

## CC12



ACS counters solar module in buildings. Features and operation are designed to measure independently, flow and heat energy supplied to each apartment building. Similarly, it is able to measure and know the energy which is generated in the control system.

Unlike others products, is capable of controlling valves, 3-speed pump, alternating twin pumps, central warehouse, auxiliary heater... .

In the same way, is capable to measure and know which is the energy generated in the control system.

Furthermore, SC10 central incorporates a wireless communication system that enables a clean installation without cables from the farthest house to the control central.

Like other MSS products, is able to use a GPRS modem and instantly send the status of the installation, a summary of the times and operating data to our website. Where you can remotely configure the control parameters without the need to travel to the facility through our website.

*Simple installation.*

*Graphic display.*

*No maintenance.*

*Configurable operation.*

*Damage control.*

*Over temperature control.*

*Wireless system.*

*Energy counter global and individual.*

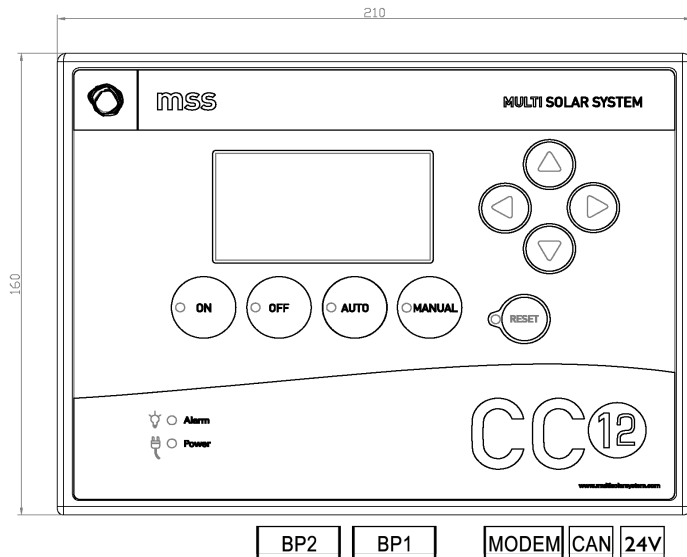
*Energy efficiency control*

*Legionella cleaner.*

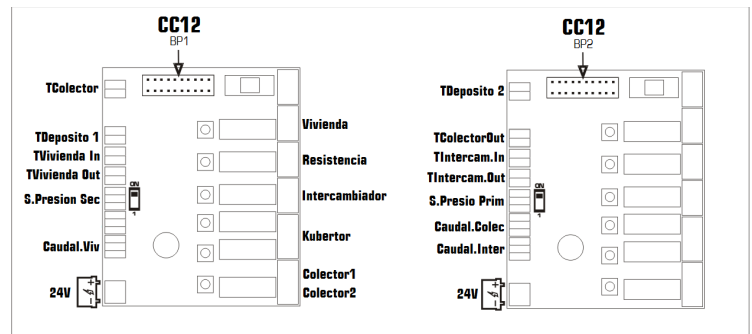
### Technical data

	Comple	Premium
Inputs temperature PTC sensor (Collector)	1	1
Inputs temperature NTC sensor	3	7
Inputs irradiation sensor	X	X
Total relays outputs	6	12
Kubertor/Aerothermo	√	√
Twins pump (primary circuit)	√	√
Three speed-pump	X	√
Resistance in the storage	√	√
Heat exchange	√	√
Pressure sensor	1	2
Flow meters	2	3
Cooling night	√	√
Anti-freeze	√	√
Over-temperature	√	√
Legionella cleaner	√	√
Second sensor in tank	X	√
Energy meter	√	√
GPRS communication	√	√

## Measure



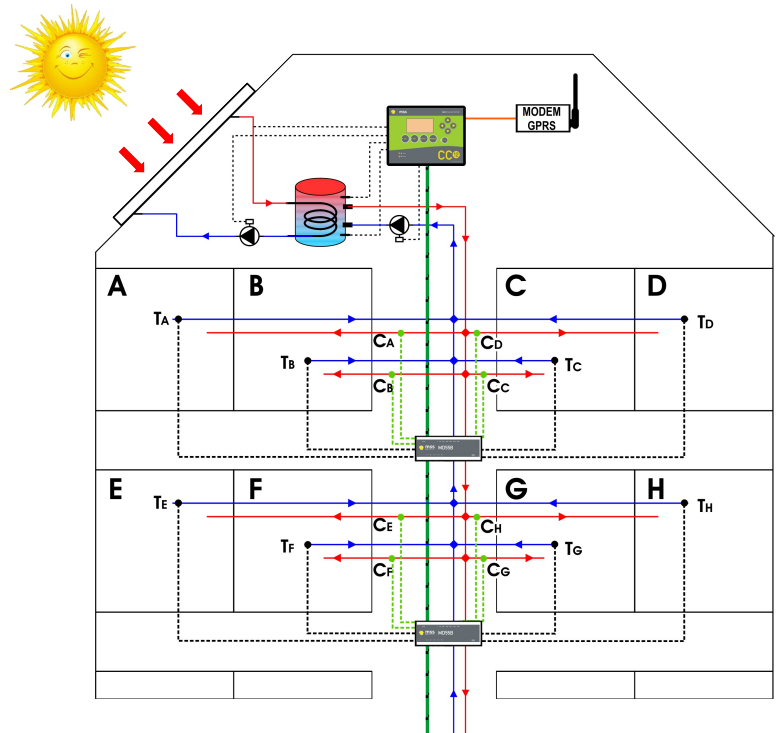
## Electrical connection



## Types of installation

Dispose of energy meter every housing, that provide to the system acquires global and individual data consumption of each user of the system in terms of media consumption.

Acquires data are sent to the MSS server ( if the client hires the service) where the assigned person can see and access to the consumption and acquired data.



## Summary table:

	Only meters		Complete				Premium			
			Cable		wireless		Cable		wire less	
ITEM/DESCRIPTION	CC12	CC12G	CC12C	CC12CG	CC12CZ	CC12CZG	CC12P	CC12PG	CC12PZ	CC12PZG
TEMPERATURE MEASUREMENT										
Collector sensor	X	X	√	√	√	√	√	√	√	√
Deposit sensor (lower)	X	X	√	√	√	√	√	√	√	√
Energy Inputs sensor	X	X	√	√	√	√	√	√	√	√
Energy Outputs sensor	X	X	√	√	√	√	√	√	√	√
Deposit sensor (top)	X	X	X	X	X	X	√	√	√	√
Output collector sensor	X	X	X	X	X	X	√	√	√	√
Input exchange sensor	X	X	X	X	X	X	√	√	√	√
Output exchange sensor	X	X	X	X	X	X	√	√	√	√
CONNECTING DEVICES										
Pump primary circuit	X	X	√	√	√	√	√	√	√	√
Pump primary circuit (twin)	X	X	√	√	√	√	√	√	√	√
Kubertor/ Aerothermo	X	X	√	√	√	√	√	√	√	√
Exchange pump primary circuit	X	X	√	√	√	√	√	√	√	√
Auxiliary resistance	X	X	√	√	√	√	√	√	√	√
Exchange pump secondary circuit	X	X	√	√	√	√	√	√	√	√
COMMUNICATION										
Wireless	X	X	X	X	√	√	X	X	√	√
DELIVER DATA TO WEB										
GPRS Modem	X	√	X	√	X	√	X	√	X	√
CONNENTION FLOWMETER (flow meter not included)										
No. ports for flow meters	0	0	2	2	2	2	3	3	3	3
CONNENTION PRESSURE SENSOR (pressure sensors not included)										
No. ports of pressure sensor	0	0	1	1	1	1	2	2	2	2

## Accessories CC12

### Story module:

responsible for measuring the flow rate and the energy generated in each housing.

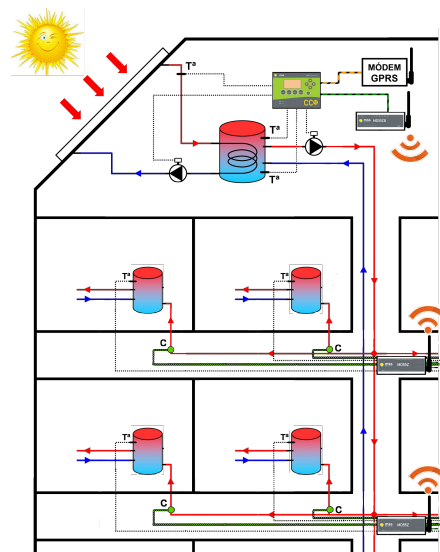
#### Basic functions:

Store information of the apartments on each floor.

Energy balance measurement.

Temperature Sensor.

Distribution Module configuration alternatives 5 or 9 housing.



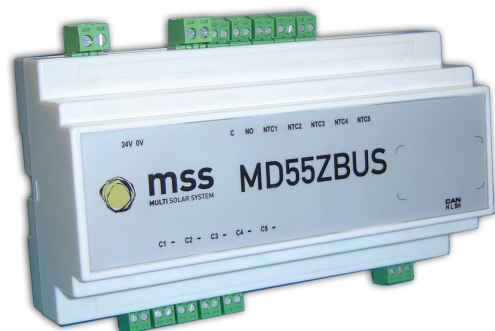
#### STORY MODULE WITH CABLE

<b>MD55B</b>	Meter is designed to measure the thermal energy and flow of 5 homes simultaneously. The product includes 5 temperature sensors.
<b>MD99B</b>	Meter is designed to measure the thermal energy and flow of 9 homes simultaneously. The product includes 9 temperature sensors.
<b>MD55CB</b>	Meter is designed to measure the flow of 5 homes simultaneously.
<b>MD99CB</b>	Meter is designed to measure the flow of 9 homes simultaneously.

#### STORY MODULE WIRELESS

<b>MD55Z</b>	Meter is designed to measure the thermal energy and flow of 5 homes simultaneously. The product includes 5 temperature sensors.
<b>MD99Z</b>	Meter is designed to measure the thermal energy and flow of 9 homes simultaneously. The product includes 9 temperature sensors.
<b>MD55CZ</b>	Meter is designed to measure the flow of 5 homes simultaneously.
<b>MD99CZ</b>	Meter is designed to measure the flow of 9 homes simultaneously.

### Coordinator module:



Collects all information from counter modules and send it to the CC12 central. Only for Wireless system.

#### Basics functions:

Controls and coordinates the communication with the story modules.

Bus communication with Central Module.

#### COORDINATOR MODULE

<b>MCZB</b>	Collect the information of all wireless modules.
<b>MD55ZB</b>	Collect the information of all wireless and cable modules. Coordinator also measure the thermal energy and flow of 5 apartments simultaneously. The product includes 5 temperature sensors.
<b>MD99ZB</b>	Collect the information of all wireless and cable modules. Coordinator also measure the thermal energy and flow of 9 apartments simultaneously. The product includes 9 temperature sensors
<b>MD55CZB</b>	Collect the information of all wireless and cable modules. Coordinator also measure the flow of 5 apartments simultaneously.
<b>MD99CZB</b>	Collect the information of all wireless and cable modules. Coordinator also measure the flow of 9 apartments simultaneously.