

TECHNICAL DATA SHEET

MODSECUR SMART IT RACK



ModSecur SMR is a complete solution, which includes a 3 to 6 kW cooling system in a rack (with the possibility of redundancy), a UPS-backed power system, access control, environmental monitoring and management and fire and extinguishing detection. Depending on the needs and requirements of each customer, ModSecur[®] Smart IT Rack can have redundant energy and cooling systems, as well as fire extinguishing and access control, which are optional.






ModSecur[®] SMR is a complete solution comprising an IT rack that integrates a DX-type climate control system (direct expansion), a rescued energy distribution system, an environmental and alarm monitoring system and a set of options, such as fire detection and extinguishing system, access control system, smart display, among others. ModSecur[®] SMR can be used as-a-service.

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MAIN FEATURES

- 24U, 30U, 42U or 47U racks;
- Racks from 1070mm to 1200mm in depth, with 800mm in width;
- Fire detection system;
- Access control system;
- Energy rescued – UPS;
- Cooling system up to 6kw;
- Environmental monitoring system – ModSecur EMS*;
- Available in two colors (other colors on request).

-  UPS
-  Fire Centre
-  ModSecur EMS
-  HVAC units
-  Access control system



Front and rear door access control system; proximity card reader, fingerprint reader, and reader options with both technologies

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MODSECUR SMART IT RACK

MAIN FEATURES

Base structure - IT Rack

- 30U, 42U or 47U racks (others on request)
- 1070mm or 1200mm deep hoop
- 800mm wide racks, with double rear doors
- Standard color: RAL9005 (black) – others on request
- Other measures on request

Cooling – cooling unit

- Top-cooling air conditioning unit, installed on top of the rack: 2.5kW to 5kW
- Integrated side cooling unit, installed inside the rack: cooling capacity from 1.6kW to 4.0kW – possibility of redundancy;
- High energy efficiency cooling unit: SEER >5.60
- Cooling unit with external condenser module;
- Other configurations and powers on request

Options

- ModSecur ACS - Front and rear door access control system; proximity card reader, fingerprint reader, and reader options with both technologies;
- Fire detection and extinguishing system:
 - Rack mount fire detection and extinguishing center
 - ModSecur LES - Fire extinguishing system:
 - NOVEC or FM200 gas based fire extinguishing system
- Monitoring platform display, command and control system, ModSecur E.M.S, based on a 7" touch display mounted on the front door of the SMR.

Power – UPS and PDU

- Uninterruptible power supply unit – UPS: rackmount, power from 1kVA to 20kVA
- Power distribution PDU – various models of horizontal or vertical fixing, with or without management
- Rack-mounted Power Box for power distribution – powering UPS and air cooling

Monitoring – ModSecur EMS

- Environmental monitoring platform, equipment management and alarms
- ModSecur E.M.S, with temperature and humidity sensors, status contacts and communication modules for interconnection with the climate control unit and UPS
- ModSecur E.M.S – connection of fire sensors and door contacts
- ModSecur E.M.S – UPS integration, air conditioning by communications protocol
- ModSecur E.M.S – 1U rackmount appliance with integrated software



Fire detection and extinguishing



Access control



Climatization System



Moisture protection



UPS



Monitoring

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DATA CENTER AGGREGATION

According to the needs of each Customer, it is possible to aggregate two or more units of the Smart IT Rack in order to increase the organization's storage and processing capacity.



Room configuration that includes 4 coupled Smart IT Rack units

TECHNICAL SPECIFICATIONS

Base structure

	SMR30		SMR42		SMR47	
Depth mm	1070	1200	1070	1200	1070	1200
Altura U's	30		42		47	
Largura mm	800					
AVAC Top-cooling (TC)	Up to 5kW (no redundancy)					
AVAC Side-cooling (SC)	Up to 4,0 kW	Up to 4,0 kW	Up to 2 x 4,0 kW	Up to 2 x 4,0 kW	Up to 2 x 4,0 kW	Up to 2 x 4,0 kW
AVAC Redundante	No	No	Yes (SC)	Yes (SC)	Yes (SC)	Yes (SC)

Other solutions on request, with units up to 40kW of cooling capacity.

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Cooling – air conditioning unit

Model	"Top cooling" (TC)			"Side cooling" (SC)	
	TC25	TC35	TC50	SC25	SC35
Minimum capacity (kW)	1,6	1,6	1,7	1,6	1,6
Nominal capacity (kW)	2,5	3,5	5,0	2,6	3,5
Maximum capacity (kW)	3,5	4,5	6,5	3,0	4,5
Nominal efficiency (EER)	4,50	4,62	4,00	3,90	3,90
Gas type	R32 - (reduction of environmental impact in the order of 68%)				
Max. length piping(m)	Up to 50m				
Air flow m3/h (min/med/max)	438/480/522	630/750/900		438/480/522	
Compressor	Inverter – continuous adjustment of the compressor speed to the needs at any given time				

Configuration example

	SMR42
Depth (mm)	1200
Total height of U's	42U
Width mm (outside)	800
AVAC Side-cooling (SC)	SC35 - 3,5KW
Fire detection system	LDS – Local Detection System (2U)
Sistema de extinção de incêndio	NOVEC
Fire extinguishing system	3KVA 10min autonomy (2U)
ModSecur Rack Power Box with Bypass	Rack Power Box + Bypass
Access control system	ModSecur ACS Smart Card (1U)
Environmental management and monitoring system	ModSecur E.M.S (1U)
Total U's available	36U's

For more information: www.maxiglobal.pt