

# JuiceMeter Pro Kit<sup>®</sup>

Datasheet EU

## Unlock the full power to charge your EVs

JuiceMeter Pro Kit is a smart metering solution, powered by Carlo Gavazzi, that can monitor building load (C&I grade), available in different configurations, depending on site electrical specifications, desired connectivity and installation requirements.

A JuiceMeter Pro kit is required to activate Load Optimization Pro, the dynamic load management service from Enel X Way. Load Optimization Pro allows to manage in a more effective way the site demand, allocating to the charging process all the remaining demand in excess over the other building loads.

## Key Features

### Compatibility

Compatible with the main grid configurations in Europe and US

### Flexible

Fits with the majority of installation scenarios







### Connectivity

Available with different cloud connectivity option

### Remote Monitored

24/7 remotely monitored, to assure best service reliability

## Kit Composition

					
<b>Gateway</b>	<b>Power Supply</b>	<b>Cellular Kit</b> (OPTIONAL)	<b>Wi-Fi Kit</b> (OPTIONAL)	<b>Meter</b> (different models available)	<b>Current Sensors</b> (CT or Rogowski, only for EM210 Meter model)

## Specifications

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<b>Gateway</b>	<ul style="list-style-type: none"> <li>&gt; Data logger to send real time meter data to the cloud</li> <li>&gt; Ethernet connectivity</li> <li>&gt; Power Supply: 15-28 V DC</li> <li>&gt; Operative Temperature: -20 to 50 °C</li> <li>&gt; Protection degree: IP40 (front), IP20 (screws terminals)</li> <li>&gt; 2 x RS485 port</li> <li>&gt; Mounting: DIN rail (2 modules)</li> </ul>						
<b>Power Supply</b>	<ul style="list-style-type: none"> <li>&gt; Input: 100 ~ 240 V AC</li> <li>&gt; Output: 21.6 V ~ 28 V DC</li> <li>&gt; Operative Temperature: -30 to 70 °C</li> <li>&gt; Protection degree: IP20</li> <li>&gt; Mounting: DIN rail (3 modules)</li> </ul>						
<b>Cellular Kit</b> (connectivity included)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td data-bbox="480 887 655 916">Modem adapter</td> <td data-bbox="683 797 1453 1010"> <ul style="list-style-type: none"> <li>&gt; Adapter to use USB modem</li> <li>&gt; Power Supply: 12-28 V DC</li> <li>&gt; Operative Temperature: -25 to 65 °C</li> <li>&gt; Protection degree: IP40 (front), IP20 (screws terminals)</li> <li>&gt; Mounting: DIN rail (2 modules) – must be installed and connected to the left side of the gateway (special connector)</li> </ul> </td> </tr> <tr> <td data-bbox="480 1167 608 1196">LTE Modem</td> <td data-bbox="683 1021 1453 1346"> <ul style="list-style-type: none"> <li>&gt; Frequencies:               <ul style="list-style-type: none"> <li>&gt; 4G (LTE-FDD): B1, B3, B7, B8, B20, B28A</li> <li>&gt; 3G: B1, B8</li> <li>&gt; 2G: B3, B8</li> </ul> </li> <li>&gt; Self powered via USB connection (to the modem adapter)</li> <li>&gt; Operating Temperature: -40 to 75 °C</li> <li>&gt; Protection degree: IP30</li> <li>&gt; Includes internal and external antennas</li> <li>&gt; Mounting: din mountable via included adapter (needs 5 DIN space)</li> </ul> </td> </tr> <tr> <td data-bbox="480 1368 647 1397">Enel X Way SIM</td> <td data-bbox="683 1368 1406 1397"> <ul style="list-style-type: none"> <li>&gt; Enel X Way MVNO with unlimited traffic for JuiceMeter Pro Kit</li> </ul> </td> </tr> </tbody> </table>	Modem adapter	<ul style="list-style-type: none"> <li>&gt; Adapter to use USB modem</li> <li>&gt; Power Supply: 12-28 V DC</li> <li>&gt; Operative Temperature: -25 to 65 °C</li> <li>&gt; Protection degree: IP40 (front), IP20 (screws terminals)</li> <li>&gt; Mounting: DIN rail (2 modules) – must be installed and connected to the left side of the gateway (special connector)</li> </ul>	LTE Modem	<ul style="list-style-type: none"> <li>&gt; Frequencies:               <ul style="list-style-type: none"> <li>&gt; 4G (LTE-FDD): B1, B3, B7, B8, B20, B28A</li> <li>&gt; 3G: B1, B8</li> <li>&gt; 2G: B3, B8</li> </ul> </li> <li>&gt; Self powered via USB connection (to the modem adapter)</li> <li>&gt; Operating Temperature: -40 to 75 °C</li> <li>&gt; Protection degree: IP30</li> <li>&gt; Includes internal and external antennas</li> <li>&gt; Mounting: din mountable via included adapter (needs 5 DIN space)</li> </ul>	Enel X Way SIM	<ul style="list-style-type: none"> <li>&gt; Enel X Way MVNO with unlimited traffic for JuiceMeter Pro Kit</li> </ul>
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<b>Wi-Fi Kit</b>	<ul style="list-style-type: none"> <li>&gt; Wireless Mode: 802.11b/g/n/ac</li> <li>&gt; Security: WPA3-EAP, WPA3-SAE, WPA2-Enterprise-PEAP, WPA2-PSK, WEP; AES-CCMP, TKIP, Auto Cipher modes, client separation</li> <li>&gt; Ethernet connectivity to the gateway</li> <li>&gt; Power Supply: 9-50 V DC (via 4 pins DC connector). Power supply included</li> <li>&gt; Operating Temperature: -40 to 75 °C</li> <li>&gt; Protection degree: IP30</li> <li>&gt; Includes internal antenna</li> </ul>						
<b>Meters</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td data-bbox="480 1951 555 1980">EM112</td> <td data-bbox="683 1816 1315 2105"> <ul style="list-style-type: none"> <li>&gt; For single phase application</li> <li>&gt; Direct insertion up to 100 Amps</li> <li>&gt; Voltage Range: 230V L-N</li> <li>&gt; Cable cross area section: 5 to 25 mm<sup>2</sup></li> <li>&gt; Operative Temperature: -25 to 65 °C</li> <li>&gt; Protection degree: IP51 (front), IP20 (screws terminals)</li> <li>&gt; Connectivity: Modbus RS485</li> <li>&gt; Mounting: DIN rail (2 modules)</li> </ul> </td> </tr> </tbody> </table>	EM112	<ul style="list-style-type: none"> <li>&gt; For single phase application</li> <li>&gt; Direct insertion up to 100 Amps</li> <li>&gt; Voltage Range: 230V L-N</li> <li>&gt; Cable cross area section: 5 to 25 mm<sup>2</sup></li> <li>&gt; Operative Temperature: -25 to 65 °C</li> <li>&gt; Protection degree: IP51 (front), IP20 (screws terminals)</li> <li>&gt; Connectivity: Modbus RS485</li> <li>&gt; Mounting: DIN rail (2 modules)</li> </ul>				
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	<ul style="list-style-type: none"> <li>&gt; For small three phases application</li> <li>&gt; Direct insertion up to 65 Amps per phase</li> <li>&gt; Compatible with TT, TN, IT grids</li> <li>&gt; Voltage Range: 120 to 230 V L-N/208 to 400 V L-L</li> </ul>
EM340	<ul style="list-style-type: none"> <li>&gt; Cable cross area section: 2,5 to 16 mm<sup>2</sup></li> <li>&gt; Operative Temperature: -25 to 65 °C</li> <li>&gt; Protection degree: IP51 (front), IP20 (screws terminals)</li> <li>&gt; Connectivity: Modbus RS485</li> <li>&gt; Mounting: DIN rail (3 modules)</li> </ul>

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## Meters

	<ul style="list-style-type: none"> <li>&gt; For all three phases application</li> <li>&gt; Measurement via 333mV sensors (CTs or Rogowski coils)</li> <li>&gt; Compatible with TT, TN, IT grids</li> <li>&gt; Voltage Range:             <ul style="list-style-type: none"> <li>&gt; MV5 model: 160 to 240 V L-N/277 to 415 V L-L</li> <li>&gt; MV6 model: 57.7 to 133 V L-N/100 to 230 V L-L</li> </ul> </li> </ul>
EM210	<ul style="list-style-type: none"> <li>&gt; Operative Temperature: -25 to 55 °C</li> <li>&gt; Protection degree: IP40 (front), IP20 (screws terminals)</li> <li>&gt; Connectivity: Modbus RS485</li> <li>&gt; Mounting:             <ul style="list-style-type: none"> <li>&gt; DIN rail (4 modules)</li> <li>&gt; Panel: 72x72 or 96x96 with adapter (sold separately)</li> </ul> </li> </ul>

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## Sensor Options

	<ul style="list-style-type: none"> <li>&gt; Split core current sensor, for cable mounting only</li> <li>&gt; Output: 333mV</li> <li>&gt; Primary current:             <ul style="list-style-type: none"> <li>&gt; 100 Amps model. Max cable diameter: 21 mm</li> <li>&gt; 400 Amps model. Max cable diameter: 36 mm</li> </ul> </li> </ul>
CTV	<ul style="list-style-type: none"> <li>&gt; Secondary wires: 3x24 AWG (0,3 mm<sup>2</sup>)</li> <li>&gt; Operative Temperature: -40 to 65 °C</li> <li>&gt; Protection degree: IP20</li> </ul>

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	<ul style="list-style-type: none"> <li>&gt; Rogowski flexible coils, for both cable and busbar mounting</li> <li>&gt; Output: 333mV</li> <li>&gt; Primary current up to 4000 Amps</li> <li>&gt; Secondary wires: 3x24 AWG (0,3 mm<sup>2</sup>)</li> <li>&gt; Coil length: 350 mm. External diameter 120 mm</li> <li>&gt; Operative Temperature: -40 to 80 °C</li> <li>&gt; Protection degree: IP67</li> <li>&gt; 3 coils included</li> </ul>
Rogowski	