# **Eficiency Data Server**





### Description

**EDS** is an energy manager equipped with **PowerStudio** Embedded and a built-in web and XML server, which enables the user to query any electrical variable by connecting the metering equipment to its RS-485 bus without having to install any software. Thanks to the RS-485 expansion bus, the user can view any variable from the units connected to the bus and can even display information in real time, in table or graphic format (data logger). There are 8 voltage-free digital inputs and 6 programmable relay digital outputs.

Its most salient features include:

- Parameterisation and management of automatic events
- Alarm recording system and system event management
- E-mail alarms.
- RS-485 port for connecting up to 5 devices.
- Ethernet connection
- Centralisation of alarms through detection of logical states or centralization of consumption by pulses.

# **Technical features**

Power Supply circuit	Power Supply voltage	85 264 Va.c. / 120 374 Vd.c.			
	Frequency	47 63 Hz			
	Consumption	5 8 VA			
Output features	Туре	Relay			
	Maximum operating power	740 VA			
	Maximum operating voltage	250 V <sub>a.c.</sub>			
	Maximum current commutation	5 A with resistive load			
	Electrical working life (250 V <sub>a.c.</sub> / 5 A)	3 x 10 <sup>4</sup> maneuvers			
	Mechanical working life	2 x 10 <sup>7</sup> maneuvers			
Input features	Туре	Free-voltage opto isolated			
	Max. current activation	50 mA			
	Isolation	1500 V			
Display	LCD with Backlight				
Mechanical features	Enclosure	Autoextingible UL94 V0 plastic			
	Protection degree	IP 51			
	Dimensions (mm)	105 x 90 x 70 mm (6 modules)			
	Weight	280 g			
Enviroment conditions	Working temperature	-10 °C 60 °C			
	Humidity	5 95% (without condensation)			
	Max. Altitude	2000 m			
Network interface	Туре	Ethernet 10BaseTX			
	Conector	RJ-45			
	Network protocol	HTTP / Modbus/RTU			
	Bus	RS-485			
Serial interface	Туре	RS-485 three wires (A/B/S)			
	Transmition speed	4800, 9600,19.200, 34.800,			
		57.600, 115.200 bps			
	Data bit	8			
	Partity	Without parity, pair, odd			
	Stop Bit	1/2			
Safety	Category III 300 / 520 Va.c. according to <b>EN 61010</b> Class II double insulation against electric shock				
tandards IEC 60664, VDE 0110, UL 94, EN 61010-1, EN 55011, EN 61000-4 EN 61000-4-11, EN 61000-6-4, EN61000-6-2, EN 61000-6-1, EN 61000-6-3, EN 61000-4-5					

# **Efficiency Data Server**

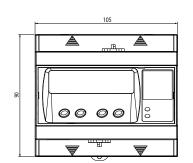
# Applications

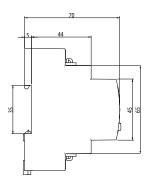
- Domestic application: EDS can be used to control the partial consumption of each load in a domestic installation.
  - Control of domestic consumption.
  - Compare your consumption with that of the energy marketer.
  - Rationalisation of home consumption.
- SME/Industrial application: EDS facilitates the control of partial consumptions of the different single-phase and three-phase loads during productive and non-productive periods.
  - Control the consumption of your installation 24/365 and locate residual consumption during non-production periods.
  - Check the power level contracted in the installation.
  - Supervise the level of harmonics and the reactive load of your installation.
  - Alarms for consumption or incidents in your electrical network.
  - No need for a computer
  - Possibility of connection when specified: the system acts automatically.
  - Provides information about your bill before you receive it.
- Multi-point application: in the case of load distribution (or remote installations) EDS can control the individual consumption of each of the installations and centralise them into a single one.
  - Efficient, easy and simple control of the consumption of your remote sites.
  - Energy reports per consumption zone or site
  - Remote alarms for excess consumption or incidents in the electrical network.
  - Possibility of comparing consumption for each site.

#### References

Description	Comunications	Ethernet	Internet	Digital inputs	Digital outputs	Туре
Remote energy manager with PowerStudio Embedded technology	RS-485 Modbus/RTU	Yes	Built-in Web server and XML	8 (voltage-free)	6 per relay	EDS
Remote energy manager with <i>PowerStudio Embedded</i> <i>technology</i> with generic modbus driver to communicate with other devices	RS-485 Modbus/RTU	Yes	Built-in Web server and XML	8 (voltage-free)	6 per relay	EDS Deluxe

### **Dimensions**





#### Connections

