# Product data sheet

**Specifications**

**power meter PowerLogic PM5650**, 2 ethernet, up to 63th Harmonic, 1,1MB, waveform, 4DI/2DO 52 alarms

METSEPM5650

**Product availability**: Stock - Normally stocked in distribution facility

**Price**: 4,646.35 USD

#### Main

<table>
<thead>
<tr>
<th>Range</th>
<th>PowerLogic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product name</td>
<td>PowerLogic PM5000</td>
</tr>
<tr>
<td>Device short name</td>
<td>PM5650</td>
</tr>
<tr>
<td>Product or Component Type</td>
<td>Power meter</td>
</tr>
</tbody>
</table>

#### Complementary

**Power quality analysis**: up to the 63rd harmonic waveform capture, voltage sag and swell detection

**Metering type**
- Measured neutral current
- Calculated ground current

**Device Application**
- Gateway
- WAGES metering
- Power monitoring
- Multi-tariff

**Type of measurement**
- Current
- Voltage
- Frequency
- Power factor
- Energy
- Active and reactive power

**Supply voltage**
- 100...300 V DC
- 90...528 V AC 45...65 Hz

**Network Frequency**
- 60 Hz
- 50 Hz

**Line Rated Current**
- 1 A
- 5 A

**Type of network**
- 3P + N
- 3P
- 1P + N

**Maximum power consumption in VA**
- 16 VA 480 V

**Ride-through time**
- 35 ms 120 V AC typical
- 129 ms 230 V AC typical
- 50 ms 125 V DC typical

**Display Type**
- Monochrome graphic LCD

**Display Resolution**
- 128 x 128 pixels

**Sampling rate**
- 128 samples/cycle

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*Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.*
<table>
<thead>
<tr>
<th>Measurement current</th>
<th>50…10000 mA</th>
</tr>
</thead>
</table>
| Analogue input type | Voltage (impedance 5 Mohm)  
Current (impedance <= 0.3 mOhm) |
| Measurement voltage | 20…400 V AC 45…65 Hz between phase and neutral  
20…828 V AC 45…65 Hz between phases |
| Frequency measurement range | 45…65 Hz |
| Number of inputs | 4 digital |
| Measurement accuracy | Apparent power +/- 0.5 %  
Frequency +/- 0.05 %  
Active energy +/- 0.2 %  
Reactive energy +/- 1 %  
Active power +/- 0.2 %  
Voltage +/- 0.1 %  
Power factor +/- 0.005  
Current +/- 0.15 %  
Reactive power +/- 1 % |
| Accuracy class | Class 0.2S active energy IEC 62053-22 |
| Number of Outputs | 2 digital |
| Information displayed | Tariff 8) |
| Communication port protocol | Modbus RTU and ASCII 9.6, 19.2 and 38.4 kbauds even/odd or none - 2 wires 2500 V  
JBUS  
Modbus TCP/IP 10/100 Mbit/s 2500 V  
Ethernet Modbus TCP/IP daisy chain  
BACnet IP  
DNP3 over ethernet |
| Communication port support | RS485  
ETHERNET |
| Communication gateway | Ethernet/serial |
| Data recording | Event logs  
Maintenance logs  
Min/max of instantaneous values  
Data logs  
Alarm logs  
Time stamping |
| Memory capacity | 1.1 MB |
| Web services | Alarm notification by e-mail  
Web server  
Diagnostic via predefined web pages  
Real time viewing of data |
| Ethernet service | SNTP client  
SNMP-Traps |
| Connections - terminals | Voltage circuit screw terminal block4  
Control circuit screw terminal block2  
Current transformer screw terminal block6  
RS485 link screw terminal block4  
Digital input screw terminal block8  
Digital output screw terminal block4  
Ethernet network RJ45 connector2 |
| Mounting Mode | Flush-mounted |
| Mounting support | Framework |
| Standards | EN 50470-3  
IEC 61557-12:2015  
IEC 62053-22:2020  
IEC 62053-24  
IEC 60529  
EN 50470-1  
UL 61010-1  
IEC 62053-23:2020  
IEC 6052-11:2020  
IEC 62052-31:2015 |
| Product certifications | CE IEC 61010-1  
CULus UL 61010-1 |
| Width | 3.78 in (96 mm) |
| Depth | 2.83 in (72 mm) |
| Height | 3.78 in (96 mm) |
### Net Weight
15.87 oz (450 g)

### Environment

**Electromagnetic compatibility**
- Limits for harmonic current emissions class A conforming to IEC 61000-3-2
- Conducted RF disturbances level 3 conforming to IEC 61000-4-6
- Magnetic field at power frequency level 4 conforming to IEC 61000-4-8
- Conducted and radiated emissions class B conforming to EN 55022
- Limitation of voltage changes, voltage fluctuations and flicker in low-voltage conforming to IEC 61000-3-3
- Electrostatic discharge - test level: 8 kV level 4 conforming to IEC 61000-4-2
- Radiated radio-frequency electromagnetic field immunity test conforming to IEC 61000-4-3
- Electrical fast transient/burst immunity test level 4 conforming to IEC 61000-4-4
- Surge immunity test level 4 conforming to IEC 61000-4-5
- Voltage dips and interruptions immunity test conforming to IEC 61000-4-11

**IP degree of protection**
- Display IP54 IEC 60529
- Rear IP30 IEC 60529

**Relative humidity**
- 5…95 % 122 °F (50 °C) non-condensing

**Pollution degree**
- 2

**Ambient air temperature for operation**
- -13…158 °F (-25…70 °C)

**Ambient Air Temperature for Storage**
- -40…185 °F (-40…85 °C)

**Operating altitude**
- <= 9842.52 ft (3000 m)

### Ordering and shipping details

**Category**
- 09777-POWERLOGIC PM5000 HARDWARE

**Discount Schedule**
- PL1

**GTIN**
- 3606489869717

**Returnability**
- Yes

**Country of origin**
- IN

### Packing Units

**Unit Type of Package 1**
- PCE

**Number of Units in Package 1**
- 1

**Package 1 Height**
- 4.53 in (11.5 cm)

**Package 1 Width**
- 4.92 in (12.5 cm)

**Package 1 Length**
- 4.92 in (12.5 cm)

**Package 1 Weight**
- 22.79 oz (646 g)

**Unit Type of Package 2**
- S03

**Number of Units in Package 2**
- 12

**Package 2 Height**
- 11.81 in (30 cm)

**Package 2 Width**
- 11.81 in (30 cm)

**Package 2 Length**
- 15.75 in (40 cm)

**Package 2 Weight**
- 17.93 lb(US) (8.133 kg)

**Unit Type of Package 3**
- P06

**Number of Units in Package 3**
- 96

**Package 3 Height**
- 29.53 in (75 cm)

**Package 3 Width**
- 31.50 in (80 cm)

**Package 3 Length**
- 23.62 in (60 cm)

**Package 3 Weight**
- 161.08 lb(US) (73.064 kg)
<table>
<thead>
<tr>
<th>Offer Sustainability</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable offer status</td>
<td>Green Premium product</td>
</tr>
<tr>
<td>California proposition 65</td>
<td>WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a></td>
</tr>
<tr>
<td>REACh Regulation</td>
<td>REACh Declaration</td>
</tr>
<tr>
<td>EU RoHS Directive</td>
<td>Compliant EU RoHS Declaration</td>
</tr>
<tr>
<td>Mercury free</td>
<td>Yes</td>
</tr>
<tr>
<td>China RoHS Regulation</td>
<td>China RoHS declaration</td>
</tr>
<tr>
<td>RoHS exemption information</td>
<td>Yes</td>
</tr>
<tr>
<td>Environmental Disclosure</td>
<td>Product Environmental Profile</td>
</tr>
<tr>
<td>Circularity Profile</td>
<td>End of Life Information</td>
</tr>
<tr>
<td>WEEE</td>
<td>The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.</td>
</tr>
<tr>
<td>Recommended replacement(s)</td>
<td></td>
</tr>
</tbody>
</table>