Monitoring of compliance with the EN50160 standard
Detection of voltage dips and surges
Harmonic analysis
Class 0.2s

ENERIUM 300
Power Monitor

Quality of LV and HV electrical networks
Specifications

Voltage inputs (AC)
Primary VT: 100 V to 650 kV – Secondary VT: 100 V to 480 V
Measurement range: 5 to 130 % of Vn for Vn = 57.7 / 230 V (ph-N)
5 to 130 % of Un for Un = 100 / 400 V (ph-ph)
Overload: 130 % of 400 V (permanent) - 800 V (24 hours)

Current inputs (AC)
Primary CT: 1 A to 25,000 A – Secondary CT: 1 A or 5 A
Measurement range: 1 % to 130 % of In for In = 5 A
Overload: 250 A for 1 second (transient) – 6.5 A (permanent)

Measurement accuracy
Power and active energy: class 0.2s (IEC 62053-22) - class 0.2 (IEC 61557-12)
Power and reactive energy: class 0.2 (IEC 61557-12) - class 2 (IEC 62053-23)
Power and apparent energy: 0.5 % (IEC 61557-12)
Voltage: 0.2 % – Current: 0.2 % – Frequency: ± 0.1 % (IEC 61557-12)
Power factor: ± 0.05 counts (IEC 61557-12)

RS485 output
Protocol: Modbus in RTU or ASCII mode
Speed: 2,400...115,200 bauds

Ethernet output
Protocol: Modbus TCP
Speed (configurable): compatible with 10, 100 and 1000 base T networks

Auxiliary power supply
80... 265 Vac 50/60 Hz - 110... 375 Vdc - 19... 58 Vdc
Consumption: < 0.1 VA

Environment
Operating temperature: -10 °C to +55 °C
Operating humidity: 95 % at 40 °C
Storage temperature: -25 °C to +70 °C

Mechanical specifications
Dimensions (L x H x D) : 144 x 144 x 55 mm

Advanced functions

Harmonic analysis
- Measurement of THD per phase on U, I and In
- Spectral analysis up to 50th order per phase on V, U, I and In

Qualimetry
- Statistical analysis graphs as per EN50160
- Log of the last 1,024 events (dips, outages, voltage surges, current surges)
- Wave capture (V-U-I-In)

To order

ENERIUM 300

1 Frequency of network measured
0 50 / 60 Hz

2 Auxiliary power supply
0 80 to 265 Vac / 110 to 375 Vdc
1 19.2 to 58 Vdc

3 Communication
0 RS485
1 Ethernet

4 Metering (or On-Off) inputs
0 none
1 2 inputs
2 4 inputs
3 6 inputs
4 8 inputs

5 On-Off outputs
0 none
1 2 outputs
2 4 outputs
3 6 outputs
4 8 outputs

6 Analogue inputs
0 none
1 2 analogue inputs
2 4 analogue inputs
3 6 analogue inputs
4 8 analogue inputs

7 Analogue outputs
0 none
1 2 outputs
2 4 outputs

8 Accuracy class
5 0.5 s
6 0.2 s

Example: Enerium 300, frequency 50/60 Hz, auxiliary power supply 80 to 265 Vac, RS485 communication, 2 On-Off inputs, no On-Off output, no analogue input, no analogue output, class 0.2 s => order ENERIUM 300 01020002 • 1-0 • 2-0 • 3-0 • 4-2 • 5-0 • 6-0 • 7-0 • 8-2

Also available in ENERIUM 310 version without display

Accessories

Optical head
P01330401

DIN-rail mounting kit
P01330360

690V / 400 resistive voltage adapter
P01330402

(42W)

85 à 264 Vac/12 Vdc - 3.5 A power supply for On-Off input
ACC1004

E.view+
Software for configuring the power monitor, viewing all the electrical parameters and processing the quantities covered by the EN50160 standard by means of summary tables, histograms and load curves.
Ref.: P01330610