



SDC-M RS

Micro-UPS DC with Modbus / BACnet – MS/TP Communication

12 V DC – 15 V DC – 24 V DC – 48 V DC

Micro-UPS with “Smart Backup Inside”
and very long service life.



BOX2
dim (mm) → W285 X H198 X D61



DMR
dim (mm) → W161 X H92 X D65



DIN1
dim (mm) → W100 X H124 X D82



DIN2
dim (mm) → W100 X H124 X D122

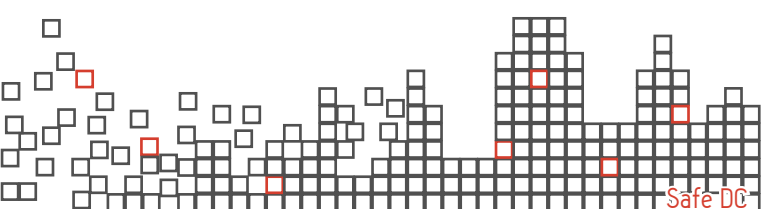
Product images non-contractual

BUILT-IN FUNCTIONS

- Keeps control of the Smart Building in case of a power failure or glitch.
- Filters electromagnetic disturbances.
- Avoids the reporting of false alarms to the supervisor due to network glitches.
- Delivers a constant voltage to equipment.
- Output voltage adjustable from -8% to +13%.









KEY PRODUCT FEATURES

- Ultra-compact / Plug and Play, parallel configuration without accessories.
- Performs self-diagnostic and that of its environment.
- Selection of Modbus or BACnet configuration via a program that can be downloaded from www.slat.com.
- Lead-free, cadmium-free backup, 100% recyclable.
- Service life of more than 10 years.



SDC-M RS 12 V DC - 15 V DC - 24 V DC - 48 V DC / 30 W - 55 W

Modbus / BACnet - MS/TP Communication

MECHANICAL CHARACTERISTICS						
BOXES		Size W x H x D (mm)	Weight (kg)	Materials	Protection rating	Installation
	DIN1	100 x 124 x 82	0.68	Aluminum	20	DIN rail
	DIN2	100 x 124 x 122	0.96 - 1.36	Aluminum	20	DIN rail
	DMR	161 x 92 x 65	0.5	ABS	20	DIN rail
	BOX2	285 x 198 x 61	1 - 1.5	ABS	30	Wall-mounted
CONNECTIONS						
DIN1	DIN2	DMR	BOX2			
Screw terminals with plug-in connectors with polarizing slot.		Screw terminals.		- Cable feedthrough via 3 cable glands or cable grommet. - Screw terminals.		
Capacity of terminal blocks / Cable size: 0.2 to 2.5 mm ²						
STANDARDS-BASED SPECIFICATIONS						
EN 60950-1 SELV class / EN 61000-6-1 / EN 61000-6-2 / EN 61000-3-2 A class				   		
EN 61000-6-3 / EN 61000-6-4 / EN 55022 + A1 class B / UN 38.3						
ENVIRONMENTAL SPECIFICATIONS						
TEMPERATURE						
Storage		-25 to +60°C				
Operating		-10 to +55°C in cabinet at 100% load				
		-5 to +60°C in cabinet at 75% load				
HUMIDITY						
Storage		relative humidity 10 to 95%				
Operating		relative humidity 20 to 95%				
ALTITUDE						
Above 2,000 m, the maximum temperature decreases by 5% every 1,000 m						
SERVICE LIFE						
10 years at 25 °C product external environment, rated mains voltage, 75% load						
ELECTRICAL CHARACTERISTICS						
NETWORK INPUT						
Voltage network AC		98 to 265 V AC				
Voltage network DC		140 to 375 V DC				
Frequency		45 to 65 Hz				
Class		Class 1				
Current		Inrush current limited by NTC				
Neutral systems		TT, TN, IT				
Protection against		primary short circuit and differential mode shock waves.				
Primary current @ 98 V AC		0.8 A [30 W] ; 1.5 A [55 W]				
Primary current @ 265 V AC		0.8 A [30 W] ; 0.38 A [55 W]				

OPERATING OUTPUT				
Rated voltage (U_n)	12 V DC	15 V DC	24 V DC	48 V DC
Output current (I_n) 30 W	2.5 A	2 A	1.25 A	-
Output current (I_n) 55 W	4.6 A	3.6 A	2.3 A	1.15 A
Maximum output power	30 W / 55W			
Precision on voltage	1%			
Adjustment by potentiometer [55 W]	-8% to +13%			
Current limitation – short-circuit current	P_{max} to $P_{max} +10\%$ with output voltage > 6 V			
Peak current	$2 I_n$ during 0.004 second			
HF ripple peak-peak (20 MHz-50 Ω)	< 4% of U_n			
Effective LF ripple	< 0.5% of U_n			
Static and dynamic regulation characteristics	< 5% of U_n for cumulative changes in sector and load (from 10% to 90%)			
Output (Smart Backup)	η @ 20% loading	η @ 75% loading	η @ 100% loading	
	90%	93%	92%	

FUNCTIONAL CHARACTERISTICS



- Operates in power-saving mode when the backup is charged.
- Remote controlled back-up mode.
- Filters disturbances of the electrical network.
- Indicates the % of remaining autonomy.
- (not for 48 V) Parallel configuration without accessories for: power increase / increase of the backup / redundancy duration.
- Push-button disconnect of the backup (reset).

SMART BACKUP



Backup type	30 W Types	2D	2E	2F	2G
		55 W Types	3D	3E	3F

- Latest generation Lithium-ion LifePO4 Technology (no risk of thermal runaway).
- Lead-free, cadmium-free, 100% recyclable.
- Storage: 9 months without recharging.
- 10 years service life.
- Advanced management settings, cell balancing, overload and overvoltage protection.
- Protection against deep discharge.
- A front panel pushbutton (on the board for BOX2) disconnects the backup via a static switch. The battery is automatically reconnected when mains voltage is present.

BACKUP DURATION ACCORDING TO OUTPUT POWER - 30 W (TYPE 2)

Operating power	DMR  12 V / 15 V / 24 V		BOX2  12 V / 24 V / 48 V		
	Backup D	Backup D	Backup E	Backup F	Backup G
	Autonomy expressed in hours and minutes				
5 W	3h23	3h23	6h47	10h11	13h35
7 W	2h32	2h32	5h04	7h36	10h08
10 W	1h48	1h48	3h37	5h26	7h15
15 W	1h13	1h13	2h26	3h40	4h53
20 W	0h55	0h55	1h50	2h45	3h40
25 W	0h44	0h44	1h28	2h12	2h56
30 W	0h36	0h36	1h13	1h48	2h27

BACKUP DURATION ACCORDING TO OUTPUT POWER - 55 W (TYPE 3)

Operating power	 DIN1 12 V / 15 V / 24 V / 48 V BOX2 12 V / 24 V / 48 V		 DIN2 12 V / 15 V / 24 V / 48 V BOX2 12 V / 24 V / 48 V		
	Backup D	Backup E	Backup F	Backup G	
	Autonomy expressed in hours and minutes				
5 W	3h10	6h20	9h29	12h40	
7 W	2h24	4h48	7h12	9h36	
10 W	1h46	3h31	5h16	7h02	
15 W	1h13	2h25	3h37	4h49	
20 W	0h55	1h50	2h44	3h40	
25 W	0h44	1h28	2h12	2h56	
30 W	0h37	1h14	1h50	2h27	
35 W	0h32	1h03	1h35	2h06	
40 W	0h28	0h55	1h23	1h50	
45 W	0h25	0h49	1h14	1h39	
50 W	0h22	0h44	1h06	1h28	
55 W	0h20	0h40	1h	1h20	

PROTECTIONS

Against overvoltages on primary (atmospheric or industrial causes) by varistor and filter.

Against surges in user output (connection error) by breaking with cyclical restart if output voltage $> U_n + 10\%$.

Against overcurrent by limiting the power supply to $I_n + 10\%$.

Against output short-circuits by disconnecting the power supply if $I > I_n + 10\%$.

MMI

LED for status display and control

Permanent green	Flashing green	Slow flashing orange	Fast flashing orange	Red
Normal mode	ECO mode Remote controlled backup mode	Backup mode	Installation fault - Overcurrent, short circuit - Low voltage output (product overload). - Excessive power supply temperature - If no mains (outside specified power supply range). End of backup imminent	UPS to be changed - If no output voltage - If power supply out of order (charger fault). Battery fault - Backup undervoltage. - Backup overvoltage

COMMUNICATION

A RS485 type serial link retrieves information remotely (product serial number, system status) and communicates the analog values (voltages and load current, % of remaining backup, rectifier, and internal temperature of the DC UPS).

The on-board Modbus communication protocol is factory set. it may can be configured in BACnet protocol via the configuration software that can be downloaded on www.slat.com (setup details in the manual).

PRODUCT REFERENCES

Interpretation of the product reference designations : SDC-M [Voltage] 2[Backup] [box] RS or SDC-M [Voltage] 3[Backup] [box] RS

Available at www.slat.com and on SLAT's Catalog.

*SLAT reserves the right to modify the characteristics of its products without prior notice.