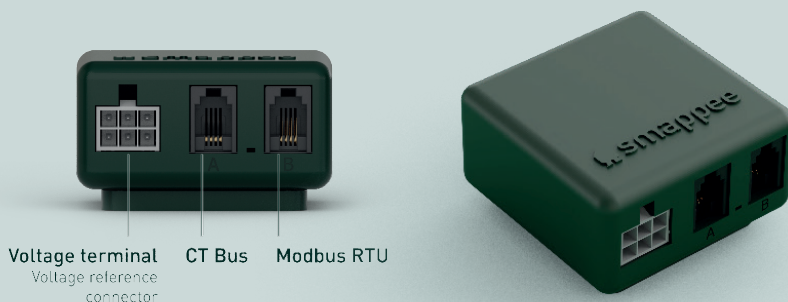


Smappee Power Box



- Works with almost any electricity network worldwide.
- Energy metering functionalities.
- You can measure up to 28 loads.
- Provides power to the entire system.

The Power Box is the compact and robust heart of the Smappee Infinity monitoring system. It's compatible with almost any electricity network worldwide and is DIN-rail mountable. It measures the line voltage of the connected phases, collects the currents from the CT sensors and calculates power, active energy, reactive energy and other energy and power quality data. Any data logger can collect this data via the Modbus RTU interface. It also provides power to all components.

- **Dimensions:** 55 × 55 × 26.6 mm (2.17 x 2.17 x 1.05 inches)
- **Weight:** 44 g (1.55 oz)
- **Working temperature:** -25 °C to 75 °C (-13 °F to 167 °F)
- **Storage temperature:** -25 °C to 90 °C (-13 °F to 194 °F)
- **Relative humidity:** 0 % - 95 %, non-condensing
- **Operating altitude:** 0 - 2,000 m (0 - 6,562 feet)
- **Product certification:** CE, FCC, CSGSUS (UL 61010-1), RCM
- **EMC:** IEC 61326-1, FCC 47 part 15
- **Safety:** IEC 61010-1:2010/COR1:2011 Complies with UL 61010-1 and CAN/CSA-C22.2 No. 61010-1-12
- **Impact rating (IEC 62262):** IK 06 (Impact Energy: 1J)
- **IP rating (IEC 60529):** IP X0
- **Power supply input:** 90 - 264 V AC
- **Power consumption:** 8 W max
- **Voltage measurement inputs:** L1, L2, L3, N
- **Topology and maximum nominal ranges:**
 - Single phase - 1-: 240 Vrms
 - Split phase - 2-: 120/240 Vrms
 - 3 phase (3 wires) - 3-: 240 Vrms
 - 3 phase (4 wires) - 3-: 240/415 Vrms
 - 3 phase (4 wires) - 3-: 277/480 Vrms
- **Frequency:** 50/60 Hz
- **Intended environment conditions:** Pollution degree 2
- **Overvoltage conditions:** overvoltage category II
- **Connectivity:**
 - Smappee Bus A
 - Smappee Bus B (Modbus RTU)
- **Accessories included:**
 - DIN mounting plate
 - Power cable 90 cm open-ended (35.43 inches)
 - Bus termination plug
- **Modbus RTU (RS-485) interface:**
 - Type: Multidrop, bidirectional
 - Connections: 2-wire, maximum distance 1,000 m
 - Addresses: 247 addresses, default address 61, auto-assigned in case of multiple devices
 - Protocol: Modbus RTU
 - Data format: 1 start bit, 8 data bit, no parity, 1 stop bit
 - Baud-rate: 38,400 or 115,200 bit/sec (auto-detect)
 - Driver input impedance: 1/8 unit load, maximum 256 transceivers on the same bus
 - Insulation: 3240 V AC RS-485 bus to mains input

