

Webdom Datalogger 3.0

Smart Energy Meter

Ref. VARIOUS MODELS
Webdom Dataloggers

Energy monitoring from a single device in a simple and intuitive way. Control the performance of your installation.

Example: DIN rail installation



GENERAL DESCRIPTION

The Webdom System is a data logger which controls both photovoltaic production and energy consumption, turning the Webdom Datalogger 3.0 in a powerful tool for managing and improving energy efficiency.

Thus the Webdom system is used for energy measuring in

- INDUSTRIES
- PUBLIC BUILDINGS
- NEIGHBOURHOOD COMMUNITIES
- PHOTOVOLTAIC PLANTS
- OTHER PROJECTS

Webdom data logger allows measuring electricity, water and gas meters, as well as meteorological sensors and photovoltaic inverters.

SYSTEM PERFORMANCE

The connection with the devices is made by serial or Ethernet port. It can be connected since 3 to 6 current clamps, depending on the model. The data logger also has several digital and analog inputs for counting pulses and connect sensors.

The internet connection for data sending is performed by Ethernet or by incorporating an internal GPRS modem (optional). The device can be adapted to the main type of energy measuring elements.

Historical data are stored in a server (client property), in a MySQL database. It is also possible to download XML files by FTP. The data logger implements Modbus-RTU / Modbus-TCP and JSON-RPC interface.

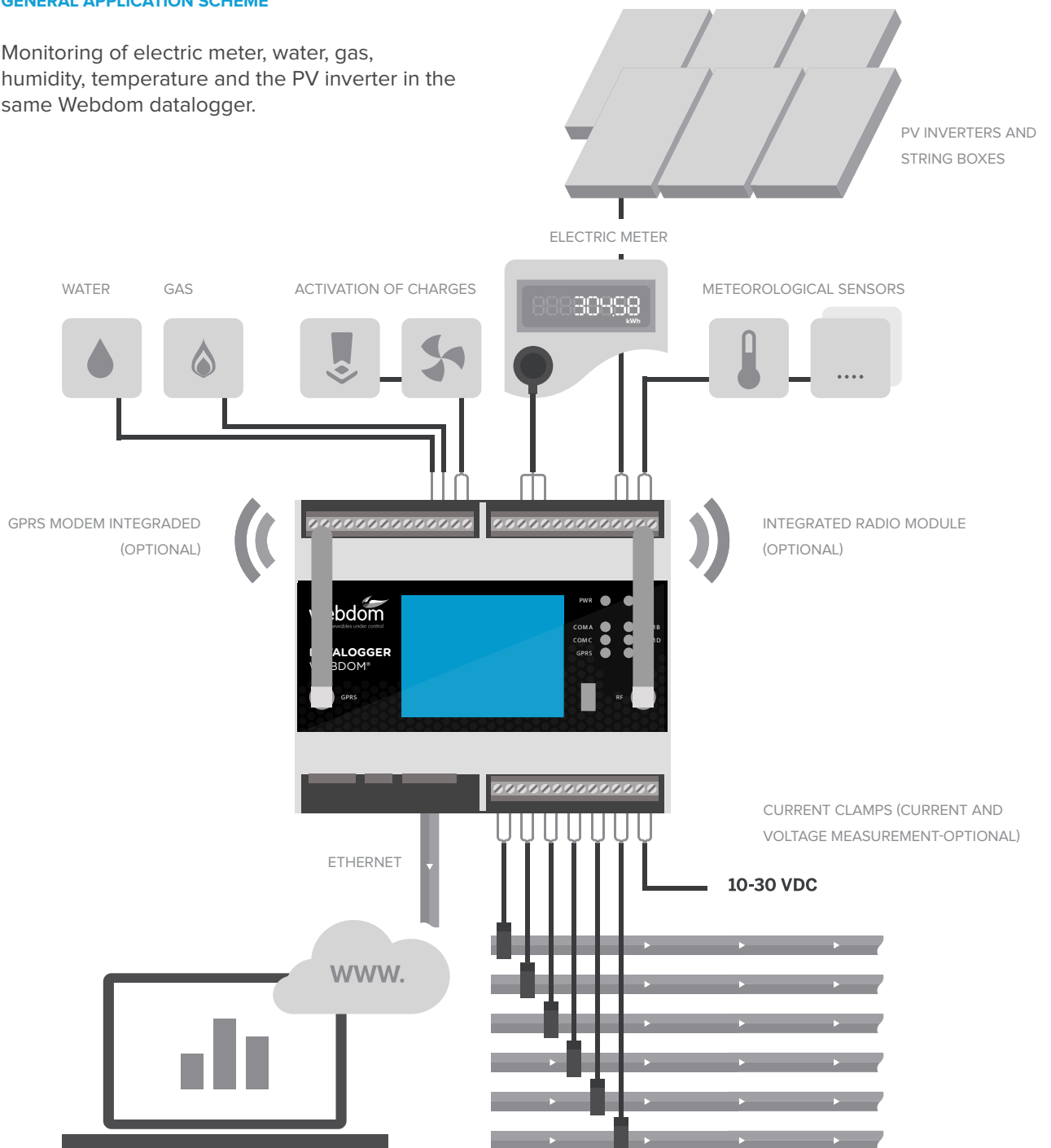
Webdom Datalogger 3.0

Smart Energy Meter

Ref. VARIOUS MODELS
Webdom Dataloggers

GENERAL APPLICATION SCHEME

Monitoring of electric meter, water, gas, humidity, temperature and the PV inverter in the same Webdom datalogger.

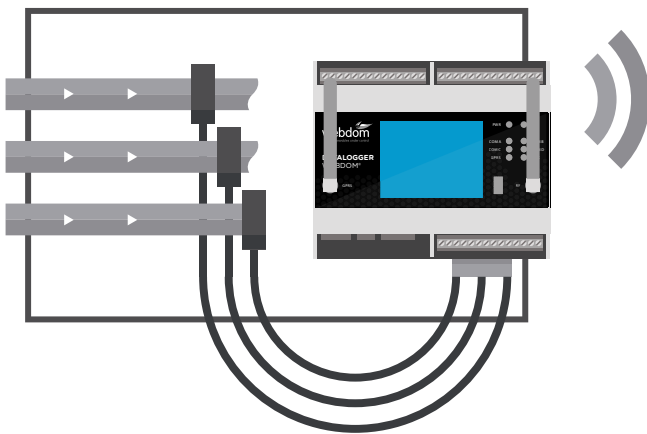
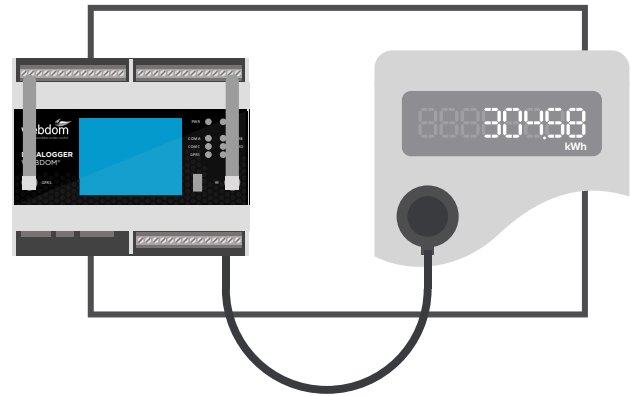


EXAMPLE 1. ENERGY MONITORING

Monitoring - Utility meter

Monitoring utility meter directly through an optical probe.
Communication with the software through Internet
(Protocols IEC870-5-102 and IEC62056-21)

OVERALL ENERGY CONSUMPTION AND ENERGY,
PRODUCTION, REAL TIME VALUES,
HISTORICAL ENERGY DATA, ALARMS.



EXAMPLE 2. ENERGY MONITORING

Monitoring – Power Lines

Monitoring of single phase and 3-phase lines with a maximum of 6 current clamps.

Examples:

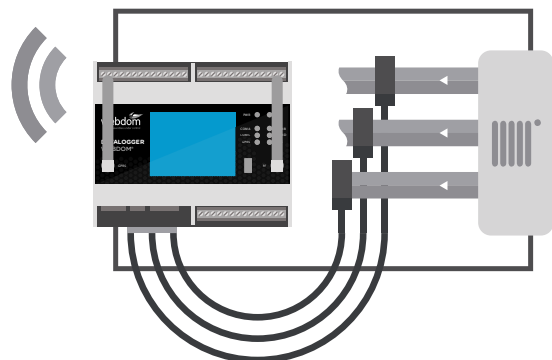
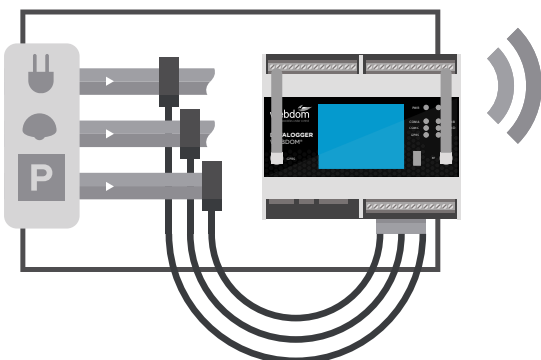
- 6 x single phase lines
- 3 x single phase lines + 1 x 3-phase line
- 2 x 3-phase lines

EXAMPLE 3. ENERGY MONITORING

Monitoring – Several distribution panels

Reading consumptions (sockets, lighting, parking) of one distribution panel through a Master Webdom and reading consumptions (HVAC) of a second distribution panel through a Slave Webdom. Radio communication between Master and Slave Webdoms.

The Master Webdom collects all the data from the slaves and from itself, and sends gathered data to the server through the internet.



Webdom Datalogger 3.0

Smart Energy Meter

Ref. VARIOUS MODELS

Webdom Dataloggers

TECHNICAL DATA

General Information

Dimensions	107,6 x 62,2 x 89,7 mm (6 Div.)
Weight	223gr
Enclosure	Polycarbonate
Mounting	Rail DIN35
TFT Screen (Optional)	2"-320X240pixels
Power Input Range	10 ~ 30 VDC inputs
Power Consumption	10 W (Typical)
Power Requirement	10 ~ 30 VDC (e.g. + 24 VDC @ 1 A) (Min. 24 W)
Status Leds	8 Status leds. Power, Serial communication, GPRS, SD, Memory Card, Ethernet.
Working Temperature	-10 ~ 70°C (14° ~ 158°F)
Storage Temperature	-20° ~ 80°C (-4° ~ 176°F)
Storage	1 x SD slots (Mini SD and SIM)
Certificates	CE, FCC Class A, CCC, UL

Comms

Serial Ports	1 x RS232 (With flux control) 2 x RS422/485 (Modbus-RTU/ Otros)
Serial Port Speed	RS-232: 300 ~ 115.2 kbps. RS-422/485: 300 ~ 115.2 kbps
Modem (Optional)	GPRS Integrated
Lan	1 x 10/100 Base-T RJ-45 Ports. Modbus-TCP
Usb	USB Port
Radio (Optional)	RF@868MHz, Module Potencia max. 20dBm, antena 2dBi

Inputs and Outputs

Analog	6 x Analog inputs (2x 4-20mA, 2x 0-10V, 2x PT100-PT1000)
Digital	4 x Digital inputs/Pulse meters 2 x Digital outputs
Current Clamps	6 x Inputs for current clamps Split core clamps 1A/5A secondary

WEBDOM DATALOGGER 3.0 READING CHANNELS

Monophasic Channels

IRMS	Phase current - [A]
IRMS_MAX	Phase MAX. current - [A]
POWER	Phase power - [W]
ENERGY	Phase total energy - [kWh]

Triphasic Channels

IRMS-1	Phase 1 current - [A]
IRMS-1_MAX	Phase 1 MAX. current - [A]
POWER-1	Phase 1 power - [W]
IRMS-2	Phase 2 current - [A]
IRMS-2_MAX	Phase 2 MAX. current - [A]
POWER-2	Phase 2 power - [W]
IRMS-3	Phase 3 current - [A]
IRMS-3_MAX	Phase 3 MAX. current - [A]
POWER-3	Phase 3 power - [W]
ENERGY-1	Phase 1 total energy - [kWh]
ENERGY-2	Phase 2 total energy - [kWh]
ENERGY-3	Phase 3 total energy - [kWh]
TOTAL POWER	Triphasic total power - [kW]
TOTAL ENERGY	Triphasic total energy - [kWh]

WEBDOM POWER SUPPLY ISO READING CHANNELS (OPTIONAL)

Channels with Power Supply ISO

Pinst	Instantaneous active power - [W]
Qinst	Instantaneous reactive power - [Var]
Pavg	Average active power - [W]
Qavg	Average reactive power - [VA]
Savg	Average apparent power - [VA]
Vrms-1	Phase 1 voltage - [VA]
Vrms-2	Phase 2 voltage - [VA]
Vrms-3	Phase 3 voltage - [VA]
PF	Power Factor

Webdom Datalogger 3.0

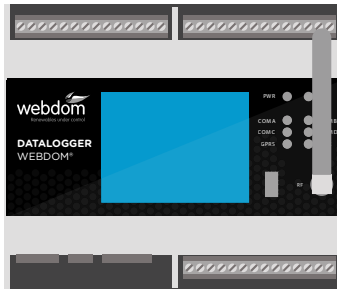
Smart Energy Meter

Ref. VARIOUS MODELS
Webdom Dataloggers

WEBDOM DATALOGGER TYPES



WEBDOM DATALOGGER 3.0



WEBDOM DATALOGGER 3.1

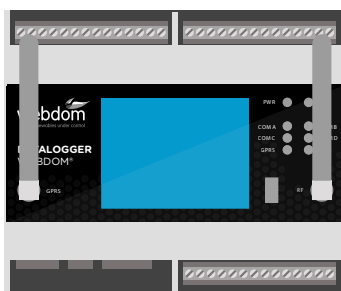


WEBDOM DATALOGGER 3.2

Webdom Datalogger 3.0

Reference Code	WD0003.0	WD0003.1	WD0003.2
Ethernet	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Display	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Radio	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
GPRS	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

WEBDOM DATALOGGER + POWER SUPPLY ISO



WEBDOM DATALOGGER 3.1/3.2/3.3



POWER SUPPLY ISO

Power supply with voltage reducer and insulation, designed to measure the voltage along with the Datalogger Webdom 3.0.

WEBDOM POWER SUPPLY ISO

Reference Code	FA0005
----------------	--------

Webdom Datalogger 3.0

Smart Energy Meter

Ref. VARIOUS MODELS
Webdom Dataloggers

COMMUNICATION PROTOCOLS IMPLEMENTED



VISUAL WEBDOM - FREE SOFTWARE



WEBDOM.ES

info@webdom.es | www.webdom.es | Tlf. (+34) 938 272 932



facebook.com/WebdomLabs

twitter.com/WebdomLabs