

## Product Overview

### Compact 54 VDC Power Supply Unit



## Description

In order to use MICROSENS components with Power-over-Ethernet plus operation according to IEEE 802.3at, the user must apply a universal compact power supply unit for placing into cable trunks, sub-floor systems, respectively wall mounting housings.

Having extremely compact dimensions, this 54 VDC power supply unit has a power of 65 W. The power loss is minimized by the high efficiency factor of about 90%. The power unit is also equipped with an effective voltage surge protection as well as overload protection.

The power-supply MS700710 has conducted grounding, fixed wires at input and output.

For the use in medical environments there are power supplies with approval according to EN60601-1 standard available.

## Properties

- Compact power supply, low weight
- Installation into cable trunks and sub-floor boxes
- High efficiency of min. 85%
- Input voltage 100..120 / 200..240VAC
- Output voltage 54VDC
- Touch proof 54VDC connector according VDE
- High output power 65W
- EMB/HF filter for interference suppression according EN55022-B, FCC Part 15 Class B, CISPR22-B
- Fully controlled and protected output
- No-load operation protection: no minimum load required
- Overload protection
- Over voltage protection
- 2-pin universal input connector according IEC320 (C9) (MS700701)
- 3x 1.5mm<sup>2</sup> wires input, open ends (MS700710)
- conducted grounding (MS700710)



# Specifications

## General

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**Type** Power Supply 48 VDC / 65 W for Power-over-Ethernet plus Devices

## Power Supply (AC)

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**Input Voltage** Nominal voltage 90 - 264 VAC  
Input frequency (AC) 47-63 Hz

**Connector** 2-pin universal input according IEC320 (C8) (MS700701)  
open cable ending (MS700710)

**Efficiency** > 85% (full load at 230 VAC, 25°C)

## Mechanical

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**Dimensions** 128.5 mm x 44 mm x 30 mm  
(w x d x h)

**Weight** 290 g

**Housing Color** black

## Reliability

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**MTBF** 100.000 h

**Method** Calculated (MIL-HDBK-217F)

## Power Supply (DC)

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**Output (DC)** Nominal voltage: 54 V DC  
Output current: 1.2 A  
Nominal power: 65 W

**Connector** 3 pin screw clamp

**Ripple and Noise** < 1.5%

**Ground Terminal (PE)** conducted grounding  
(MS700710, only)

## Environment

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**Operating Temperature** 0..+40 °C

**Storage Temperature** -40..+85 °C (MS700701)  
-20..+85 °C (MS700710)

**Relative Humidity** up to 90 % non condensing

## Standards Compliance

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**CE Mark** 2004/108/EC (EMC)  
2006/95/EG (Low Voltage)

**Safety** EN60950

**Electromagnetic Emission** EN5022-B

## Order Information

### Description

### Article Number

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Power supply 100-230 VAC / 54 VDC, 1.35 A, 65 W

**MS700701**

Power supply 100-230 VAC / 54 VDC, 1.35 A, 65 W, open wire ends, fixed cable, conducted grounding

**MS700710**

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