

Compact Power Supply for Industrial Use (AC/DC)

MICROSENS

General

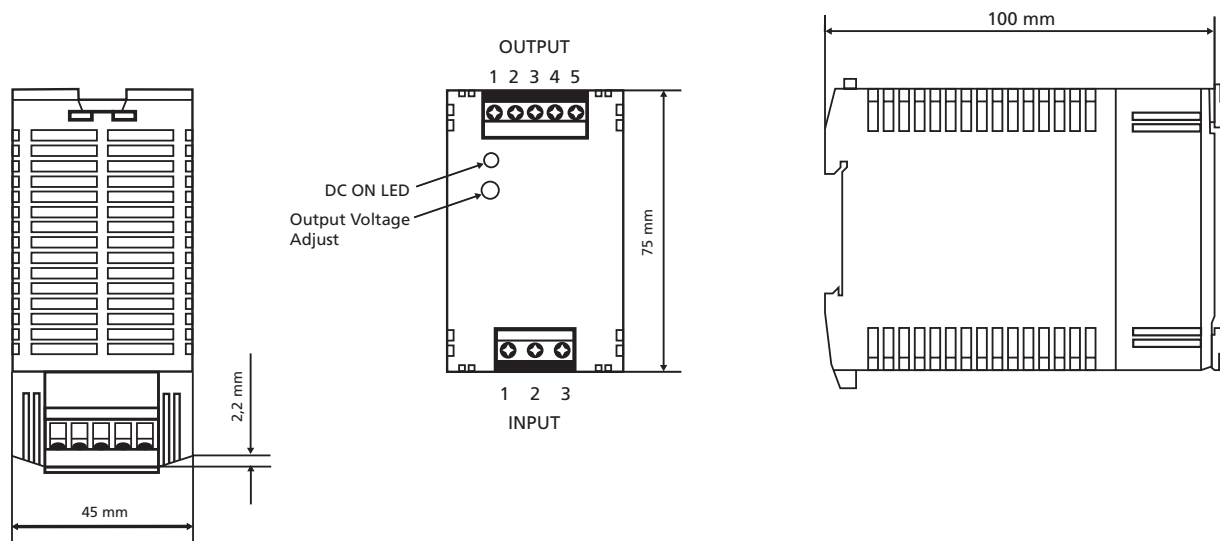
For the particular demanding industrial use in harsh environments MICROSENS has developed a special compact power supply.

Beside standardized features this device offers additional optimizations for the use in switching cabinets. The design of the chassis increases the surface and leads together with the high efficiency to optimum heat dissipation.

The product range for the industrial use includes, beside the described power supply, media converters for Ethernet (10Base-FL/10Base-T), Fast Ethernet (100Base-FX/100Base-TX) and converter for serial interfaces (RS-232, RS-422, RS-485).

Furthermore available are Fast Ethernet and Gigabit Ethernet switches with ring functionality.

Connectors



| Pin | Input | Output (MS700420) | Output (5-pin) |
|-----|-------|----------------------|-------------------|
| 1 | PE | $+V_{out}$ | $+V_{out}$ |
| 2 | N | $-V_{out}$ | $+V_{out}$ |
| 3 | L1 | | $-V_{out}$ |
| 4 | | | $-V_{out}$ |
| 5 | | | Power Good |

Technical Specifications

| | | |
|-------------------------------------------------------|----------------------------------------------------------------------------------------|--------------------------------------------------------------|
| Type | Compact Power Supply for Industrial Use | |
| Input | Input voltage range | 85...264 V AC |
| | Input frequency | 47-63 Hz |
| | Input current (230 VAC) at full load | 0.2 A (MS700420) 0.6 A (MS700421/430) 1.0 A (MS700422) |
| | Harmonic limits | EN61000-3-2 Class A |
| Output | Output voltage adj. range | 24 V – 28 V DC |
| | Output power | 24 W (MS700420) 60 W (MS700421) 120 W (MS700422) |
| | Ripple | < 50 mV |
| | Efficiency | 88% (typical) |
| Connections | all cables 0.5 to 2,5 mm ² / AWG=12-22 | |
| Parallel Connection | up to 5 power supplies of same series | |
| Isolation Voltages | 3000 VAC (input to output) 2000 VAC (input to output) 500 VAC (output to ground) | |
| Safety Standards | EN60950, EN50178, EN60204, EN61558-2-8, UL6090, UL508 | |
| Electromagnetic compatibility (EMC), Emissions | EN61000-6-3 | |
| Electromagnetic compatibility (EMC), Immunity | EN61000-6-2 | |
| Power fail compensation (Hold-up time) | >125 ms ($U_{in}=230$ V AC) >15 ms ($U_{in}=115$ V AC) | |
| LEDs | DC On DC Adjust | |
| Dimensions | MS700420: | 27 x 100 x 75 mm (B x T x H) |
| | MS700421/430: | 45 x 100 x 75 mm (B x T x H) |
| | MS700422: | 85 x 100 x 75 mm (B x T x H) |
| Weight | MS700420: | 140 g |
| | MS700421/430: | 265 g |
| | MS700422: | 440 g |
| Derating | 115 VAC: 1,1%/°C ab 40°C | |
| | 230 VAC: 1,7%/°C ab 50 °C | |

Temperature ranges

Operation: -10 °C to +70 °C
 Storage: -25 °C to +85 °C

Rel. humidity

up to 95 % non condensing

Reliability (MTBF)

(calculated according to IEC-1709)

MS700420: 2.680.000 h (IEC 61709)
 MS700421/430: 2.950.000 h (IEC 61709)
 MS700422: 1.620.000 h (IEC 61709)

Installation

This compact power supply is equipped with a robust plastic chassis (vacuum shed) with an integrated holder for DIN-rails. For the mounting it is possible to use 35 mm DIN-rails according DIN EN 50 022. The fixing of the MICROSENS power supply on the rail is done with a locking pin that can be opened from the bottom side. Multiple devices can be lined up on the rail.

Further Reading

- This document please find also under www.microsens.com → Newlink: 710060
- DC/DC-Compact Power Supply → Newlink: 710078

Order Information

| Art.-No. | Description | Connectors |
|----------|-----------------------------------------------------------------------------------|-------------------------|
| MS700420 | DIN-rail power supply 24 Watt 24 V / 1.0 A, Wide range power input 85-264 VAC | In: 3-pin Out: 2-pin |
| MS700421 | DIN-rail power supply 60 Watt 24 V / 2.5 A, Wide range power input 85-264 VAC | In: 3-pin Out: 5-pin |
| MS700422 | DIN-rail power supply 120 Watt 24 V / 5.0 A, Wide range power input 85-264 VAC | In: 3-pin Out: 5-pin |
| MS700430 | DIN-rail power supply 60 Watt 48 V / 1.25 A, Wide range power input 85-264 VAC | In: 3-pin Out: 5-pin |

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