SC10



SC10 central is designed to control the production of SHW in buildings. Its features and operation are designed to control the operation of pumps and system devices while calculates the solar power produced by the facility.

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 maintenace. Configurable operation. Damage control. Over temperature control. Wireless system. Energy counter global and individual.

Technical data:

	Simple	Complet	Premium
Inputs probes PTC (Collector)	1	1	1
Inputs temperature probes NTC	1	3	7
Inputs irradiation sensor	Х	Х	Х
Total relays outputs	3	6	12
Kubertor /Aerotermo	N	N	N
Twins pump (primary circuit)	Х	V	N
Three speed-pump	Х	N	N
Resistance in the storage	Х	Х	Х
Heat exchange	Х	Х	N
Pressure sensor	Х	1	2
Flow meters	Х	2	3
Cooling night	N	V	N
Anti-freeze	N	N.	N
Over temperature	N	V	N
Legionella cleaner	х	Х	Х
Second probes in tank	Х	Х	N
Energy meter	Х	N	N
GPRS communication	N	V	N

Measures



Electrical connection



Types of installation

Installation in building with "n" number of housing. The installation consists of:

-central module, next to the engine room, control panel and programming unit.

Controls the primary circuit of solar collection and distribution and function of bus communication and control modules Housing in secondary circuit.

-distribution module, next to to the distribution panel of each floor, communication bus between modules and power distribution to the housing module.

-housing module, in each housing, controls of the accumulator tank SHW, temperature, valve and resistance and communication bus with central module.

Dispose of energy meter in the 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:

		Sin	nple			Con	nplet			Prei	nium	
	Ca	ble	Wir	eless	Ca	ble	Wir	e less	Ca	ble	Wir	eless
ITEM/DESCRIPTION	SC10B	SC10BG	SC10BZ	SC10BZG	SC10C	SC10CG	SC10CZ	SC 10CZ G	SC10P	SC10PG	SC10PZ	SC10PZ6
TEMPERATURE MEASURE/	WENT											
Collector sensor	\sim	\sim	\sim	$\sim \sqrt{-1}$	\sim	\sim	\sim	1	\sim	\sim	\sim	\sim
Deposit sensor (lower)	\sim	$\sim $	$\sim $	$\sim \sqrt{-1}$	$\overline{\mathbf{A}}$	\neg	$\sim $	$\sim $	$\sim \sqrt{-1}$	$\sim $	$\sim $	\sim
Energy Inputs sensor	Х	Х	Х	Х	\sim	1	\sim	1	1	\sim	\sim	\sim
Energy Outputs sensor	Х	X	Х	Х	\sim	$\sim $	$\sim \sqrt{-1}$	\sim	$\sim \sqrt{-1}$	\sim	$\sim \sqrt{-1}$	$\sim \sqrt{-1}$
Deposit sensor (top)	Х	Х	Х	Х	Х	Х	Х	Х	1	1	_√	- √
Output collector sensor	Х	X	X	Х	Х	X	X	X	$\sim \sqrt{-1}$	$\sim $	$\sim \sqrt{-1}$	$\neg $
Input exchange sensor	Х	Х	Х	Х	Х	Х	Х	Х	\sim	\sim	\sim	\sim
Output exchange sensor	Х	X	Х	Х	Х	X	X	X	$\sim \sqrt{-1}$	$\sim $	$\sim \sqrt{-1}$	$\neg $
CONNECTING DEVICES												
Pump primary circuit	\sim	\sim	\sim	\neg	$\overline{\mathbf{A}}$	\sim	\sim	1	\sim	\sim	\sim	\sim
Pump primary circuit (twin)	Х	X	Х	Х	$\overline{\mathbf{A}}$	\neg	$\sim \sqrt{-1}$	$\sim \sqrt{-1}$	$\sim \sqrt{-1}$	$\sim $	$\sim \sqrt{-1}$	$\sim \sqrt{-1}$
Kubertor/Aerotermo	\neg	\sim	\sim	\neg	\sim	- √	\sim	1	\sim	$\overline{\mathbf{A}}$	\sim	\sim
Exchange pump primary circuit	X	X	X	X	Х	X	X	X	4		Ą	Ą
Auxiliary resistance	Х	Х	Х	X	Х	X	Х	Х	Х	Х	Х	Х
Exchange pump secondary circuit	X	X	X	X	X	X	X	X	Х	X	X	X
COMMUNICATION												
Wireless	Х	X	$\sim \sqrt{-1}$	$\sim $	X	X	\sim	\sim	Х	X	\sim	\sim
DELIVER DATA TO WEB												
GPRS Modem	X	$\sim \sqrt{-1}$	Х	$\sim \sqrt{-1}$	X	\sim	X	\sim	X	\sim	Х	$\sim \sqrt{-1}$
CONNEXION FLOWMETE	R (Flow	/ meter	not inc	luded)								
No. ports for flow meters	0	0	0	0	2	2	2	2	3	3	3	3
CONNEXION PRESSURE SENSOR (Pressure sensors not included)												
No. ports of pressure sensor	0	0	0	0	1	1	1	1	2	2	2	2

Accessories SC10

Housing module:



Active resistance and/or heat exchanged with the main tank according to the temperature of this. <u>Basics functions:</u> Control of the accumulator tank SHW of each housing.

Control of temperature, valve and resistance. Communication bus with central module.

Item / Description	N⁰ probes
Housing module.	1
Housing module, energy meter.	2
Wireless housing module.	1
Wireless housing module, energy meter.	2

Distribution module:



Responsible for collecting all information of the module housing and send it to Central SC10.

Basics functions:

Installed in the distribution panel of each plant. Communication bus between modules.

Power distribution to the housing module.

Item / Description	Mod. connections
Distribution module (4 housing).	4
Distribution module (8 housing).	8