SIEMENS

SITOP power supply

SITOP lite

Cost-effective basic power supply

Brochure

Edition 07/2017

siemens.com/sitop-lite

The benefits at a glance

- 24 V DC/2.5 A, 5 A, 10 A and 20 A for industrial applications with basic requirements
- 1-phase wide-range input
- Narrow width
- No lateral installation clearances required
- Up to 92% efficiency
- Green LED for «24 V OK»
- Switching in parallel
- Cooling through natural convection
- Short-circuit and overload protection
- CE, cULus and CB certification

The regulated 24 V power supplies meet basic requirements in the industrial environment and provide all important functions at a low price. The wide-range input supports connectivity to a variety of 1-phase supply systems used around the world. The compact design means that the fanless primary switched-mode regulators take up little space on the DIN rail and do not require lateral clearance to neighboring devices. The high degree of efficiency results in low power consumption and heat loss in the control cabinet. Short-circuit and overload protection as well as UL approval for export ensure problem-free use.

For demands that go beyond basic requirements, SITOP offers further product series which are positioned above the SITOP lite product line:

SITOP smart –
The high-performance standard power supply for 1- and 3-phase networks. For automated machinery and plants with 24 V or 12 V power supplies. They are equipped with 50% extra power for 5 s/min and certifications for explosion protection applications and shipbuilding.
www.siemens.com/sitop-smart

SITOP modular –
The technology power supply for complex solutions. For use in complex plants and machinery with maximum functionality and reliability thanks to a wide-range input for 1-, 2- or 3-phase line supply connection, power boost with three times the rated current for brief periods, 50% extra power for 5 s/min, selectable overload response, high efficiency and a compact metal enclosure.
www.siemens.com/sitop-modular

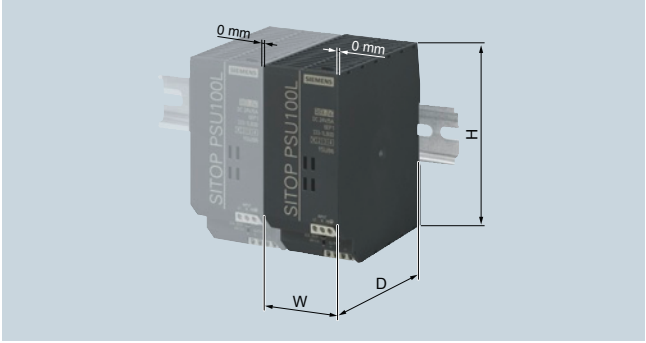
Technical specifications [1]	SITOP lite			
				
Output voltage/current	**24 V/2.5 A**	**24 V/5 A**	**24 V/10 A**	**24 V/20 A**
Article No. [2]	**6EP1332-1LB00**	**6EP1333-1LB00**	**6EP1334-1LB00**	**6EP1336-1LB00**
Input voltage				
– Rated value	120/230 V AC			100-240 V AC
– Range	93 ... 132/187 ... 264 V AC			85 ... 264 V AC/ 88 ... 370 V DC
Power failure backup	> 20 ms (at 93/187 V)			
Line frequency				
– Rated value	50/60 Hz			
Input current				
– Rated value	1.1 A/0.65 A	2.1 A/1.15 A	4.1 A/2.0 A	5.55 A/2.35 A
– Inrush current [3]	< 27 A	< 32 A	< 65 A	< 45 A
– Recommended miniature circuit breaker	3 A characteristic C	6 A characteristic C	10 A characteristic C	10 A characteristic C
Output voltage				
– Rated value	24 V DC			
– Tolerance	± 3%			
– Adjustment range	22.8 ... 26.4 V DC			22.8 ... 28 V DC
Output current				
– Rated value	2.5 A	5 A	10 A	20 A
– Derating	From +45 °C (2%/K)	From +45 °C (2%/K)	From +45 °C (2%/K)	From +45 °C (2.5%/K)
Efficiency at rated values, approx.	85%	86%	89%	92%
Switching in parallel	Yes			
Electronic short-circuit protection	Yes, constant current			
Radio interference suppression (EN 55022)	Class A			Class B
Radio interference suppression (EN 61000-3-2)	Not applicable	No	No	Yes
Degree of protection (EN 60529)	IP 20			
Ambient temperature	0 ... +60 °C			-25 ... +70 °C
Dimensions (W x H x D) in mm	32.5 x 125 x 120	50 x 125 x 120	70 x 125 x 120	110 x 125 x 125
Weight, approx.	0.32 kg	0.5 kg	0.75 kg	1.8 kg
Certifications	CE, cULus, CB			

[1] Technical specifications apply with rated input voltage and +25 °C ambient temperature (if not otherwise specified)
[2] Current ordering data and prices, plus terms and conditions of sales and delivery can be found in Catalog KT 10.1 and on the Internet at: **www.siemens.com/industrymall**
[3] The inrush current can be limited to 10 A using the "SITOP inrush current limiter" expansion module, Article Number 6EP1967-2AA00

Dimensions and installation instructions

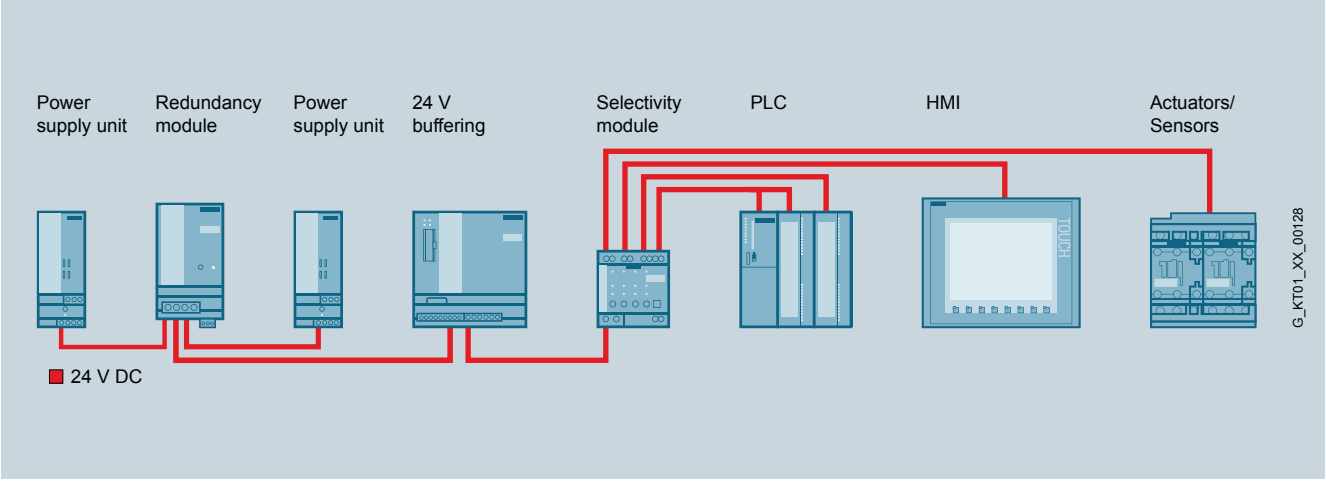
W = width, H = height, D = depth:
see „Technical specifications" table for dimensions.

Lateral clearance to other devices is not required, even for those which actively emit heat. This means that, compared to most other manufacturers, compact SITOP lite power supply units save additional space on the DIN rail.



Our answers to the demands made on a reliable power supply:

Use different add-on modules for flexible expansion of SITOP lite power supply units to build up all-round protection.



Protection against power supply unit failure: SITOP PSE202U redundancy module

- Reliable 24 V supply even when a power supply fails
- Less space required due to compact redundancy modules for power supplies up to 40 A
- Version with power limitation to 100 VA according to NEC Class 2
- Signaling contact for status signaling to controller, PC or process control system

Protection of 24 V feeders: SITOP PSE200U selectivity module

- Reliable protection for up to 4 consumer feeders per module
- Reliable tripping regardless of cable lengths or cross-sections
- Sequential connection of feeds is possible to reduce inrush current
- Fast and channel-specific diagnostics through single-channel signaling (evaluation by means of free SIMATIC S7 function blocks for S7-1200/1500/300/400)
- Simple commissioning thanks to manual switch on/off of outputs

Buffering in the minutes range: Uninterruptible SITOP UPS500 power supply

- Long lasting, maintenance-free double-layer capacitors (ultracaps), even at high ambient temperatures
- No battery replacement and no ventilation of control cabinet required
- Available in 2 versions: Modular, expandable DIN rail devices and rugged design with IP65 protection
- Easy integration into PC-based automation systems with free SW tool and USB

Buffering in the hours range: Uninterruptible SITOP UPS1600 power supply

- Battery modules on lead and lithium basis offer reliable protection against power failures
- Optimal charging and continuous monitoring of energy storage device
- Comprehensive operating and diagnostics information
- Direct integration into open communication networks: Ethernet or PROFINET
- Comprehensive TIA integration saves time and money in planning and operation

Support from planning to operation

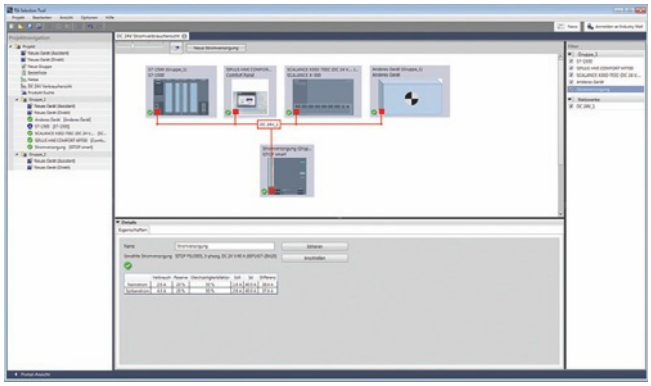
Free software and comprehensive data significantly reduce the time required for planning, dimensioning and ordering the matching power supply, from documentation all the way to operation.

SITOP Selection Tool

- Simple and intuitive handling: Find the appropriate power supply or DC UPS faster
- Product selection based on essential technical characteristics with a more detailed comparison afterwards
- Backup of the selection results or direct transfer to the Industry Mall
- Fast access to specific product information such as CAx data or product data sheets
- Available online and in CA01 catalog (DVD)

TIA Selection Tool

- Easy selection of the required power supply for selected automation products, e.g.
  SIMATIC S7, SIMATIC HMI or SCALANCE
- Intuitive handling and assignment of
  24 V DC consumers with drag and drop
- Selection of the power supply according to power consumption (rated current as well as peak current) of the consumers
- Redundant configuration of the power supply units possible



Comprehensive data and documentation

- Additional information such as 3D data, circuit diagram macros, certificates and operating instructions make configuration and documentation easier (available via CAx download manager)
- Mechanical and electrical engineering data can be downloaded in DXF, STEP and EPLAN format and can be used directly in the CAD or CAE system
- The manual configurator supports individual compilation of the plant documentation consisting of manuals, data sheets or certificates

Industry Online Support app

- Scanning of product codes/EAN codes with direct display of all technical information for this product including graphical data (CAx data)
- Product information or entries can be sent by email
- Technical Support for questions.
  Photo function for submitting detailed information
- Offline cache function of all favorites saved in mySupport. No network coverage required for retrieval

Get more information

SITOP Selection Tool:
siemens.com/sitop-selection-tool

TIA Selection Tool:
siemens.com/sitop-tst

Operating instructions for downloading:
siemens.com/sitop/manuals

Requesting CAx data with the CAx download manager:
siemens.com/cax

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Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions constitute one element of such a concept.

Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place.

For additional information on industrial security measures that may be implemented, please visit **http://www.siemens.com/industrialsecurity.**

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under **http://www.siemens.com/industrialsecurity.**

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