

# SMART POWER SENSOR



**Accurate**  
Class 1 Measurement  
Accuracy



**Simple & Easy**  
Lcd Display, Easy to Set  
and Check



**Energy Efficient**  
Overall Power  
Consumption ≤ 1.5 W

## Smart Power Sensor Technical Specifications

| Technical Specification       | SmartPS-100A-S0                                                                                                                 | SmartPS-80A-T0                                          | DDSU666-H                                                                                                                       | DTSU666-H                                                                                                                       |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| General Specification         |                                                                                                                                 |                                                         |                                                                                                                                 |                                                                                                                                 |
| Dimensions (H x W x D)        | 100 mm x 36 mm x 65.5 mm<br>(3.9 in. x 1.4 in. x 2.6 in.)                                                                       | 100 mm x 72 mm x 80 mm<br>(3.9 in. x 2.8 in. x 3.1 in.) | 100 mm x 36 mm x 65.5 mm<br>(3.9 in. x 1.4 in. x 2.6 in.)                                                                       | 100 mm x 72 mm x 65.5 mm<br>(3.9 in. x 2.8 in. x 2.6 in.)                                                                       |
| Mounting type                 | DIN35 Rail                                                                                                                      |                                                         |                                                                                                                                 |                                                                                                                                 |
| Weight (including cables)     | 1.2 kg                                                                                                                          | < 0.5 kg                                                | 1.2 kg (2.6 lb)                                                                                                                 | 1.5 kg (3.3 lb)                                                                                                                 |
| Power Supply                  |                                                                                                                                 |                                                         |                                                                                                                                 |                                                                                                                                 |
| Power grid type               | 1P2W                                                                                                                            | 3P3W/3P4W                                               | 1P2W                                                                                                                            | 3P3W/3P4W                                                                                                                       |
| Input voltage (phase voltage) | 176-288 V AC                                                                                                                    | 90-500 V AC                                             | 176 V AC-288 V AC                                                                                                               |                                                                                                                                 |
| Power consumption             | ≤ 0.8 W                                                                                                                         | ≤ 1.5 W                                                 | ≤ 0.8 W                                                                                                                         | ≤ 1 W                                                                                                                           |
| Measurement Range             |                                                                                                                                 |                                                         |                                                                                                                                 |                                                                                                                                 |
| Line voltage                  | /                                                                                                                               | 90-1000 V AC (> 500 with external PT <sup>1)</sup> )    | /                                                                                                                               | 304 V AC-499 V AC                                                                                                               |
| Phase voltage                 | 176-288 V AC                                                                                                                    | 52-577 V AC                                             | 176 V AC-288 V AC                                                                                                               |                                                                                                                                 |
| Current                       | 0-100 A                                                                                                                         | 0-80 A (>80 with external CT <sup>2)</sup> )            | 0-100 A                                                                                                                         | 0-100 A                                                                                                                         |
| Measurement Accuracy          |                                                                                                                                 |                                                         |                                                                                                                                 |                                                                                                                                 |
| Current/Voltage               | ±0.5%                                                                                                                           |                                                         |                                                                                                                                 |                                                                                                                                 |
| Power/Energy                  | ±1%                                                                                                                             |                                                         |                                                                                                                                 |                                                                                                                                 |
| Frequency                     | ±0.01 Hz                                                                                                                        |                                                         |                                                                                                                                 |                                                                                                                                 |
| Communication                 |                                                                                                                                 |                                                         |                                                                                                                                 |                                                                                                                                 |
| Interface                     | RS485                                                                                                                           |                                                         |                                                                                                                                 |                                                                                                                                 |
| Baud rate                     | 4800/9600/19200/115200 (9600 bps by default)                                                                                    |                                                         | 9,600 bps                                                                                                                       |                                                                                                                                 |
| Communication protocol        | Modbus-RTU                                                                                                                      |                                                         |                                                                                                                                 |                                                                                                                                 |
| Environment                   |                                                                                                                                 |                                                         |                                                                                                                                 |                                                                                                                                 |
| Operating temperature range   | -25°C to +60°C                                                                                                                  |                                                         |                                                                                                                                 |                                                                                                                                 |
| Storage temperature range     | -40°C to +70°C                                                                                                                  |                                                         |                                                                                                                                 |                                                                                                                                 |
| Operating humidity            | 5% RH-95% RH (non-condensing)                                                                                                   |                                                         |                                                                                                                                 |                                                                                                                                 |
| Others                        |                                                                                                                                 |                                                         |                                                                                                                                 |                                                                                                                                 |
| Accessories                   | RS485 Cable (10 m / 33 ft.)                                                                                                     |                                                         | RS485 Cable (10 m / 33 ft.)                                                                                                     |                                                                                                                                 |
|                               | 1 CT 100 A / 40 mA<br>(5 m / 16.4 ft.)<br> | /                                                       | 1 CT 100 A / 40 mA<br>(5 m / 16.4 ft.)<br> | 3 CT 100 A / 40 mA<br>(5 m / 16.4 ft.)<br> |