

BMSvision

Empowering your productivity



EM/TCP

Energy analyzer & concentrator
dimensioned for the manufacturing industry



In-depth electrical
analysis



Easy integration
and configuration



One device to
connect all



Map all energy
flows



Easily
expandable

FEATURES

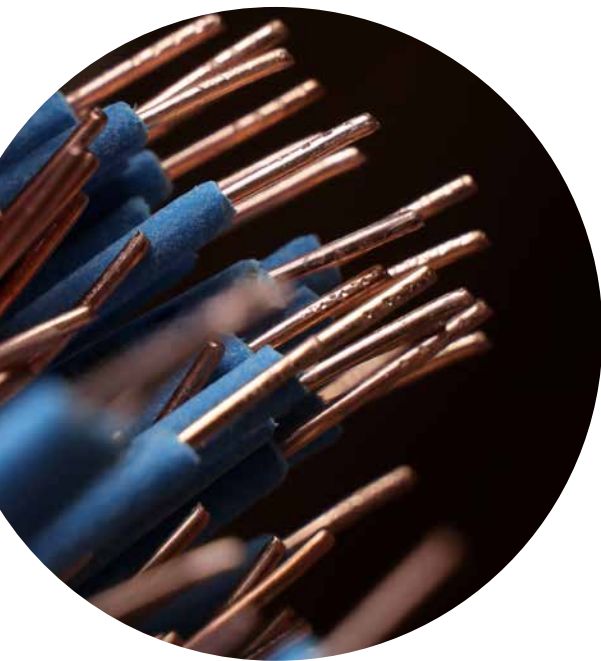
- High Accuracy (0.5S).
- Measuring up to the 51 harmonics.
- Modbus TCP protocol.
- Connect ethernet ready machines directly to the server.
- Calculate immediately the efficiency of utilities.
- 4 analog inputs (4 - 20 mA, 0 - 10 V, 0 - 5 V, -5 - 5V).
- Expand up to 8 Modbus RTU meters (option).
- MQTT (option).

Ease of use

The energy analyzer works on Modbus TCP communication protocol, giving a reliable data transfer between the server and the machine.

As the device is also a concentrator, you can connect the remaining utilities data streams such as compressed air to it.

- Making it suitable to map the total energy consumption for (ethernet ready) machines without the need of an BMSvision Data Unit.
- Immediately calculate the efficiency of the utilities such as compressors, chillers (COP), pumps, ...



Straightforward integration and configuration

Connecting the device to the network is straightforward:

Simply plug in the Ethernet cable and enter the static IP address and communication settings directly on the device's screen.

The EM/TCP device can be further configured through the BMSvision energy management system

Guaranteed data quality

We take responsibility over the quality and robustness of the EM/TCP meter data as part of the BMSvision hardware portfolio.

Technical specifications

Electrical

Connection:

3-phase, 1-phase and 2-phase, LV, MV, HV balanced, unbalanced, 3- and 4-wires.

Voltage inputs:

20 V to 500 V phase to phase. With external VT (max. 400 kV primary).

Current inputs:

1, 2 or 3 external CTs, max. 10 kA primary and 1 A or 5 A secondary. Load on the CT: < 0.5 VA.

Power supply:

85 - 265 Vac
100 - 374 Vdc.

Functional

Measurement:

True-RMS up to the 51st harmonic.

Accuracy active energy:

Class 0.5S according to EN 62053-22.
Class C according to EN 50470-3.

Accuracy reactive energy:

Class 1 according to EN 62053-24.

Insulation:

Galvanic on all the inputs and outputs.

Protection class:

Safety: IEC EN 61 010 class 2.
EMC: IEC EN 61326-1A.

Analog inputs:

4 inputs: 4 - 20 mA, 0 - 10 V, 0 - 5 V, -5 - 5V

Mechanical

Working temperature: -20 to +60 °C.

Humidity: 95% RH, non-condensing.

Enclosure: Self-extinguishing plastic class UL 94 V0.

Protection degree:

Front panel: IP40,
terminals side: IP20.

Size: 106.3 x 90.5 x 62 mm (6 DIN modules).

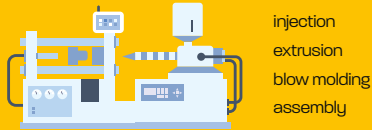
Mounting: DIN rail.

Terminals: Screw connector cables.
Max. section up to 4 mm².

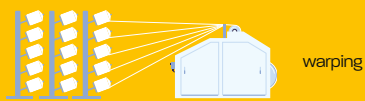
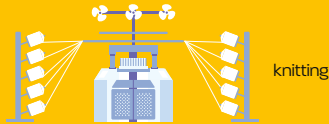
Weight: About 260 g.

For all consumers

Plastics



Textiles

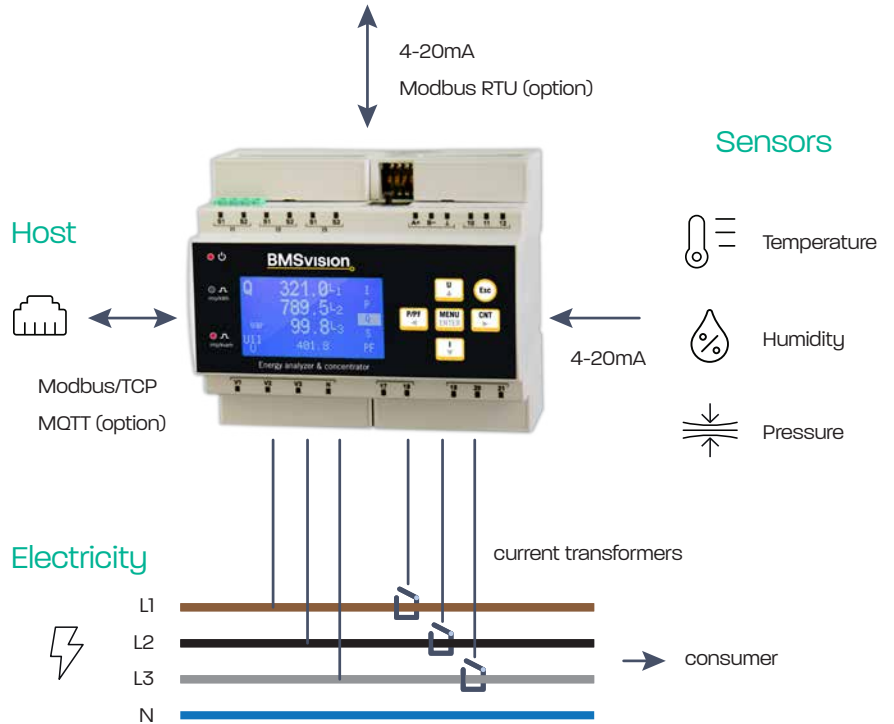
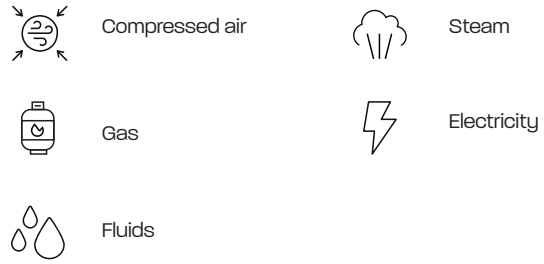


Utilities

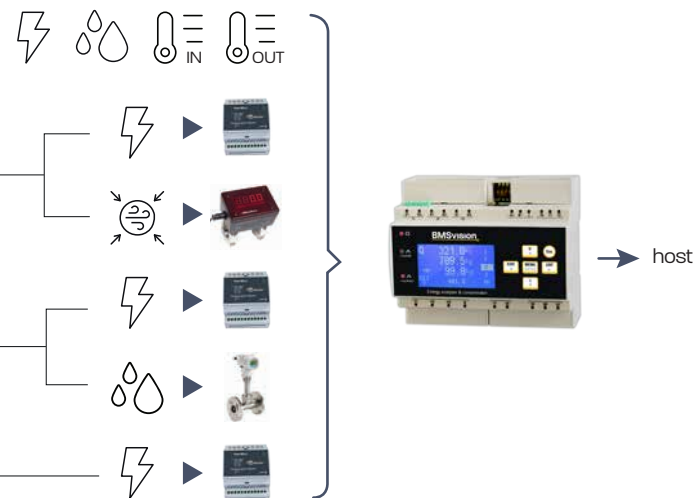


Easily expandable

Flow and other meters



Example



• E M P O W E R I N G • • • • •
 • • • • • Y O U R • • • • •
 • • • P R O D U C T I V I T Y • • • • •

Why BMSvision

- MES experts since 1975.
- + 2000 installations worldwide.
- Innovation is part of our DNA.

Interested to know more?

Check out our website www.bmsvision.com
Or contact our experts via sales@bmsvision.com



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