

Power Supply Equipment / seria E

SMART-PSM48/E Power Supply Manager / **SMART-PS48800** Power Supply Unit / **SMART-PF4** Power Frame



SMART-PSM48/E Power Supply Manager is designed for distribution of DC Power Supply from Power Supply Units (PSU) and a back-up battery. The unit controls battery charging and distributes power supply to all Voice Evacuation System (VES) equipment at max. 60 A. When the system uses battery back-up, the power supplied is 3.2 kW (48 V). The unit complies with the EN 54-4 VES standards and also EN 12101-10 Smoke and Heat Control System standards. As a main source of energy distribution, the manager uses external modules 800 W (SMART-PS48800) for 48 V.

SMART-PSM48E power supply manager uses internal power converter for 24 V equipment. As a source of standby power supply it uses the battery bank of the capacity of up to 200 Ah.

SMART-PSM48/E cooperates with the 4 × 12 V VRLA battery bank. It maintains the bank in charged condition, ensures temperature compensation of charging parameters and monitors serial resistance of the battery and its wiring as specified in Exhibit No. A2 to the EN 54-4 Standard.

SMART-PSM48/E cooperates with up to 4 modules of SMART-PS48800 Power Supply Units. The manager ensures safe connection for the purpose of parallel operations and monitors the output parameters of each power supply unit.

SMART-PS48800 is designed for assembling in a dedicated SMART-PF4 Power Supply Unit Frame. The elements of the system are designed for assembling in a Rack 19" IP30-type.

EN 54-4

SMART-PS48800



SMART-PF4



	SMART-PSM48	SMART-PSM48E
Electrical		
Maximum configuration	1 × SMART-PSM48 – Power Supply Manager 4 × SMART-PS48800 – Power Supply Unit 1 × SMART-PF4 – Power Supply Units Frame	1 × SMART-PSM48E – Power Supply Manager 4 × SMART-PS48800 – Power Supply Unit 1 × SMART-PF4 – Power Supply Units Frame
AC power supply	230 VAC + 10%-15%; 50/60 Hz	
Max. nominal power consumption	885 W / 3.85 A	
Efficiency at rated power	> 90%	
DC input	4; bolted terminals; dedicated power supply unit SMART-PS48800	
DC input protection	4 × 20 A 58 V DC	
DC outputs	8 × 48V, each output max. 30 A (total for all 8 outs max. 63 A)	8 × 48V, each output max. 30 A (total for all 8 outs max. 63 A) 6 × 24V, each output max. 5 A (total for all 6 outs max. 6,25 A)
Summary maximum DC output load (24 V and 52 V)	3200 W	
Battery (type)	4 pieces, VRLA 12 V 15 – 200 Ah	
Charging current	max. 14 A	
Charging voltage	54,6 V ± 0,6 V (at 25°C)	
Maximum resistance of wiring and fuses	10 mΩ	
Maximum total serial resistance of wiring, fuses, and batteries	28 – 100 mΩ	
Environmental		
Operating temperature	-5°C up +40°C	
Mechanical		
Dimensions	482 (W) × 85 (H) × 443 (D) mm	
Weight	7,2 kg	
	SMART-PS48800	
Electrical		
AC power supply	230 VAC +10% -15%, 50/60Hz, 3.85 A Wire with IEC 60320 C13 3 × 0,75 mm ² coupling (supplied with the unit)	
Maximum power consumption	885 W / 3.85 A	
Efficiency at rated power	> 90%	
AC input protection	T6.3 A/250 V 5 × 20mm slow-blow fuse (accessed when the casing is open)	
Protection from electric shock	Class I (EN 60065)	
DC output	52 VDC; max. 15.4 A	
Mechanical		
Dimensions	85 (W) × 95 (H) × 395 (D)	
Weight	2,6 kg	
Accessories		
Power supply cord	IEC 60320 C13 1,5 m	