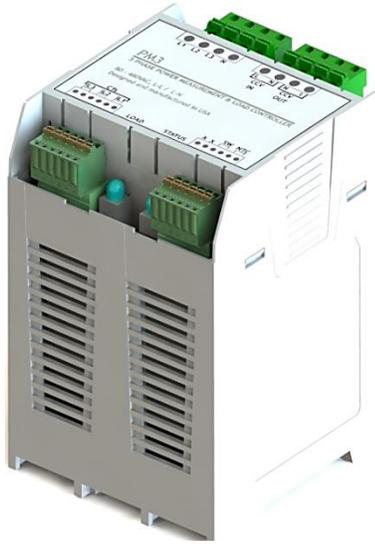


# PM3

## 3 Phase Energy monitoring and load control



### Applications

Three phase, 480VAC, industrial grade energy monitoring and scheduled load control

### Key Features

- Energy monitoring of one to three phase 480VAC (L-L or L-N) loads in heavy industry
- Simple installation without the need for any network or electrical installers.
- Flexible communication options – Wi-Fi, MODBUS TCP/IP, Cellular or Hybrid Power Line-RF
- Flexible data transfer options – to the cloud or to a local dashboard
- Automatic secure network authentication using EAP-PSK and 256-bit ECC encryption
- Flexible load control using external contactors for one to three phase large industrial loads
- Built in time keeping for scheduled load control
- Built in memory for unattended storage of energy parameters

### Technical

Metering	<ul style="list-style-type: none"><li>▪ 80 to 480VAC, one to three phase (L-L or L-N) power metering</li><li>▪ 0.1% accurate energy metering across a 4000:1 dynamic range</li><li>▪ External current transformer (one to three) connection on cage clamp terminal blocks</li><li>▪ External voltage tap connection (one to three) on cage clamp terminal blocks</li><li>▪ Active, reactive, and apparent power. RMS current and voltage. Line frequency and power factor. Cumulative energy</li><li>▪ Configurable 1 second to one day metering and reporting intervals</li><li>▪ Data is stored locally to non-volatile memory when network is unavailable and transferred automatically when network is back up</li></ul>
Control & monitoring	<ul style="list-style-type: none"><li>▪ External contactor control with coil voltage independent of line voltage. 600VAC max @1.2A</li><li>▪ Non-Volatile storage of load schedule.</li><li>▪ On-board real time clock with a 48-hour power backup</li><li>▪ External thermistor input for 10K NTC thermistors</li></ul>
Network	<ul style="list-style-type: none"><li>▪ Multiple plug-in communication options available: Wi-Fi, MODBUS-TCP/IP, Cellular, Hybrid Power Line &amp; RF (one protocol selected at purchase)</li><li>▪ Wi-Fi: 2.4 &amp; 5GHz, Wi-Fi 6, 802.11a/b/g/n/ac/ax, Matter support</li><li>▪ MODBUS-TCP/IP: 57.6 to 230.4 Kbs client</li><li>▪ Cellular: LTE-M/NB-IOT, Onomondo SGP3.2 esim (provisioning is done by end customer. Onomondo account required)</li><li>▪ Power line: Hybrid power line &amp; RF network, CENELEC-B band, auto-connecting mesh network (requires one PLC gateway per site).</li></ul>
Security	<ul style="list-style-type: none"><li>▪ EAP-PSK and network IDs configured at factory ensure that only whitelisted nodes can join the network.</li><li>▪ Secure TLS/SSL based connection between device and the cloud or local on-premises computing.</li></ul>
Power	<ul style="list-style-type: none"><li>▪ 80 – 480VAC nominal, 50-60Hz, single or three phase, L-L or L-N</li><li>▪ 3.5W power consumption when active, less than 0.25W on standby</li><li>▪ OVP category II, Class B compliance</li><li>▪ Fully protected against transients and brownouts with EN55022 Class B isolation</li><li>▪ Separate contactor coil voltage control of 80 to 600VAC, 1.2A for external contactor control.</li></ul>
Mechanical	<ul style="list-style-type: none"><li>▪ 2.66 x 2.95 x 4.21 in [68 x 75 x 107 mm]</li><li>▪ 35mm DIN rail mount</li><li>▪ -40°C to +85°C Operating temperature</li></ul>