photovoltaic friendly design
- Recyclable casing material
- Exchangeable communication modules
- Exchangeable input/output modules
### MT860 High precision modular meter

#### Type overview

<table>
<thead>
<tr>
<th>Network</th>
<th>CT connected</th>
<th>CT &amp; VT connected</th>
</tr>
</thead>
<tbody>
<tr>
<td>High voltage</td>
<td></td>
<td></td>
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<tr>
<td>Medium voltage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low voltage</td>
<td></td>
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</tbody>
</table>

- 3P4W
- 3P3W

#### Communication type

- on board
- Optical probe + no power reading, RS-485

#### Outputs – on board

- External power supply, Two impulse outputs, RS485

#### Input – output options

- 4 OPTOMOS outputs + 5A bistable relay + 1 input, 5 OPTOMOS outputs + 1 input, 8 OPTOMOS outputs + 4 inputs

### Technical specifications

#### Nominal voltage

<table>
<thead>
<tr>
<th>Un</th>
<th>MT860S-T1 CT connected</th>
<th>MT860S-T1 CT &amp; VT connected</th>
</tr>
</thead>
</table>

- 3 x 57.7/100 V ... 3 x 240/415 V

#### Reference frequency

- 50 Hz ±2 % or 60 Hz ±2 %

#### Current

- Nominal current $I_n$
- Base current $I_b$
- Maximal current $I_{\text{max}}$

- 1 A, 2 A, 5 A, 5//1 A
- –
- 6 A, 10 A

#### Accuracy class

- Active energy
- Reactive energy
- Apparent energy

- Class 0.25 (IEC 62053 - 22)
- Class 2, 3 (IEC 62053-23), calibrated up to 0.5%
- According to the IEC 62053 - 22 standard

#### Real-time clock

- Accuracy
- Back-up power supply

- Crystal: < 5 ppm = ± 3 min./year (T = +25 °C)
- Li battery: 10 years

#### External power supply

- Value
- Tolerance
- Frequency (only for AC)

- 100 – 240 V AC/DC
- 0.8 – 1.15 Un
- 50 Hz or 60 Hz

#### Temperature ranges (IEC 62052 - 11)

- Operation
- Storage

- -40 °C ... +70 °C
- -40 °C ... +80 °C

#### Ingress protection IEC 60529

- IP 53

#### Liquid Crystal Display

- Liquid Crystal Display

#### Basic functionality

- Measurement
- Tariff functions
- Load profiles
- Communication
- Power quality

- Active (import/export) and Reactive energy (import/export), 4Q Reactive, Apparent energy & demand, Phase and three phase energy/demand measurements, Current average, maximum and cumulative demand measurement, Maximum demand can be calculated for all energies measured as tariff rated or cumulative
- Complex time-of-use (TOU), Tariff control via RTC or external inputs
- Two independent Load profiles, Programmable and independent Load profiles period, Event log
- Independent communication channels, MODBUS RTU and MODBUS TCP/IP
- Measurement of RMS phase current, RMS phase voltage, Power factor, Network frequency, Phase angles, Voltage interruptions, Short power outages

#### Specific

- Backlit LCD display, Detection of opening main and terminal cover, Secured communication channels, Network anomalies detection, Communication modules, Input/output modules

- Enhanced Power quality measurement features (Harmonic components, Total harmonic distortion factor, Voltage sags and swells), Load control, RTC (Li battery)

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