



## energy meters

## instruments for analysis of power consumption

These energy meters are precise measuring instruments designed to monitor the main electrical parameters and instant and total power consumption of the connected loads.

They record power consumption data, thus allowing system managers to carry out complete and detailed analysis in order to:

- identify when and where power is consumed;
- identify incorrect behaviour and usage;
- troubleshoot faults and abnormal power usage;
- evaluate the effects of energy saving strategies implemented.

These instruments are already integrated into and managed by the CAREL PlantVisorPRO and PlantWatchPRO

supervisors, and the pLoads and pChrono electrical load controllers.

A 1tool module is also available for integration into CAREL pCO sistema programmable controllers.

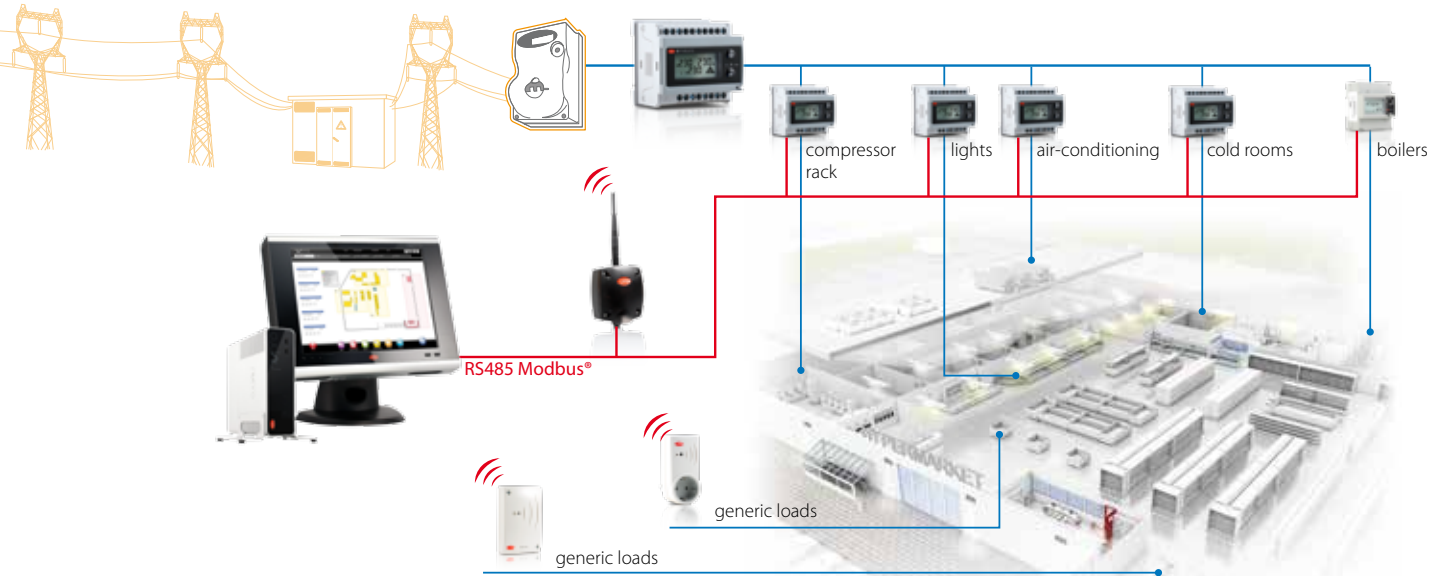
The instruments can moreover be integrated into other BMS systems using ModBus®/RS485 communication.

They are useful additions to the Retail sistema range, which includes a wide offering of Carel products and solutions designed to maximise energy saving, through optimised use of systems, reduction in power consumption, and identification and elimination of waste.

### CAREL emeter3:

- three-phase energy meter
- optional display
- DIN rail or built-in mounting
- 4 DIN modules





## Product table

Products		
	MT100D2100	Single-phase energy meter with built-in user interface. This measures the electrical parameters of the line and the applied loads, and includes total and partial energy metering. Direct connection for loads up to 65 A.
	MT300W1100	Three-phase energy meter without user interface (optional, P/N MTOPZD0000). Designed for easy installation on the panel or on DIN rail. It requires three external current transformers (example: MTOPZT1000 or MTOPZT2000, version up to 9600 b/r).
<b>NEW</b>	MT300W3200	Three-phase energy meter without user interface (optional, P/N MTOPZD0000). Designed for easy installation on the panel or on DIN rail. It requires three external current transformers.
Options		
	MTOPZD0000	Removable user terminal (no batteries required) for three-phase energy meter MT300W1100.
	MTOPZT*	Current transformer: *= 1000: 100 A for cable/busbar; 2000: 200 A for cable/busbar.
<b>NEW</b>	MTOPZA*	Openable current transformer: *= 1000: 100 A for cable/busbar; 2000: 200 A for cable/busbar; 4000: 400 A for cable/busbar.
rTM system wireless solutions		
	WS01C010*0	Wireless single-phase energy meter for loads up to 2.5 kW with built-in relay for ON/OFF management of electrical loads, 85 Vac to 250 Vac 50/60 Hz power supply. *= type of plug; I: Italian; E: European; F: French; U: British. - To be used with Access Point (code WS01AB2M20)
	WS01C010X0	Wireless single-phase energy meter for loads up to 2.5 kW with built-in relay for ON/OFF management of electrical loads, 85 Vac to 250 Vac 50/60 Hz power supply, direct connection to the controlled unit for universal use to prevent tampering/vandalism. - To be used with Access Point (code WS01AB2M20)



### Integration

Totally integrated into the 1tool development environment, the CAREL PlantVisorPRO, PlantWatchPRO supervisors and the pLoads controller (optimised management of electrical loads)



### Connectivity

Modbus on RS485 communication as standard.  
Can also be used with third party BMS.



### Display

Display for configuration and directly reading the measurements.  
Removable on the three-phase model.  
Without battery and electrical contacts.

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