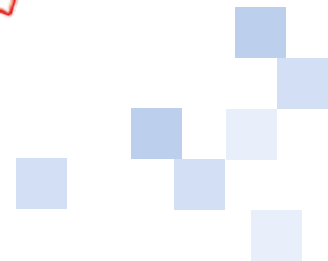




Multi-energy metering
(electricity, water, gas, etc.)
LV/MV/HV network
monitoring
Energy quality



CLASS 0.2
EN61557-12



ENERMIUM

Multi-energy
power monitors

Functions

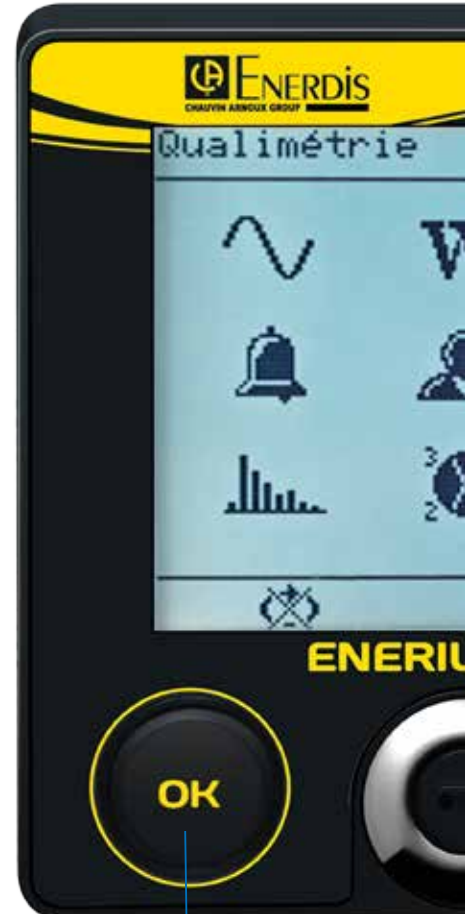
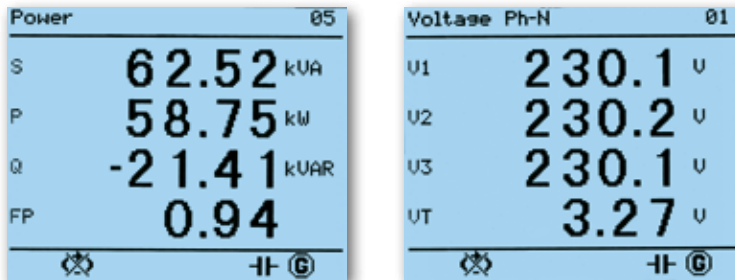
Simple, intuitive and customizable interface for quick access to the information that you need.

Real-time display

of instantaneous, average, min and max values.

Time/date-stamped recording

of min and max values



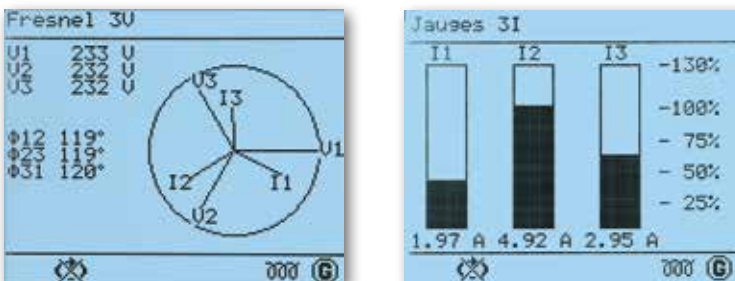
Alarms

- 16 programmable alarms on instantaneous, average, min and max values, as well as analogue and on-off inputs (e.g. circuit-breaker status)
- Recording of the last 64 events (values, dates, times, durations)
- Flashing display if there is an alarm

The image shows a table titled 'Alarmes' with three columns: 'Numéro', 'Statut', and 'Relais'. The table contains several rows of data, with the first row showing '1' in the 'Numéro' column and dashes in the other columns. The table has a small icon of a bell and a power button symbol at the bottom.



Graphics for easier data analysis



- Checking of connections, unbalance measurement and display of phase shift
- Monitoring of load factor (display of V, U, I and P)



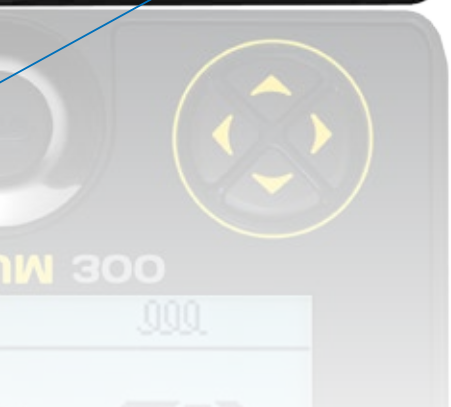
Validation and **navigation keys** via drop-down menus



Indication of connection errors

before operation begins





Local access via **USB cable/**
optical head for:

- programming
- reading the data
- upgrading the firmware



Recording

- Indices, consumption curves ⁽¹⁾ (electricity, water, gas, etc.) and temperature curves ⁽¹⁾
- Critical parameters with triggering according to 3 different modes (date, alarm, on-off input) and possibility of pre/post trigger ⁽²⁾

(1) Load curves. (2) Trend curves.



Preventive maintenance

- Installation operating time
- Operating time of monitored equipment



Quick programming

- Current transformer ratios and communication parameters can be set on the front panel or remotely
- Possibility of protection by password



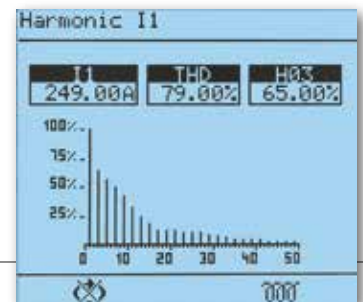
Customizable screens

- 3 screens with 4 display lines each to organize the information as you wish

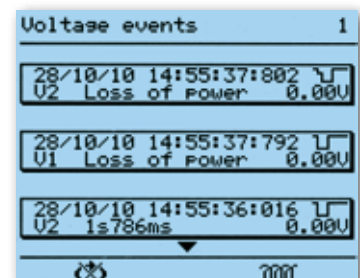


Harmonic analysis

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



Qualimetry



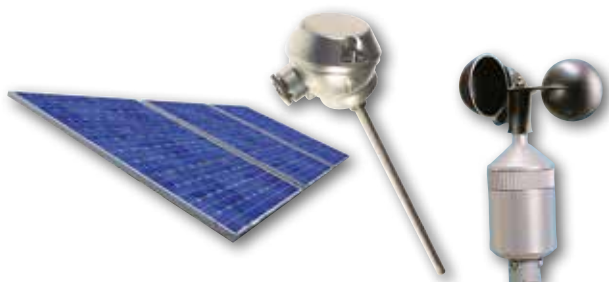
- Statistical analysis graphs as per EN50160

- Log of the last 1024 events (dips, outages, overvoltages, overcurrents)
Waveform capture (V-U-I-In)

Multiple applications

In addition to the generic functions of power monitors, the ENERIUM range also offers extensive, customizable communication functions.

ANALOGUE INPUTS



METERING INPUTS



insolation, weather data, temperatures, etc.

water, gas, electricity

CURRENT AND VOLTAGE INPUTS – LV/MV/HV NETWORKS

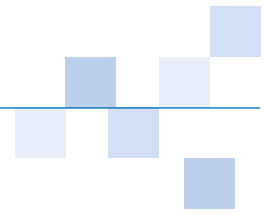


ANALOGUE OUTPUTS



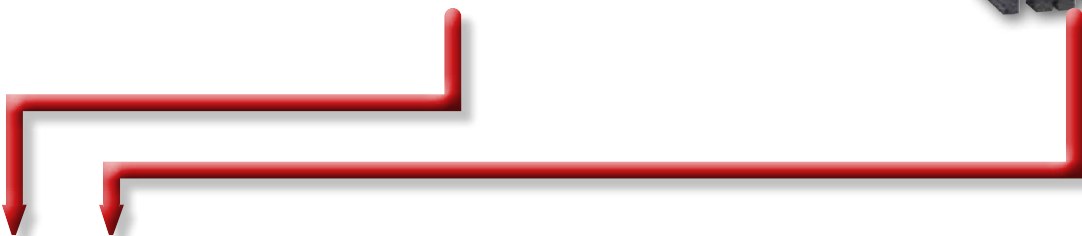
ALARM RELAY OUTPUTS





SYNCHRO PULSE INPUTS

STORAGE OF STATUSES AND ALARMS



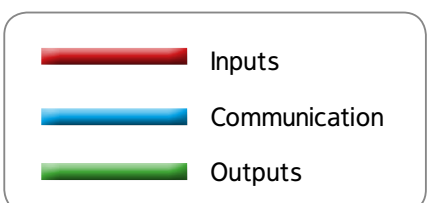
E.ONLINE® ENERGY MANAGEMENT SOFTWARE



PLCs FOR CTM/TBM SUPERVISION



PLC OUTPUTS (ALARM/PULSE)



Choose your power monitor

ENERIUM®, THE TECHNOLOGICAL REFERENCE for everything from basic applications (secondary switchboard, load monitoring) to the most demanding tasks (metering station).



ELECTRICAL ENERGY

MULTI-ENERGY

QUALIMETRY

| Functional specifications | ENERIUM 30 | ENERIUM 50 | ENERIUM 150 | ENERIUM 100 | ENERIUM 200 | ENERIUM 300 |
|---|--|--|--|--|--|--|
| Accuracy class (IEC61557-12) | 1 | 0.5 | 0.5 | 0.5 | 0.5 ou 0.2 | 0.2 |
| Format | 96 x 96 mm | 96 x 96 mm | 96 x 96 mm | 144 x 144 mm | 144 x 144 mm | 144 x 144 mm |
| Graphic LCD screen | • | • | • | • | • | • |
| Version without display | - | - | - | Enerium 110 | Enerium 210 | Enerium 310 |
| Mounting | Flush-mounted, DIN rail* or plate-mounted* | Flush-mounted, DIN rail* or plate-mounted* | Flush-mounted, DIN rail* or plate-mounted* | Flush-mounted, DIN rail* or plate-mounted* (Enerium 110) | Flush-mounted, DIN rail* or plate-mounted* (Enerium 210) | Flush-mounted, DIN rail* or plate-mounted* (Enerium 310) |
| Harmonics | | | | | | |
| Max. order | - | 25 | 50 | 25 | 50 | 50 |
| Recording functions | | | | | | |
| 8 load curves | - | • | • | - | • | • |
| 4 trend curves | - | - | • | • | • | 1 |
| Alarms | | | | | | |
| Number of alarms | 2 | 16 | 16 | 16 | 16 | 16 |
| Time/date-stamped events recorded | - | 64 | 64 | 64 | 64 | 64 |
| Qualimetry functions | | | | | | |
| Qualimetry according to EN50160 | - | - | - | - | - | • |
| V, U, I and In waveform capture | - | - | - | - | - | 16 |
| Storage of last 1024 events (dips, outages, overvoltages) with time/date-stamping | - | - | - | - | - | • |
| Inputs / outputs | | | | | | |
| Max. number | 1 | 2 | 2 | 8 | 8 | 8 |
| Inputs (optional) | | | | | | |
| On-off (pulses or alarm) | - | 0,1 or 2 | 0,1 ou 2 | 0, 2, 4, 6 or 8 | 0, 2, 4, 6 or 8 | 0, 2, 4, 6 or 8 |
| Analogue | - | - | - | - | - | - |
| Outputs (optional) | | | | | | |
| On-off (pulses or alarm) | 1 | 0,1 or 2 | 0,1 or 2 | 0, 2, 4, 6, or 8 | 0, 2, 4, 6, or 8 | 0, 2, 4, 6, or 8 |
| Analogue | 0 | 0 or 2 | 0 or 2 | 0.2 or 4 | 0.2 or 4 | 0.2 or 4 |
| Graphics | | | | | | |
| Fresnel | - | - | • | • | • | • |
| Gauges | • | - | • | - | - | - |
| Histograms of harmonic orders | - | - | • | - | • | • |
| Communication interface | | | | | | |
| Optical / USB | - | Front | Front | Front or rear | Front or rear | Front or rear |
| Ethernet or RS485 | RS485 | • | • | • | • | • |
| Metrological LED | - | - | - | • | • | • |
| Other functions | | | | | | |
| Programming on front panel | • | • | • | • | • | • |
| Programming via software | - | • | • | • | • | • |

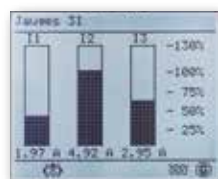
* With mounting kit

Advantages



An optical head/USB connection for:

- Programming
- Reading the data
- Upgrading the software



Display with graphics (Fresnel, gauges, harmonics)

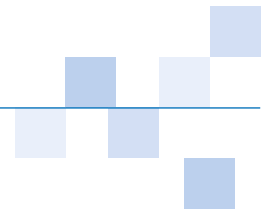


Screenless version for DIN-rail or plate mounting (ENERIUM 110/210/310)



Up to 8 on-off or analogue inputs/outputs

and related software



[.view

[.view +



Architecture:

- Display of the electrical installation's architecture

| Installation | | | |
|--------------|-------|-------|-------|
| Voltage | V1 | V2 | V3 |
| Phase (V) | 230V1 | 230V2 | 230V3 |
| Phase (V) | 0V0 | 0V1 | 0V2 |
| Phase (V) | 0V3 | 0V4 | 0V5 |
| Phase (V) | 0V6 | 0V7 | 0V8 |
| Phase (V) | 0V9 | 0V10 | 0V11 |
| Phase (V) | 0V12 | 0V13 | 0V14 |
| Phase (V) | 0V15 | 0V16 | 0V17 |
| Phase (V) | 0V18 | 0V19 | 0V20 |

Display:

- All the quantities managed by the power monitor
- Reading of 1 s, average, min and max values with time/date-stamping

| Summary tables | | | |
|----------------|------|-------------|------|
| Voltage (V) | | Current (A) | |
| V1 | 0V | 0V | 0V |
| V2 | 0V1 | 0V1 | 0V1 |
| V3 | 0V2 | 0V2 | 0V2 |
| V4 | 0V3 | 0V3 | 0V3 |
| V5 | 0V4 | 0V4 | 0V4 |
| V6 | 0V5 | 0V5 | 0V5 |
| V7 | 0V6 | 0V6 | 0V6 |
| V8 | 0V7 | 0V7 | 0V7 |
| V9 | 0V8 | 0V8 | 0V8 |
| V10 | 0V9 | 0V9 | 0V9 |
| V11 | 0V10 | 0V10 | 0V10 |
| V12 | 0V11 | 0V11 | 0V11 |
| V13 | 0V12 | 0V12 | 0V12 |
| V14 | 0V13 | 0V13 | 0V13 |
| V15 | 0V14 | 0V14 | 0V14 |
| V16 | 0V15 | 0V15 | 0V15 |
| V17 | 0V16 | 0V16 | 0V16 |
| V18 | 0V17 | 0V17 | 0V17 |
| V19 | 0V18 | 0V18 | 0V18 |
| V20 | 0V19 | 0V19 | 0V19 |

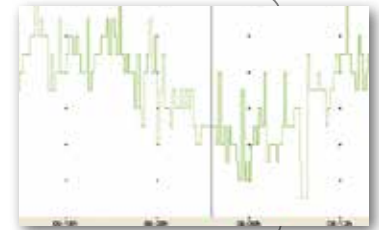
Summary tables:

- Simplified analysis of the results
- Alarms log
- Statistics compliant with EN50160
- Time/date-stamped events (*dips, outages, overvoltages, etc.*)



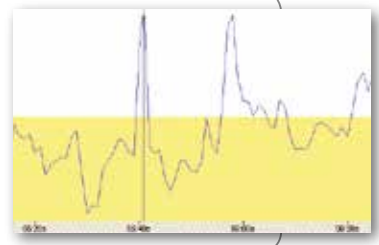
Data export:

- Alarms log
- EN50160 statistics
- Voltage events (*dips, outages, overvoltages, etc.*)
- Waveforms
- Multiple export formats: .csv, .xls, .txt, etc.



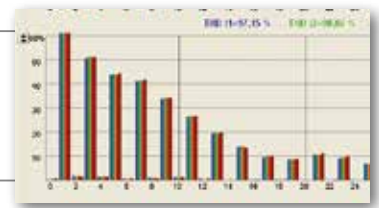
Energy management:

- Display of load curves
- Comparison of energy consumption with temperature curves



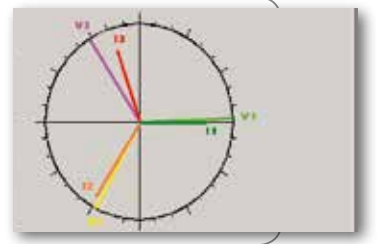
Installation monitoring:

- Recording of critical parameters
- Analysis of recordings after triggering by alarm



Harmonic analysis:

- Simplified analysis of the results by means of graphics



Phase shift measurement:

- Implementation made easier by simple visual check
- Measurement of phase angles and unbalance (V, U, I)

Related software

| Functions | [.set ^{(1) (2)} | [.view ⁽²⁾ | [.view + ⁽²⁾ |
|----------------------------------|--------------------------|-----------------------|-------------------------|
| Creation of network architecture | ● | ● | ● |
| Configuration (remote or local) | ● | ● | ● |
| Data display and export | | ● | ● |
| Graphics | | | ● |

(1) delivered as standard with each instrument
 (2) Except on Enerium 30

Functions

Measurements

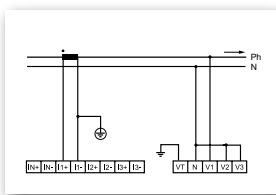
| | 1 S | min | max | average | min average | max average |
|--|-----|-----|-----|---------|-------------|-------------|
| V, U | ● | ○ | ● | ● | | ○ |
| Vearth | ○ | ○ | ○ | ○ | | ○ |
| I | ● | ○ | ● | ● | | ○ |
| In (calculated or measured) ⁽¹⁾ | ● | ○ | ● | ● | ○ | ○ |
| P (4 quadrants) | ● | ○ | ○ | ○ | | |
| Pt (4 quadrants) | ● | ● | ● | ● | | ○ |
| Q (4 quadrants) | ● | | ○ | ○ | | |
| Qt (4 quadrants) | ● | ○ | ● | ● | | ○ |
| S | ● | | ○ | ○ | | |
| St | ● | ● | ● | ● | | ○ |
| FP (4 quadrants) | ● | | | ○ | | |
| FPT (4 quadrants) | ● | | | ● | ○ | ○ |
| Cosφ (4 quadrants) | ○ | | | ○ | | |
| Cosφt (4 quadrants) | ○ | ○ | ○ | ○ | ○ | ○ |
| Tanφt (4 quadrants) | ● | | | ● | ○ | ○ |
| Frequency | ● | ○ | ● | ○ | | |
| V crest factor | ○ | | | ○ | | ○ |
| I crest factor | ○ | | | ○ | | ○ |
| U unbalance | ○ | | | ○ | | ○ |
| Harmonics on V, U, I | ○ | | | | | |
| Harmonics on In | ○ | | | | | |
| THD V, U, I | ● | | | ● | | ○ |
| THD In | ● | | ○ | ● | | ○ |
| Active energy (receiver, generator) | ● | | | | | |
| Reactive energy (Qcad1, 2, 3, 4) | ● | | | | | |
| Apparent energy (receiver, generator) | ● | | | | | |
| On-off input (pulse mode) | ○ | | | | | |
| Analogue input (Enerium 100/200) | ○ | | ○ | ○ | ○ | ○ |
| Voltage presence hour meter (U) | ○ | | | | | |
| Load hour meter (I) | ● | | | | | |
| Auxiliary power supply hour meter | ● | | | | | |

■ Except on 30

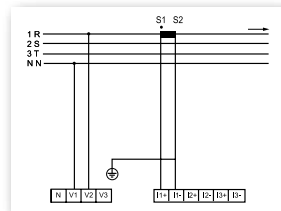
⁽¹⁾ on Enerium 30/50/150, calculated only

Connection diagrams

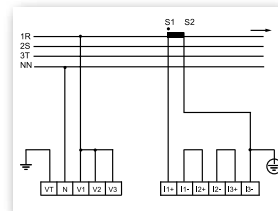
Single-phase



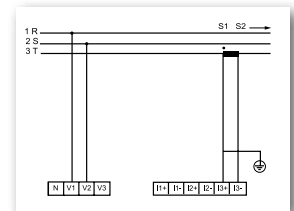
Balanced 3-phase, 4 wires - 1 CT Except on Enerium 30



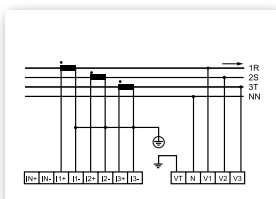
Balanced 3-phase, 4 wires - 1 CT Enerium 30 only



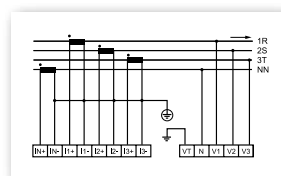
Balanced 3-phase, 3 wires - 1 CT Enerium 30 only



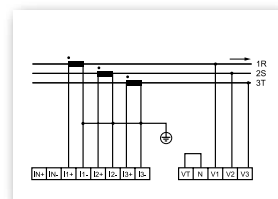
Unbalanced 3-phase, 4 wires - 3 CTs



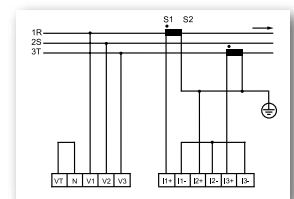
Unbalanced 3-phase, 4 wires - 4 CTs Except on Enerium 30/50/150



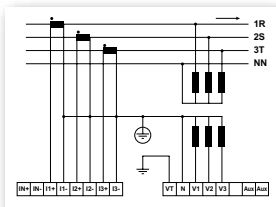
Unbalanced 3-phase, 3 wires - 3 CTs



Unbalanced 3-phase, 3 wires - 2 CTs



Example of connection to VT



Trend curves

(except on Enerium 30/50)

| 1S VALUES | |
|---|---|
| V, Vearth | ● |
| U12, U23, U31 | ● |
| I1, I2, I3, In | ● |
| Pt | ● |
| Qt | ● |
| St | ● |
| PFt | ● |
| U unbalance | ● |
| THD V, U, I, In | ● |
| Analogue inputs (Enerium 100/200 only) | ● |
| AVERAGE VALUES | |
| V1, V2, V3 | ● |
| U12, U23, U31 | ● |
| I1, I2, I3, In | ● |
| Gen: P1, P2, P3, Pt | ● |
| Rec: P1, P2, P3, Pt | ● |
| Analogue inputs (Enerium 100/200 only) | ● |
| Gen: PF1, PF2, PF3, PFt | ● |
| Rec: PF1, PF2, PF3, PFt | ● |
| Gen: Cosφ1, Cosφ2, Cosφ3, Cosφt | ● |
| Rec: Cosφ1, Cosφ2, Cosφ3, Cosφt | ● |
| Tanφt | ● |
| Frequency | ● |
| Crest factor V1, V2, V3 | ● |
| Crest factor I1, I2, I3 | ● |
| THD U12, U23, U31 | ● |
| THD I1, I2, I3, Ineutral | ● |
| THD V1, V2, V3 | ● |

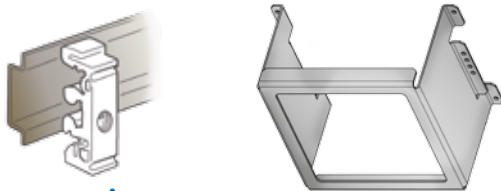
Load curves

(except on Enerium 30/100 and 110)

| AVERAGE VALUES | |
|------------------------------------|---|
| Pt Gen, Pt, Rec | ● |
| Qcad1, Qcad2, Qcad3, Qcad4, | ● |
| St Gen, St Rec | ● |
| On-off inputs | ● |
| Analogue inputs (Enerium 200 only) | ● |

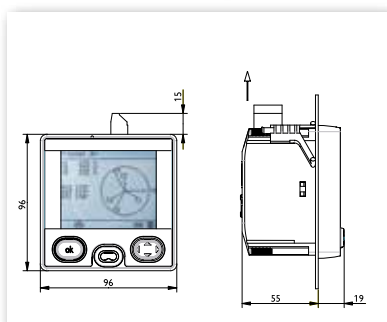
Accessories

Kit for DIN-rail or plate mounting

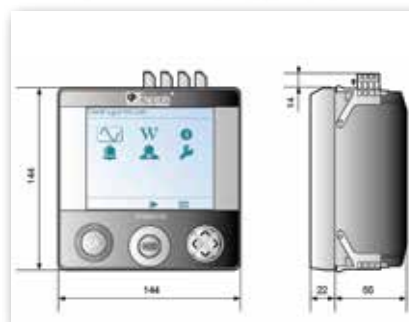


Dimensions

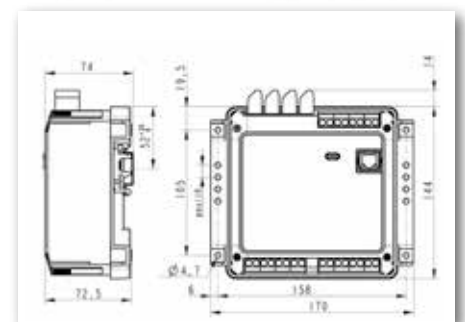
ENERIUM 30/50/150



ENERIUM 100/200/300



ENERIUM 110/210/310



Alarms

| 1S VALUES | |
|--|---|
| V1, V2, V3 | ● |
| Vearth | ○ |
| U12, U23, U31 | ● |
| I1, I2, I3, In | ● |
| Pt | ● |
| Qt | ● |
| St | ● |
| PFt | ● |
| Cosφt | ○ |
| Tanφt | ● |
| Frequency | ● |
| U unbalance | ○ |
| THD V, U, I, In | ○ |
| 3 hour meters : network presence, on-load presence, aux. source | ○ |
| Analogue inputs (Enerium 100/200 only) | ○ |
| AVERAGE VALUES | |
| Pt Gen, Pt Rec | ○ |
| Qt Gen, Qt Rec | ○ |
| St | ○ |
| Tanφt (except on Enerium 30/50/150) | ○ |
| Analogue inputs (Enerium 100/200 only) | ○ |
| ON-OFF INPUTS (Enerium 100/200 only) | |
| ■ Except Enerium 30 | ● |

Analogue outputs (option)

(Except Enerium 30)

| 1S VALUES | |
|----------------------|---|
| V1, V2, V3, Vearth | ● |
| U12, U23, U31 | ● |
| I1, I2, I3, In | ● |
| Pt | ● |
| Q1, Q2, Q3 | ● |
| Qt | ● |
| S1, S2, S3 | ● |
| St | ● |
| PF1, PF2, PF3 | ● |
| PFt | ● |
| Cosφ1, Cosφ2, Cosφ3, | ● |
| Cosφt, | ● |
| Tanφt, | ● |
| Frequency | ● |

Specifications

| | ENERIUM 30 Class 1 | ENERIUM 50/150 Class 0.5 s | ENERIUM 100/200 Class 0.5 s | ENERIUM 200 Class 0.2 s | ENERIUM 300 Class 0.2 s |
|---------------------------------------|--|--|--------------------------------|--|--|
| Electrical network | | | | | |
| Max. phase-to-phase voltage measured | 650 kV | | | | |
| VT ratio | VT primary: 100 V to 650 kV VT secondary: 100 V to 480 V | | | | |
| Max. current measured | 25,000 A | | | | |
| CT ratio | CT primary: 1 A to 25,000 A CT secondary: 1 A or 5 A | | | | |
| Max. power measured | 2 GW | | | | |
| Voltage inputs (AC) | | | | | |
| Measurement range | 5 to 130 % of V_n for $V_n = 57.7 / 230$ V (ph-N) 5 to 130 % of U_n for $U_n = 100 / 400$ V (ph-ph) | | | | |
| Crest factor | 2 | | | | |
| Measurement accuracy (U and V) | 0.5 % from 20 % to 130 % of U_n / V_n | 0.2 % from 20 % to 130 % of U_n / V_n | | | |
| Overvoltage | Transient $U = 800$ V for 24 hours Permanent 130 % of 400 V = 520 V | | | | |
| Frequency | 50 / 60 Hz | 50 / 60 Hz or 400 Hz | 50 / 60 Hz | 50 / 60 Hz or 400 Hz | 50 / 60 Hz |
| Consumption | < 0.1 VA | < 0.15 VA | < 0.1 VA | | |
| Input impedance | 0.45 M Ω | 0.44 M Ω | 1 M Ω | | |
| Current inputs (AC) | | | | | |
| Measurement range | 1 % to 130 % of I_n for $I_n = 5$ A | | | | |
| Crest factor | 3 | | | | |
| Measurement accuracy | 0.5 % from ≥ 10 % to ≤ 130 % | 0.2 % from ≥ 10 % to ≤ 130 % 0.5 % from ≥ 5 % to ≤ 10 % 1 % from ≥ 1 % to ≤ 5 % | | | |
| Acceptable overload | Transient $I = 250$ A for 1 second Permanent 130 % of 5 A = 6.5 A | | | | |
| Consumption | < 0.15 VA | | | | |
| Compliance with standards | | | | | |
| EN62053-22 | Active energy Class 1 Reactive energy Class 2 | Active energy Class 0.5 s | | Active energy Class 0.2 s | Active energy Class 0.2 s |
| IEC61557-12 PMD SD/SS | V,I Class 0.5 P,S Class 0.5 | V,I Class 0.2 P,S Class 0.5 | class 0.5 | class 0.2 | class 0.2 |
| | | Active energy Class 0.5 Reactive energy Class 0.5 | | Active energy Class 0.2 Reactive energy Class 0.5 | Active energy Class 0.2 Reactive energy Class 0.2 |
| Multi-measurement (accuracies) | | | | | |
| Active power and energy | 1 % for 5 % $I_n \leq I \leq I_{max}$ | 0.5 % for 5 % $I_n \leq I \leq I_{max}$ | | 0.2 % for 5 % $I_n \leq I \leq I_{max}$ | |
| Reactive power and energy | 2 % for 5 % $I_n \leq I \leq I_{max}$ | 0.5 % for 5 % $I_n \leq I \leq I_{max}$ | | | |
| Apparent power and energy | 1 % for 5 % $I_n \leq I \leq I_{max}$ | 0.5 % for 5 % $I_n \leq I \leq I_{max}$ | | | |
| Power factor (PF) and $\cos(\varphi)$ | ± 0.05 counts when 0.5 inductive < PF < 0.5 ± 0.1 counts when 0.2 inductive < PF < 0.2 capacitive | ± 0.02 counts when 0.5 inductive < PF < 0.5 capacitive ± 0.05 counts when 0.2 inductive < PF < 0.2 capacitive | | | |
| Frequency | $\pm 0.1\%$ from 42.5 to 69 Hz | | | | |
| Sampling frequency | 6.4 kHz to 50 Hz | | | | |
| THD-I, THD-V and THD-U | ± 0.5 counts | | | | |
| Harmonics order by order | – | ± 0.5 counts | | | |

| | ENERIUM 30 Class 1 | ENERIUM 50/150 Class 0.5 s | ENERIUM 100/200 Class 0.5 s | ENERIUM 200 Class 0.2 s | ENERIUM 300 Class 0.2 s |
|--|--|--|--|----------------------------|----------------------------|
| RS485 output | | | | | |
| Connection | 2 wires, half duplex | | | | |
| Protocol | ModBus / JBus RTU mode | | | | |
| Speed (configurable) | 2,400 - 4,800 - 9,600 - 19,200 - 34,800 (115,200 on ENERIUM 50/150) | | | | |
| Parity | Even, odd or none | | | | |
| JBus addresses | 1 to 247 | | | | |
| Ethernet output | | | | | |
| Type | - | RJ45 - 8 pins | | | |
| Protocol | - | ModBus/TCP | | | |
| Speed (configurable) | - | Compatible with 10, 100 and 1,000 base T | | | |
| Auxiliary power supply | | | | | |
| Power supply | 230...400 Vac ± 20 % (< 10 VA) | 80 to 265 Vac (< 15 VA) 42.5 to 69 Hz 110 to 375 Vdc 19 to 57 Vdc (< 7.5 W) | 80 to 265 Vac (< 20 VA) - 42.5 to 69 Hz 110 to 375 Vdc 19 to 57 Vdc (< 10 W) | | |
| Digital inputs (on-off or metering pulse) | | | | | |
| Operating voltage | - | Up to 70 Vdc max. | High level: 10 to 70 Vdc Low level: 0 to 5 Vac | | |
| Min. signal width | - | High level: 30 ms Low level: 30 ms | | | |
| Consumption | - | < 0.5 W | | | |
| Pulse or alarm relay outputs | | | | | |
| Type | Static relay | | | | |
| Operating voltage | 70 Vdc max 33 Vac max | 24 to 110 Vdc ± 20 % 24 to 230 Vac ± 10% | | | |
| Max. current | 100 mA | 100 mA | | | |
| Compliance with standard | IEC 62053-31 | | | | |
| Analogue inputs | | | | | |
| Scale | - | - | Configurable between -20 to +20 mA | | |
| Power consumption | - | - | < 50 mW | | |
| Input impedance | - | - | 50 Ω | | |
| Analogue outputs | | | | | |
| Scale | - | Configurable between -20 to + 20 mA | | | |
| Acceptable overload | - | 500 Ω | | | |
| Response time | - | < 500 ms | | | |
| Storage | | | | | |
| Non-volatile memory | Configuration parameters – Recordings (curves, alarms, min-max, qualimetry events log, IEC 50160 statistics) | | | | |
| RAM | Capture of waveforms | | | | |
| Environmental specifications | | | | | |
| Operating temperature | - 10 °C to + 55 °C (K55 according to IEC61557-12) | | | | |
| Operating humidity | 95 % to 40 °C | | | | |
| Storage temperature | - 25 °C to + 70 °C | | | | |
| Safety specifications | | | | | |
| Pollution | 2 | | | | |
| Behaviour in fire | UL 94, severity V1 | | | | |
| Installation category | 3 | | | | |

To order

Standard ENERIUM

| Model | Frequency | Accuracy class | Power supply | Communication | On-off inputs | On-off outputs | Analogue outputs | Reference |
|-------------|------------|----------------|--------------------------------|---------------|---------------|----------------|------------------|-----------|
| ENERIUM 30 | 50 / 60 HZ | 1 | 230 to 400 Vac/Vdc | - | 0 | 0 | 0 | P01330821 |
| ENERIUM 30 | 50 / 60 HZ | 1 | 230 to 400 Vac/Vdc | - | 0 | 1 | 0 | P01330822 |
| ENERIUM 30 | 50 / 60 HZ | 1 | 230 to 400 Vac/Vdc | RS485 | 0 | 0 | 0 | P01330823 |
| ENERIUM 30 | 50 / 60 HZ | 1 | 230 to 400 Vac/Vdc | RS485 | 0 | 1 | 0 | P01330824 |
| ENERIUM 50 | 50 / 60 HZ | 0.5 s | 80 to 265 Vac / 110 to 375 Vdc | RS485 | 0 | 0 | 0 | P01330805 |
| ENERIUM 50 | 50 / 60 HZ | 0.5 s | 80 to 265 Vac / 110 to 375 Vdc | Ethernet | 0 | 0 | 0 | P01330806 |
| ENERIUM 50 | 50 / 60 HZ | 0.5 s | 80 to 265 Vac / 110 to 375 Vdc | RS485 | 1 | 1 | 0 | P01330807 |
| ENERIUM 50 | 50 / 60 HZ | 0.5 s | 80 to 265 Vac / 110 to 375 Vdc | Ethernet | 1 | 1 | 0 | P01330808 |
| ENERIUM 150 | 50 / 60 HZ | 0.5 s | 80 to 265 Vac / 110 to 375 Vdc | RS485 | 0 | 0 | 0 | P01330809 |
| ENERIUM 150 | 50 / 60 HZ | 0.5 s | 80 to 265 Vac / 110 to 375 Vdc | Ethernet | 0 | 0 | 0 | P01330810 |
| ENERIUM 150 | 50 / 60 HZ | 0.5 s | 80 to 265 Vac / 110 to 375 Vdc | RS485 | 0 | 2 | 0 | P01330811 |
| ENERIUM 150 | 50 / 60 HZ | 0.5 s | 80 to 265 Vac / 110 to 375 Vdc | Ethernet | 0 | 2 | 0 | P01330812 |
| ENERIUM 100 | 50 / 60 HZ | 0.5 s | 80 to 265 Vac / 110 to 375 Vdc | RS485 | 0 | 0 | 0 | P01330831 |
| ENERIUM 100 | 50 / 60 HZ | 0.5 s | 80 to 265 Vac / 110 to 375 Vdc | RS485 | 2 | 2 | 0 | P01330832 |
| ENERIUM 200 | 50 / 60 HZ | 0.5 s | 80 to 265 Vac / 110 to 375 Vdc | RS485 | 4 | 2 | 0 | P01330833 |
| ENERIUM 200 | 50 / 60 HZ | 0.5 s | 80 to 265 Vac / 110 to 375 Vdc | Ethernet | 2 | 2 | 2 | P01330834 |
| ENERIUM 210 | 50 / 60 HZ | 0.5 s | 80 to 265 Vac / 110 to 375 Vdc | Ethernet | 8 | 0 | 0 | P01330835 |
| ENERIUM 300 | 50 / 60 HZ | 0.2 s | 80 to 265 Vac / 110 to 375 Vdc | RS485 | 0 | 0 | 0 | P01330816 |
| ENERIUM 300 | 50 / 60 HZ | 0.2 s | 80 to 265 Vac / 110 to 375 Vdc | Ethernet | 0 | 0 | 0 | P01330817 |
| ENERIUM 300 | 50 / 60 HZ | 0.2 s | 19 to 58 Vdc | RS485 | 0 | 0 | 0 | P01330818 |
| ENERIUM 300 | 50 / 60 HZ | 0.2 s | 19 to 58 Vdc | Ethernet | 0 | 0 | 0 | P01330819 |

Configured products

ENERIUM

1 2 3 4 5 6 7 8 9

1 Model

| | |
|-----|---|
| 50 | ENERIUM 50 – Electrical energy – Load curves - Format 96 x 96 |
| 150 | ENERIUM 50 + Trend curves - Format 96 x 96 |
| 100 | ENERIUM 100 – Multi-energy - Trend curves - Format 144x144 |
| 110 | ENERIUM 100 screenless version - Format 144x144 |
| 200 | ENERIUM 100 + Load curves - Format 144x144 |
| 210 | ENERIUM 200 screenless version - Format 144x144 |
| 300 | ENERIUM 200 + Qualimetry |
| 310 | ENERIUM 300 screenless version |

2 Frequency of network measured

| | |
|---|---|
| 0 | 50 / 60 Hz |
| 1 | 400 Hz (except on Enerium 100 / 200 class 0.5s / 300) |

3 Auxiliary power supply

| | |
|---|--------------------------------|
| 0 | 80 to 265 Vac / 110 to 375 Vdc |
| 1 | 19.2 to 58 Vdc |

4 Communication

| | |
|---|----------|
| 0 | RS485 |
| 1 | Ethernet |

Note: with choices 5, 6, 7 and 8, it is possible to have a maximum of 8 inputs and/or outputs (ENERIUM 100-110/200-210).

Note: for the Enerium 50/150, choices 5 and 6 only allow the following combinations: 0-0, 1-1, 2-0, 0-2.

5 Metering (or On-Off) inputs

| | |
|---|-------------------------------------|
| 0 | none |
| 1 | 1 input (only on ENERIUM 50/150) |
| 2 | 2 inputs |
| 4 | 4 inputs (except on ENERIUM 50/150) |
| 6 | 6 inputs (except on ENERIUM 50/150) |
| 8 | 8 inputs (except on ENERIUM 50/150) |

6 On-Off outputs

| | |
|---|--------------------------------------|
| 0 | none |
| 1 | output (only on ENERIUM 50/150) |
| 2 | 2 outputs |
| 4 | 4 outputs (except on ENERIUM 50/150) |
| 6 | 6 outputs (except on ENERIUM 50/150) |
| 8 | 8 outputs (except on ENERIUM 50/150) |

7 Analogue inputs (ENERIUM 100/200 only)

| | |
|---|-------------------|
| 0 | none |
| 2 | 2 analogue inputs |
| 4 | 4 analogue inputs |
| 6 | 6 analogue inputs |
| 8 | 8 analogue inputs |

8 Analogue outputs

| | |
|---|--------------------------------------|
| 0 | none |
| 2 | 2 outputs |
| 4 | 4 outputs (except on ENERIUM 50/150) |

9 Accuracy class

| | |
|---|-------------------------------------|
| 5 | 0.5 s (except on ENERIUM 300) |
| 2 | 0.2s (ENERIUM 200/210/300/310 only) |

Example: Enerium 200, frequency 50/60 Hz, 80 to 264 Vac auxiliary power supply, RS485 communication, 2 on-off inputs, no on-off outputs, no analogue inputs, no analogue outputs, Class 0.2s

=> order ENERIUM 200 01020002 • 1-200 • 2-0 • 3-1 • 4-0 • 5-2 • 6-0 • 7-0 • 8-0 • 9-2

Logiciels

| | |
|---------|-----------|
| E.set | P01330501 |
| E.View | P01330601 |
| E.View+ | P01330610 |

Accessories

| | |
|---|-----------|
| Optical head for ENERIUM 50/150 | P01330403 |
| Optical head for ENERIUM 100/110 - 200/210 – 300/310 | P01330401 |
| DIN-rail mounting kit for ENERIUM 30/50/150 | P01330830 |
| DIN-rail mounting kit for ENERIUM 100/200/300 | P01330360 |
| 690 V / 400 V resistive voltage adapter (for wind-turbine applications) | P01330402 |
| Power supply for On-Off inputs 85 to 256 Vac/12 Vdc – 3.5 A (42 W) | ACCJ1004 |

FRANCE

Enerdis
16, rue Georges Besse - Silic 44
92182 ANTONY Cedex
Tel : +33 1 75 60 10 30
Fax : +33 1 46 66 62 54
info@enerdis.fr
www.enerdis.fr

UNITED KINGDOM

Chauvin Arnoux Ltd
Unit 1 Nelson Ct, Flagship Sq, Shaw Cross Business Pk
Dewsbury, West Yorkshire - WF12 7TH
Tel: +44 1924 460 494
Fax: +44 1924 455 328
info@chauvin-arnoux.co.uk
www.chauvin-arnoux.com

MIDDLE EAST

Chauvin Arnoux Middle East
P.O. BOX 60-154
1241 2020 JAL EL DIB - LEBANON
Tel: +961 1 890 425
Fax: +961 1 890 424
camie@chauvin-arnoux.com
www.chauvin-arnoux.com

