Expert PDU Energy 8311 Series

7- or 20-fold metered PDU with integrated current metering and monitoring

**Features**

- 7 or 20 load outlets on front panel
- Metering of energy, current, power factor, phase angle, frequency, voltage and active / apparent / reactive power
- 2 energy meters per phase, one meter continuously, the other restartable
- Residual current metering type A (8311-2, -14, -16)
- Illuminated two-line LCD display
- Interface for optional sensors for environmental monitoring (temperature, humidity, and air pressure)
- Easy configuration by web browser, Windows or Linux tool
- Firmware update via Ethernet during operation
- IPv6-ready
- HTTP/HTTPS, e-mail (SSL, STARTTLS), DHCP, Syslog
- SNMPv1, v2c, v3 (Get/Traps)
- TLS 1.0, 1.1, 1.2
- Radius and Modbus TCP protocol supported
- Configuration and control via Telnet
- Low internal power consumption
- Developed and manufactured in Germany

**Electrical Connections**

- Power supply safety socket (230 V)
- Load outlets: 7 x safety socket CEE 7/3 (8311-1, -2), 4 x safety socket CEE 7/3 and 16 x IEC C13 (8311-13, -14), 4 x IEC C19 and 16 x IEC C13 (8311-15, -16)
- Ethernet connector RJ45 (10/100 Mbit/s)
- Sensor interface (RJ45) for optional sensor

**Technical Details**

- 19 inch, 1 rack unit
- LxHxD (without brackets): 43.4 x 4.4 x 4.4 cm (8311-1, -2) 87 x 4.4 x 4.4 cm (8311-13, -14, -15, -16)
- Weight: 1.5 kg (8311-1, -2) / 2.5 kg (8311-13, -14, -15, -16)
- Operating temperature: 0-50 °C
- Storage temperature: -20 - 70 °C
- Relative humidity: 0 - 95 % (non-condensing environment)

**Order Code**

<table>
<thead>
<tr>
<th>Code</th>
<th>Product Description</th>
<th>Feature</th>
<th>Operating Voltage</th>
<th>Max. Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>8311-1</td>
<td>Expert PDU Energy 8311-1</td>
<td>Energy metering, 7 x safety socket</td>
<td>230 V</td>
<td>16 A</td>
</tr>
<tr>
<td>8311-2</td>
<td>Expert PDU Energy 8311-2</td>
<td>Energy metering, 7 x safety socket, residual current metering type A</td>
<td>230 V</td>
<td>16 A</td>
</tr>
<tr>
<td>8311-13</td>
<td>Expert PDU Energy 8311-13</td>
<td>Energy metering, 4 x safety socket, 16 x IEC C13</td>
<td>230 V</td>
<td>16 A</td>
</tr>
<tr>
<td>8311-14</td>
<td>Expert PDU Energy 8311-14</td>
<td>Energy metering, 4 x safety socket, 16 x IEC C13, residual current metering type A</td>
<td>230 V</td>
<td>16 A</td>
</tr>
<tr>
<td>8311-15</td>
<td>Expert PDU Energy 8311-15</td>
<td>Energy metering, 4 x IEC C19, 16 x IEC C13</td>
<td>230 V</td>
<td>16 A</td>
</tr>
<tr>
<td>8311-16</td>
<td>Expert PDU Energy 8311-16</td>
<td>Energy metering, 4 x IEC C19, 16 x IEC C13, residual current metering type A</td>
<td>230 V</td>
<td>16 A</td>
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- 8311-14: Expert PDU Energy 8311-14
- 8311-15: Expert PDU Energy 8311-15
- 8311-16: Expert PDU Energy 8311-16

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