

Power supply unit for AS-Interface

Construction

The GEMÜ 4130 power supply unit is available as an AS-Interface power supply unit or as a 24 V DC power supply unit. Both versions have a stable metal housing with close meshed ventilation grids and can be mounted on a 35 mm DIN rail without any tools. All operating elements and terminals are at the front of the device and can be easily accessed.

Features

- Voltage selection switch 115 V / 230 V
- Overvoltage protection
- Overload-proof
- Sustained short circuit proof
- Idling proof
- Earth fault controller (AS-Interface power supply unit 4A)
- High efficiency
- Internal input fuse
- Optical indication of functions

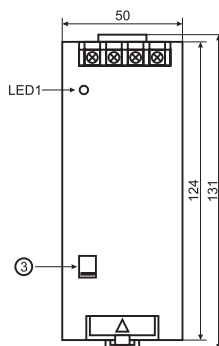
Advantages

- Simple DIN rail mounting
- All secondary terminals two fold
- Bus communication can be disabled (AS-Interface power supply unit)
- Integrated data decoupling (AS-Interface power supply unit)

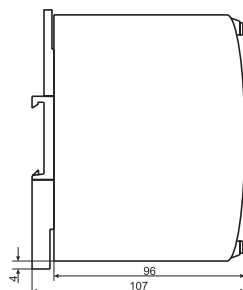
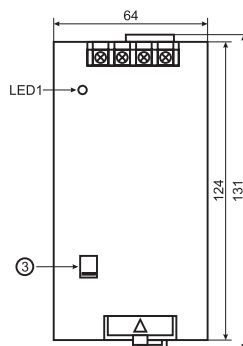


Dimensions [mm]

24V DC power supply unit 2.5 A



24V DC power supply unit 5 A



Technical data - AS-Interface power supply unit

Operating conditions

Ambient temperature	-10°C to +60°C
Storage temperature	-25°C to +85°C
Protect from humidity and dust!	

Material

Housing	Aluminium
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General information

Protection class to EN 60529	IP 20 (EN 60529)
Electrical protection class	I (EN 60950)
Weight	650 g (4A version) 890 g (8A version)
Dimensions	Width 73 mm (4A version) Width 91 mm (8A version) Height 124 mm Depth 102 mm + DIN rail
Mounting position	Optional
Clearance for cooling	left/right 15 mm each top/bottom 25 mm each Mounting 35 mm DIN rail
EMC directives	EN 50081-1 and -2 (4A version) EN 61000-6-1 EN 61000-6-2 (8A version) EN 61000-6-4 (8A version) EN 55011, EN 55022, class B (8A version) EN 55024 (4A version) VDE 0160/W2
Safety standards	EN 60950, EN 60204-1 EN 50178, IEC 60950 UL 60950, UL 508 CAN/CSA-C22.2 No. 60950 (CUR) CAN/CSA-C22.2 No. 14 (CUL)
CE-marking carried out acc. to EMC directive and low voltage directive.	
Safety and protection	Overvoltage protection (max. 55V) Overload-proof Sustained short circuit proof Idling proof Earth fault controller (4A version) Over-temperature protection (8A version)
Safety extra-low voltage	SELV (EN 60950) PELV (EN 50178)

Electrical data

Power supply

Switch position 115V

Power supply	115V AC	(85 - 132V AC)
Frequency	50/60 Hz	(47 - 63 Hz)
Current consumption	2.7A	(4A version)
	6.0A	(8A version)

Switch position 230V

Power supply	230V AC	(184 - 264V AC)
Frequency	50/60 Hz	(47 - 63 Hz)
Current consumption	1.3A	(4A version)
	2.8A	(8A version)

External protection for device protection not necessary (internal fuse).

Protection fuse with B characteristic 6A (4A version) / 10A (8A version) or slower or alternatively fuse T6A HBC (4A version) / 10A HBC (8A version) recommended.

Output (DC_{out})

Nominal voltage V _{out}	30.5V ± 3%
Permissible load I _{out}	4A (120 W) (4A version) 8A (240 W) (8A version)

Current limitation	> 4.2A (see characteristic) (4A version) > 8.4A (see characteristic) (8A version)
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Efficiency	90 % (4A version) 92 % (8A version)
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Behaviour during overload / short-circuit	Electronic disconnection Reset via button
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Electrical connection

Power supply	Screw terminals up to 4 mm ²
AS-Interface	Screw terminals up to 4 mm ²

Special features	
Optical indication (overload)	LED 1 x green (goes off during overload) LED 2 x red (IR-addressing) LED 3 x red (earth fault)

Special features	
Optical indication (overload)	LED 1 x green (goes off during overload) LED 2 x red (IR-addressing) LED 3 x red (earth fault)

Technical data - 24V DC power supply unit

Operating conditions

Ambient temperature	-10°C to +60°C
Storage temperature	-25°C to +85°C
Protect from humidity!	

Material

Housing	Aluminium
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General information

Protection class to EN 60529	IP 20 (EN 60529)
Electrical protection class	I (EN 60950)
Weight	460 g (2.5A version) 620 g (5A version)
Dimensions	Width 49 mm (2.5A version) Width 64 mm (5A version) Height 124 mm Depth 102 mm + DIN rail
Mounting position	Optional
Clearance for cooling	left/right 10 mm each top/bottom 25 mm each
Mounting	35 mm DIN rail
EMC directives	EN 50081-1 and -2 EN 61000-6-1 EN 55024 VDE 0160/W2
Safety standards	EN 60950, EN 60204-1 EN 50178, IEC 60950 UL 60950, UL 508 CAN/CSA-C22.2 No. 60950 (CUR) CAN/CSA-C22.2 No. 14 (CUL)
CE-marking carried out acc. to EMC directive and low voltage directive.	
Safety and protection	Overvoltage protection Overload-proof Sustained short circuit proof Idling proof
Safety extra-low voltage	SELV (EN 60950) PELV (EN 50178)

Electrical data

Power supply

Switch position 115V

Power supply	115V AC	(85 - 132 V AC)
Frequency	50/60 Hz	(47 - 63 Hz)
Current consumption	< 1.3A	(2.5A version)
	< 2.6A	(5.0A version)
Current at start up	< 25.0A	(2.5A version)
	< 15.0A	(5.0A version)

Switch position 230V

Power supply	230V AC	(176 - 264 V AC)
Frequency	50/60 Hz	(47 - 63 Hz)
Current consumption	< 0.7A	(2.5A version)
	< 1.4A	(5.0A version)
Current at start up	< 25.0A	(2.5A version)
	< 15.0A	(5.0A version)

External protection for device protection not necessary (internal fuse).
Protection fuse with B characteristic 10A or slower or alternatively fuse 10A HBC recommended.

Output (DC_{out})

Nominal voltage V _{out}	24V +5% - 1%
Permissible load I _{out}	2.5A (2.5A version) 5.0A (5.0A version)
Current limitation	typ. 2.6 - 3.9A (see characteristic) (2.5A version) typ. 6 - 9A (see characteristic) (5.0A version)
Efficiency	87.5% (2.5A version) 90% (5.0A version)
Behaviour during overload / short-circuit	no disconnection, device continues

Electrical connection

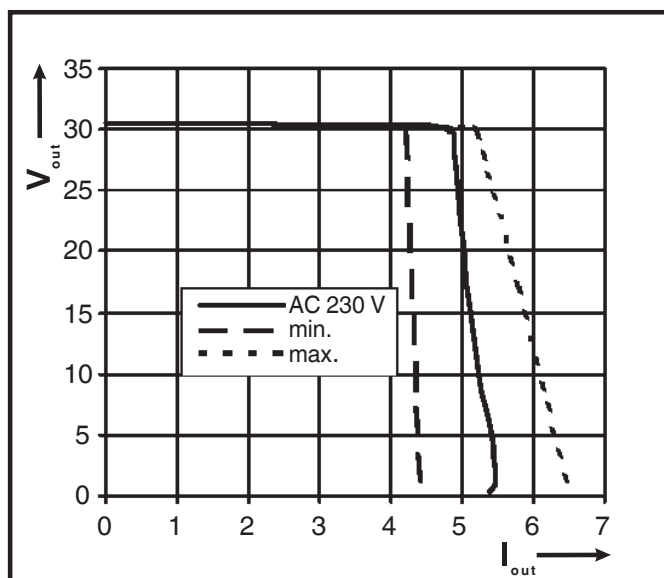
Power supply	Screw terminals up to 6 mm ²
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Special feature

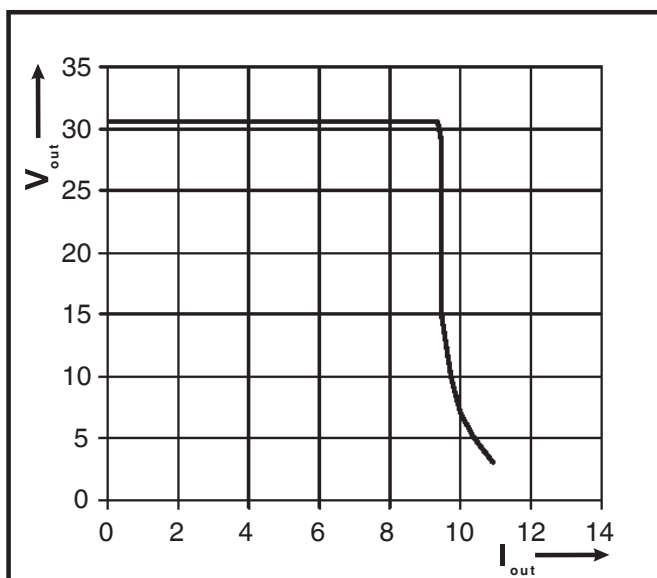
Optical indication	LED 1 x green (output voltage)
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Characteristics

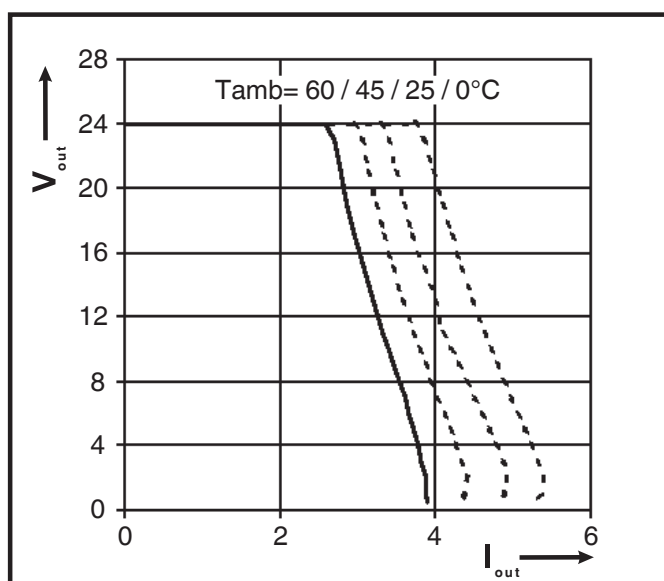
Characteristic AS-Interface power supply unit 4A



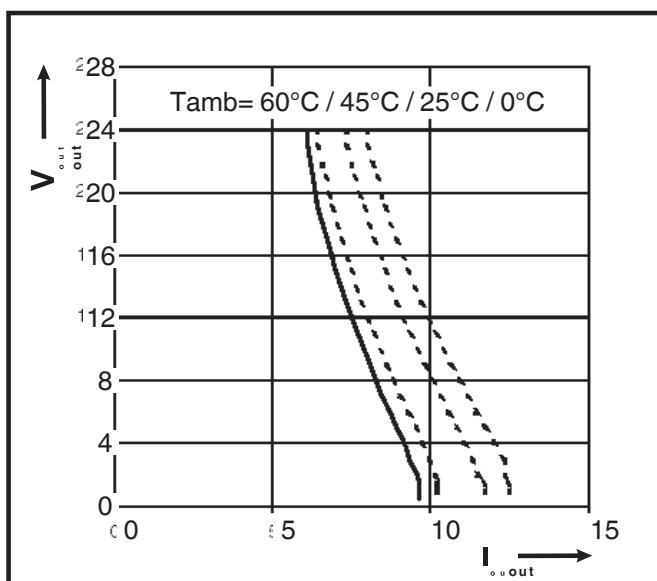
Characteristic AS-Interface power supply unit 8A



Characteristic 24V DC power supply unit 2.5A

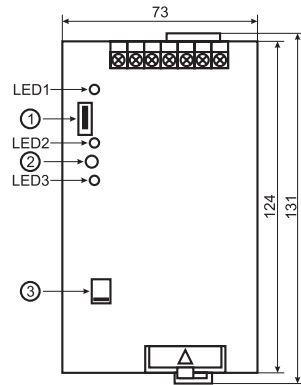


Characteristic 24V DC power supply unit 5A

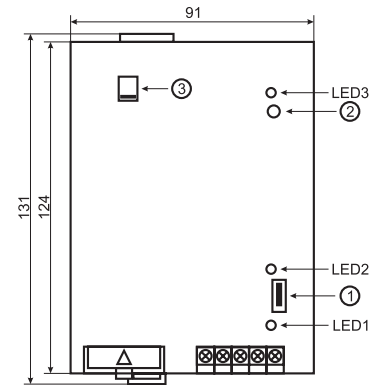


Dimensions [mm]

AS-Interface power supply unit 4A



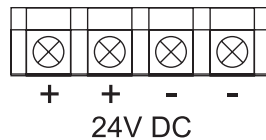
AS-Interface power supply unit 8A



	Function
LED 1	Indication of function
LED 2	IR-Addressing
LED 3	Error
1	Jumper for disabling the AS-Interface communication
2	Test / Reset
3	Voltage selection switch

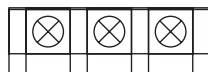
Electrical connections

24V DC power supply units

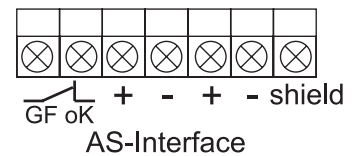


115/230V AC

N L $\perp$

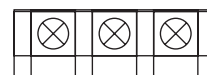


AS-Interface power supply unit 4A



115/230V AC

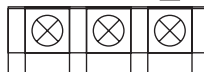
N L $\perp$



AS-Interface power supply unit 8A

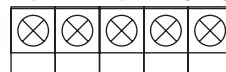
115/230V AC

N L $\perp$



AS-Interface

+ - + - shield



Order data

Field bus	Code
Without field bus	000
AS-Interface	A

Output 2	Code
Without output	only field bus code A 00
24 V DC / 5A	only field bus code 000 01
24 V DC / 2.5A	only field bus code 000 02

Housing material	Code
Aluminium (for DIN rail mounting)	01

Output 3	Code
Without output	00

Number of outputs	Code
1 output	01

Output 4	Code
Without output	00

Output 1	Code
Without output	only field bus code 000 00
AS-Interface / 4A	only field bus code A 02
AS-Interface / 8A	only field bus code A 03

Voltage/Frequency	Code
230 V AC, 50/60 Hz	L4

Order example	4130	A	Z	01	01	00	01	00	00	L4
Type	4130									
Field bus (code)		A								
			Z							
Housing material (code)				01						
Number of outputs (code)					01					
Output 1 (code)						00				
Output 2 (code)							01			
Output 3 (code)								00		
Output 4 (code)									00	
Voltage/Frequency (Code)										L4

For further field bus components, accessories and other products,
please see our Product Range catalogue and Price List.
Contact GEMÜ.



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AND CONTROL SYSTEMS