

# Central Power Supply 48/54 VDC

## Description

The MS70087x power supply system is designed for different applications such as DC UPS systems, TPS applications or Fiber To The Office (FTTO) networks. It offer a high reliability with very compact dimensions including processor controlled battery charge. Free programmable relay contacts and configurable DC outputs. Several options provide a solution for global applications with different requirements.

The system is prepared for up to 3 rectifier modules MS700870-R850W. In the compact module are the controller, deep discharge protection (LVD), priority load control (PLD), current sensors, battery fuses and up to 6 independent protected DC outputs integrated. These features and the very low mounting depth are key factors for the success. With this system we can offer a cost effective, compact and reliable solution.



Figure 1: MICROSENS central power supply with 850 W rectifier modules

## Main Features

- 19" / 1U power supply system for up to 2550 W
- Simple connections due to screw terminals
- Very high efficiency of up to 95,2%
- High energy density
- Very low mounting depth (for 300mm ETSI housings)
- Rectifier parallel redundant
- Rectifier MS700870-R850W with temperature controlled fans
- Integrated temperature sensor for temperature compensation
- Simple setup and programming via web browser
- Load sharing
- Dimensions: 44,45 x 430 x 300 mm (h x w x d)
- 24 months warranty

## Applications

- DC UPS systems
- Digital Subscriber Lines (DSL)
- Industrial applications
- Network devices for FTTO networks
- TPS (Telecom Power Solutions)
- PoE / PoE+

## Technical Specifications

General	
Efficiency	≥ 95,2 %
EMV	EN 55022, Class B
Safety	EN 300 386
Cooling	Fan cooled, temperature controlled
Protections Class	IP 20

Input	
AC connection	1 x L/N/PE
Nominal voltage	230 VAC
Voltage range	80 ... 300 Vrms
Voltage range reduced power	80 ... 184 Vrms
Frequency range	45-66 Hz
Nominal current	12 Arms
Recommended fuse	16 A

Output	
Nominal voltage	-53.5 VDC
Voltage range	-42 ... -58 VDC
Output current at $U_{nenn}$	47.4 ADC
Power limitation	3 x 850 W
Nominal power	2550 W
Power, redundant	1700 W

DC Output	
Circuit breaker: Hydraulic- magnetic	Max. 6 pcs. / 2 ... 30 A
Default assembly	Each 1 x 2/6/10/16/20/30 A
LVD	F1 – F4
PLD	F5 + F6

Battery connection	
Fuse	2 x 50 A

Mechanical	
Construction	Steel housing
Housing standard	19 inch
Width	430 mm
Depth, complete	300 mm
Height, complete	44.45 mm (1 U)
Weight, system	4.5 kg (without rectifier)
Weight, rectifier	Each 0.6 kg

Environmental	
Operating temperature	-35 ... +60 °C (power reduction from 45 °C)
Rel. humidity	95 % max., non-condensing

Control and monitoring	
Controller	ORION

## View



Figure 2: Front view



Figure 3: Rear view

## Order Information

Art.-No.	Description
MS700871	DC power supply 19" 1U, 3 Slots for each 850W/54VDC rectifier, equipped with 1x 850W/54VDC Rectifier, 6x DC-output, 2x battery input, 6x circuit breaker, incl. management controller (SNMP)
MS700872	DC power supply 19" 1U, 3 Slots for each 850W/54VDC rectifier, equipped with 2x 850W/54VDC Rectifier, 6x DC-output, 2x battery input, 6x circuit breaker, incl. management controller (SNMP)
MS700873	DC power supply 19" 1U, 3 Slots for each 850W/54VDC rectifier, equipped with 3x 850W/54VDC Rectifier, 6x DC-output, 2x battery input, 6x circuit breaker, incl. management controller (SNMP)
MS700870-R850W	850W Rectifier module 54VDC for MS700871..73 + MS700881..86

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