

EMONIO P3

High performance energy data logger with 32GB storage and Wifi/BLE support.



Features:

- Easy installation, no power interruption needed
- Integrated power supply (via voltage lines)
- Small and affordable
- Enough storage for >2 years at 1-second interval
- App for iOS/Android (for configuration and access)

User manual:



<https://wiki.emonio.de/en/EmonioP3plus>

Applications:

- Industry (monitoring of machines, substations)
- Household (total consumption, solar production)
- Consulting (peak measurement, load profile)
- Engineering (compliance testing, analysis)
- Power quality monitoring, Machine health, Smart power distribution units...

Description:

Small and easy to use energy data logger with integrated Wifi and BLE communication, Real-time-clock and storage on SDhc card. Different current sensors can be connected from 5A current transformers with 10mm diameter to 20kA Rogowski coils with 180mm diameter.

Values recorded: Urms, Irms, P, Q, S, F, W, PF, W_in, W_out, thdU, thdI, Urms_min, Urms_max, Irms_min, Irms_max, Pmin, Pmax, for all three phases separate and as sum/avg.

Specification:

Power supply	Via integrated power supply and test leads on N and U1.
Voltage	100-240V \pm 10%, 50Hz/60Hz (between neutral und U1)
Fuse	Hollyfuse 6FF-0250H1: 6x32mm, 250mA FF, 1000V, I _k =100kA
Inputs	3+1 voltage inputs, 3 current inputs
Sampling rate	32.000 samples/s
Input level voltage inputs	230V: N \Leftrightarrow U1, 400V: U1 \Leftrightarrow U2 \Leftrightarrow U3
Input level current inputs	max. \pm 0,5Vpp
Measurement uncertainty	\pm 1% for U, I, P, S, L and Q, all devices are calibrated and come with factory certificate.
Power quality measurements	IEC 61000-4-30 Class S, IEC 61000-4-7 harmonic analysis, Total harmonic distortion, power factor, IEC 62053-21 and IEC 62053-22; EN50470-3; OIML R46; and ANSI C12.20 Supports reactive energy standards: IEC 62053-23, IEC 62053-24
Telemetry data buffer	Up to 1 year in full resolution (if internet connection is interrupted)
Memory	32GB memory on integrated SDhc card, sufficient for up to 2 years in 1-second resolution.
Consumption (max., typical)	50mA / 15mA
Communication	WiFi: 802.11 b/g/n/e/i (802.11n @ 2.4 GHz up to 150 Mbit/s or BT: v4.2 BR/EDR and BT Low Energy (BLE)
Security	IEEE 802.11 with all Standards, incl. WFA, WPA/WPA2/WPA2-Enterprise and WAPI, TLS 1.2
Firmware upgrade	OTA (via network) / download and write firmware via host
WiFi mode	Station/softAP/SoftAP+station/P2P
Encryption	AES/RSA/ECC/SHA
Network protocols	MQTT, ModBus/TCP, DHCP, HTTP, NTP, SMTP, FTP, Telnet
Display	3 status-LEDs
Operating conditions	-5°C to 40°C, max. 80% RH, 2000m max. altitude
Measurement category:	CAT III / 300V (acc. to: EN61010-2-030)
Overvoltage category:	OVC III (acc. to EN61010-1)
IP Category	IP20
Mounting	via magnetic back plate or DIN-RAIL mounting kit
Weight	237g
Size in mm (LxWxH)	116,0 x 84,5 x 35,40mm
Weight (set with accessories)	980g
Packaging (set with accessories)	EVA case with 210 x 170 x 70mm, Box size: 250 x 250 x 130mm
HS code	90303900
GS1 US / GTIN code	850073587010

Drawing:



SCALE 1 : 1

Manufacturer:

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