

Cerberus™ FIT

Power supply kit (70 W)

FP120-Z1



This standalone power supply is intended for decentralized supply to external devices. FP120-Z1 has an integrated operating and fault indicator, and makes it possible to forward faults via potential-free contacts.

- Output power 70 W
- Two separately fused, reactionless DC 24 V outputs, limited to 2 A in total
- Short-circuit-proof
- Current limited
- Mains voltage monitored
- Batteries monitored
- Battery charging with temperature compensation
- Uninterruptible power supply in battery operation
- Supplies other consumers (complies with EN 54 and VdS)
- AC 230 V or AC 115 V

Properties

- Integrated operating and fault indicator.
- Fault forwarding possible via potential-free contacts.
- The power supply (70 W) converts mains voltage to system voltage and charges the batteries.
- The DC 24 V system voltage is electrically isolated.
- For the supply of consumers in accordance with EN 54-4 and VdS.
- The output voltage is short-circuit-proof and battery charging is current-limited.
- Must not be connected in parallel.
- The battery charge voltage is regulated with temperature compensation.
- A jumper can be used to switch the mains voltage from AC 230 V to AC 115 V.

Monitoring of mains voltage and the batteries

- A failure of the AC 230 V supply voltage or a higher internal battery resistance are detected and an error message is generated.

Uninterruptible power supply

- If the mains voltage fails, the supply switches automatically from mains operation to battery operation.

Protecting the battery against total discharge

- When the final voltage is reached, the battery switches off automatically.

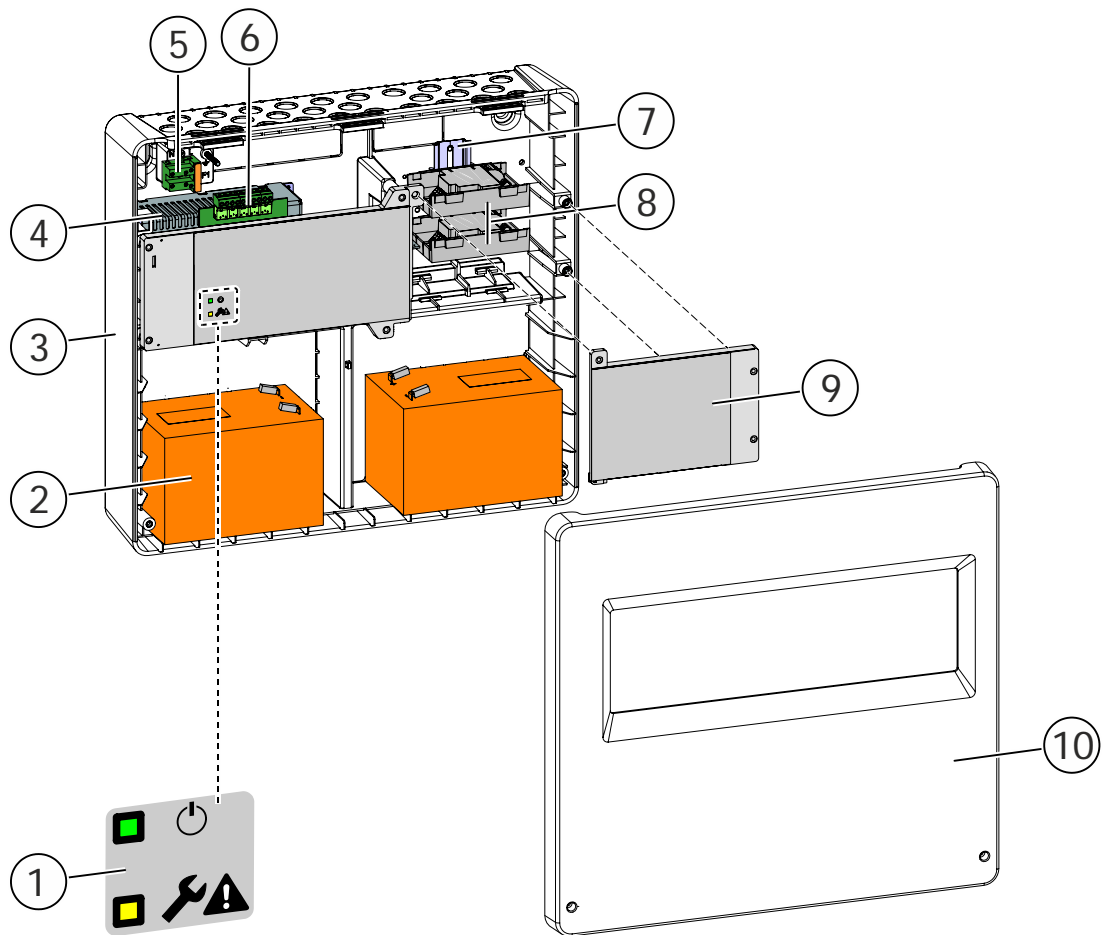
Use

The power supply kit FP120-Z1 is for the following use:

- Standalone power supply for decentralized supply to external devices (DC 24 V) in accordance with EN 54-4 and VdS.

Possible configuration

- Installation of various battery types from 7 Ah to 17 Ah
- Installation of input/output module FDCIOxxx
- Installation of a TS35 U-rail to mount several modules, such as FDCIOxxx/Z3B171



Installation situation FP120-Z1

- | | | | |
|---|----------------------------|----|---|
| 1 | LED function display | 6 | Connection card FP120-Z1 mainboard |
| 2 | Battery | 7 | U-rail TS35, 122 mm long |
| 3 | Housing | 8 | Installation positions for input/output modules and relay modules |
| 4 | Power supply (70 W) | 9 | Front panel |
| 5 | Mains connection terminals | 10 | Cover cap |

Component

Type	Designation	Order no.	Weight
FP120-Z1	Power supply kit (70 W)	S54400-S122-A1	3,920 kg

Scope of delivery

The power supply kit (70 W) is supplied mounted with housing, a left-hand installation frame with integrated power supply (70 W) FP2015 and FP120-Z1 mainboard, a right-hand installation frame for optional components, and a pre-wired connection for the battery, as well as mounting instructions for wall mounting and optional components: Document ID A6V10393173.

Accessories

The following accessories are not included in the scope of delivery and must be ordered separately.

Type	Designation	Order no.	Weight
TS35/122	U-rail TS35/7.5/122	BPZ:5644780001	0.041 kg
FA2003-A1	Battery (12 V, 7 Ah, VDS)	A5Q00019353	2.450 kg
FA2004-A1	Battery (12 V, 12 Ah, VDS)	A5Q00019354	3.930 kg
FA2005-A1	Battery (12 V, 17 Ah, VDS)	A5Q00019677	5.640 kg

Spare part

Type	Designation	Order no.	Weight
FP2015-A1	Power supply (70 W)	S54400-B121-A1	0.576 kg

Product documentation

Document ID	Title
A6V10393194	Power supply kit A (70 W) FP120-Z1 – Technical manual
A6V10393173	Power supply kit A (70 W) FP120-Z1 – Mounting

Related documents such as environmental declarations, CE declarations, etc., can be downloaded at the following Internet address:

<http://siemens.com/bt/download>

Disposal



This equipment is manufactured using materials and procedures which comply with current environmental protection standards as best as possible. More specifically, the following measures have been undertaken:

- Use of reusable materials
- Use of halogen-free plastics
- Electronic parts and synthetic materials can be separated

Larger plastic parts are labeled according to ISO 11469 and ISO 1043. The plastics can be separated and recycled on this basis.




Electronic parts and batteries must not be disposed of with domestic waste.

- Take electronic parts and batteries to local collection points or recycling centers.
- Contact local authorities for more information.
- Observe national requirements for disposing of electronic parts and batteries.

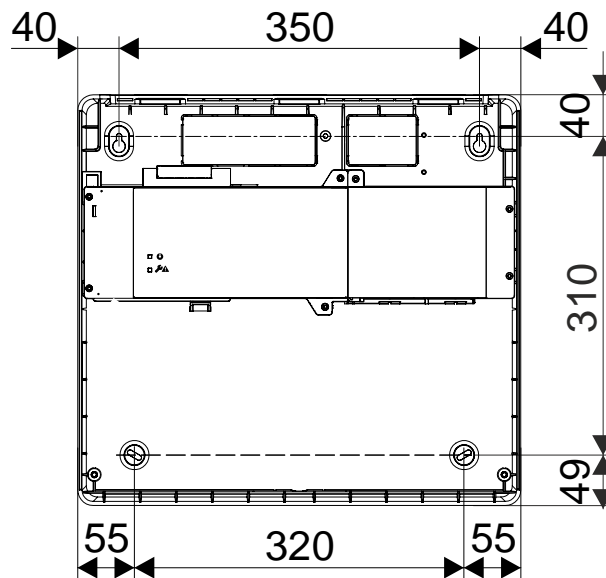
Technical data

Mains supply	Voltage	AC 97...127 V, AC 196...253 V, 50 / 60 Hz
	Current	0.5...1 A
	Power consumption	Max. 90 VA
System supply output	Designation	'AUX 1', 'AUX 2'
	Voltage	2x DC 20.2...28.6 V, depending on charge and temperature
	Current (sum of both outputs)	
	<ul style="list-style-type: none"> • Maximum output current with battery charge ($I_{\max a}$) 	0.9 A
	<ul style="list-style-type: none"> • Maximum output current without battery charge ($I_{\max b}$) 	2.0 A
	<ul style="list-style-type: none"> • Minimum output current (I_{\min}) 	0.05 A
	Output power	70 W
Ripple	Max. 5 %	
Battery supply output	Designation	'Accu'
	Voltage	DC 20.5...28.6 V, depending on charge and temperature
	Charging current	Max. 1.6 A, the charging current is reduced at full load
	Connectable batteries	2x 12 V / 7...17 Ah Battery types recommended by Siemens in accordance with 'Components / accessories / spare parts' chapter
	Battery internal resistance (R_{\max})	Max. 1 Ω , batteries incl. line
	Batteries are monitored for	<ul style="list-style-type: none"> • Short-circuit • Open line • Presence
	Low discharge protection	Battery voltage DC 20.5...21.0 V
Mains fault monitoring signal	Designation	'MAINS'
	Active in event of	<ul style="list-style-type: none"> • No mains voltage, signaling within 10 s
	Design	Potential-free changeover contact DC 30 V/1 A
Battery fault monitoring signal	Designation	'BATT'
	Active in event of	<ul style="list-style-type: none"> • Battery fault • Battery voltage <DC 21.0 V
	Design	Potential-free changeover contact DC 30 V/1 A
Connections	Mains supply, battery supply and monitoring signals	Plug-type connection and terminals 0.2...2.5 mm ²

Mechanical data	Dimensions (W x H x D)	430 x 399 x 124 mm
	Weight	3,920 kg, without batteries
	Housing color	~ RAL 9010 pure white
	Protection category (IEC 60529)	IP 30
Approvals	VdS	G214130
	LPCB	Pending

15  0786	FP120-Z1	Siemens Switzerland Ltd, Gubelstrasse 22 CH-6301 Zug, Switzerland Technical data: see doc. A6V10393194
FP120 - Power Supply Equipment 24V/70W for use in fire detection and fire alarm systems installed in buildings		
305/2011/EU (CPR): EN 54-4 ; 2014/30/EU (EMC): EN 50130-4 / EN 61000-6-3 ; 2014/35/EU (LVD): EN 60950-1 ; 2011/65/EU (RoHS): EN 50581		
Declared performance and conformity can be seen in the Declaration of Performance and the EC Declaration of Conformity, which is obtainable via the Customer Support center: Tel. +49 89 9221-8000 or http://siemens.com/bt/download		
DoP No.: 0786-CPR-21414; DoC No.: CED-FP120		

Dimensional drawing



Issued by
Siemens Switzerland Ltd
Building Technologies Division
International Headquarters
Gubelstrasse 22
CH-6301 Zug
Tel. +41 41-724 24 24
www.siemens.com/buildingtechnologies

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