HUAWEI

# ENERGY MANAGEMENT ASSISTANT

EMMA-A02




**Accurate**
Class 1 measurement accuracy

**Easy**
Built-in WLAN module for easy commissioning

**Intelligent**
Optimization of PV and ESS scheduling based on prediction

**Flexible**
Management for PV, ESS, Charger and home appliances

Version No.: 06-202311

EMMA

# Technical Specifications

| Technical Specification | EMMA-A02 | | |
|---|---|---|---|
| General Data | | | |
| Dimension(W × H × D) | 108 mm × 100 mm × 65 mm | | |
| Mounting type | DIN35 Rail | | |
| Height requirement of cabinet | ≥ 47.5 mm | | |
| Weight | 0.5 kg | | |
| Power Supply | | | |
| AC Voltage | 1P2W: 100 ~ 240V, 50 / 60Hz | 3P3W: 346 ~ 415V, 50 / 60Hz | 3P4W: 346 ~ 415V, 50 / 60Hz |
| Typical power consumption | 4 W | | |
| Interface | | | |
| Power output | 9.5~13.2V @ 100mA, ≤ 3m | | |
| LAN | 10 / 100Mbps,≤ 100m | | |
| WAN | 10 / 100Mbps,≤ 100m | | |
| WLAN | AP + STA, 802.11b/g/n (2.412GHz ~ 2.484GHz) | | |
| RS485 | 9600 / 19200 / 115200bps,× 2, ≤ 50m | | |
| Digital input | × 2, ≤ 20 m | | |
| Digital output | × 2, ≤ 20 m | | |
| Interaction | | | |
| LED | LED Indicator × 3 RUN, ALM, COM | | |
| Button | RST | | |
| APP | Communication by WLAN for Commissioning | | |
| Measurement Range | | | |
| Current range | Direct connection: ≤ 63 A, external CT[1] : > 63 A | | |
| Voltage range | 1P (L-N): 85 ~ 299 Vac; 3P (L L): 148 ~520 Vac | | |
| Energy accuracy | ±1% | | |
| Device Management | | | |
| Smart energy controllers | up to 3 | | |
| Smart chargers | up to 2 | | |
| Heat pump | up to 1[2] | | |
| Shelly device | up to 20 | | |
| Environment | | | |
| Operating temperature range | -25 °C ~ +60 °C | | |
| Storage temperature range | -40 °C ~ +85 °C | | |
| Relative humidity range | 5% ~ 95% RH (non condensing) | | |
| Max. operating altitude | 4000m (derating over 2000m) | | |
| Degree of protection | IP2X | | |
| Compatible Device | | | |
| WLAN | SUN2000-2-6KTL-L1<br>SUN2000-8-10K LC0<br>SUN2000-3-10KTL-M1<br>SUN2000-12-25KTL-M5<br>SUN2000-12-25K-MB0 | | |
| Smart charger | SCharger-7KS/22KT-S0 | | |
| Heat pump | SG-ready | | |
| Shelly device | Shelly Plus Plug S, Shelly Plus 2PM, Shelly Pro 2PM [3] | | |

*1 2nd current should be 50mA, length ≤ 30m
*2 1 Heat Pumps are allowed to directly connect to EMMA-A02. More can be connected via shelly device
*3 Firmware version should be: 0.12.99 plugsprod1 or 0.14.4 for Shelly Plus Plug S, 0.10.2 beta4 for Shelly Plus 2PM, 0.10.2 beta 1 or 1.0.3 for Shelly Pro 2PM

Disclaimer: the preceding values are measured by an internal laboratory of Huawei in a specific environment. The actual values may vary with products, software versions, usage conditions, and environmental factors.

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