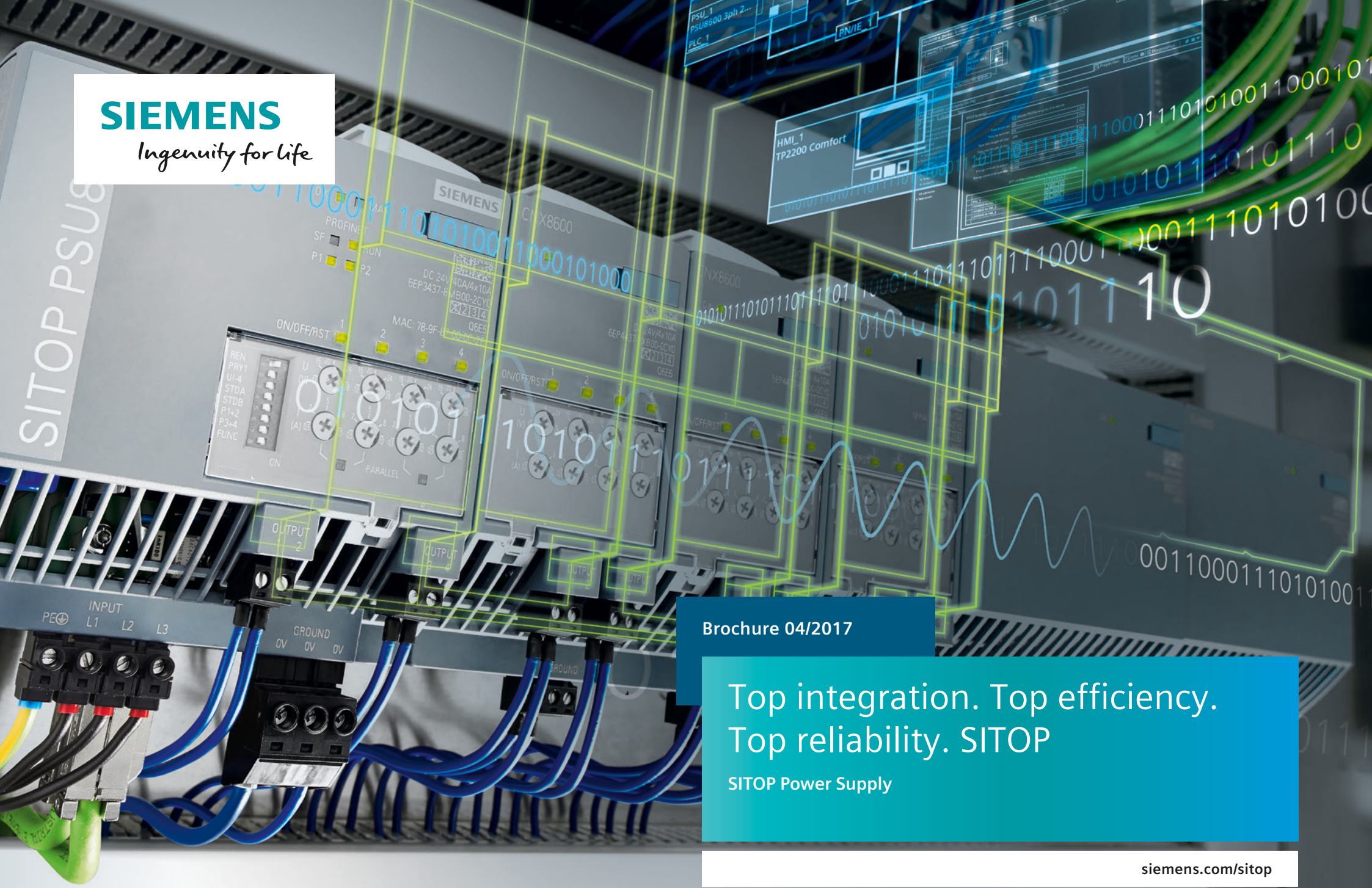
SIEMENS

Ingenuity for life



Brochure 04/2017

Top integration. Top efficiency. Top reliability. SITOP

SITOP Power Supply

siemens.com/sitop

You can invest a lot in your power supply. Or you can profit from it.

An efficient power supply is a basic requirement for operating any plant, no matter the industry or need. Critical production processes can only be maintained if a constant power supply of the necessary quality is available for the automation system. SITOP has proven its value in the manufacturing environment over many years, and guarantees a reliable power supply with a complete and precisely coordinated range of products – especially suited to the growing demands of our time.

SITOP means top reliability

You should think about a good power supply when purchasing one – and then never have to think about it again. SITOP has proven its reliability in nearly all grids around the world. With its flexible wide-range input, its outstanding load characteristics, and all relevant certifications, SITOP power supply units protect the availability of your plant. Add-on modules offer additional supply reliability and provide all-round protection against mains issues and problems on the DC side.

The 24 V power supply units can be expanded for an uninterruptible power supply to protect against power failures. Depending on buffering time requirements, different energy storage devices can bridge power failures for periods ranging from seconds to minutes and even to hours.

In the event of an overload caused by a fault or even a short circuit in the output circuit, selective disconnection of the feeder makes continued operation possible because the supply to the other loads is maintained.

For particularly critical applications, such as those in the process industry, it is also possible to establish redundant power supply solutions.

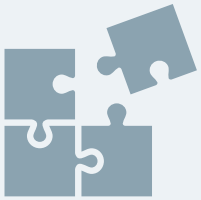
SITOP provides you with complete protection against production outages and enables you to avoid high follow-up costs. And if a replacement is ever needed, our global customer service ensures the fastest possible delivery because all SITOP products can be supplied from stock.

SITOP means top efficiency

Energy costs represent an increasingly large proportion of production costs. Any company that can save here will gain a valuable competitive advantage. SITOP makes an important contribution to energy conservation, because the primary switched-mode power supply units operate highly efficiently. For example, the SITOP modular has an efficiency of up to 95 percent. Losses are low over the entire load range, even in no-load operation. This is because in practice, a power supply is rarely operated at full load.

The SITOP PSU8600 power supply system records power data from all outputs, which is then further processed in energy management systems. And PROFIenergy allows you to select which power supply outputs to switch off during rest times, for example.

But that's not all – because for us, efficiency is also always measured against the product life cycle. With the SITOP Selection Tool and the 24-V power consumer view in the TIA Selection Tool, we make it easy for you to select the power supply and the DC-UPS. We provide you with all mechanical and electrical design data for all common CAE systems as well as the corresponding product documentation.



SITOP means top integration

SITOP is setting new standards when it comes to integration, both in the manufacturing and in the process industries: Complete integration into Totally Integrated Automation (TIA) and the TIA Portal saves time and money, is simple, and provides failure safety during engineering. For the first time, this is made possible by the SITOP PSU8600 power supply system and the SITOP UPS1600 uninterruptible power supply with PROFINET connection. SIMATIC S7 function blocks provide for the integration into user programs and WinCC faceplates for the easy visualization of operating and diagnostic information. For the selectivity module SITOP PSE200U, S7 function blocks analyze the single-channel signaling.

PC-based automation systems in particular should be protected from power failures. To accomplish this, the SITOP UPS1600 can be easily integrated via USB or Ethernet.

The SITOP library for SIMATIC PCS 7 ensures constant transparency of the 24 V DC supply – in a redundant version, with DC UPS, or with selective protection – in the process control system.

The network-compatible devices SITOP PSU8600 and UPS1600 also communicate via the OPC UA open communication interface. Direct integration into automation applications with OPC UA clients from different vendors, for example controllers or PCs, is now possible with the OPC UA server.

Overview of SITOP product lines

What an optimal power supply looks like depends on numerous factors – size, performance range, and functions, to name but a few. The extensive range of SITOP products ensures that your power supply will always match your requirements.

Page 18 – 19

new!

LOGO!Power

The flat power supply for distribution boards

Small. Clever. LOGO!Power. The 4th generation of the globally proven miniature power supply units with a flat, stepped profile now offer even more power in an even smaller space. Expanded functionality such as flexible installation, current monitoring, and further improved energy efficiency allows even more universal use in applications with 5 V, 12 V, 15 V, and 24 V.

Page 20

SITOP compact

The slim power supply for control boxes

SITOP compact was developed to be an extremely space-saving power supply for the lower power range. It is especially suited to distributed applications in control boxes and in small control cabinets. Its high efficiency over the entire load range and low no-load loss make it exceptionally efficient. It is ideal for applications that are often in standby mode.

Page 21

SITOP lite

The cost-effective basic power supply

SITOP lite is the power supply series for basic requirements in the industrial environment, offering all the important functions at a low cost – without compromising quality and reliability. The wide-range input with manual switchover supports connection to a wide range of single-phase supply systems.

Page 22/1-phase
Page 23/3-phase

SITOP smart

The powerful standard power supply

SITOP smart is the optimal power supply for many 24 V and 12 V applications, featuring compact design, powerful performance, and low price. Despite its compact size, it offers outstanding overload characteristics thanks to the extra power feature that provides 1.5 times the rated current for five seconds: Even large loads can be easily switched on. And with a rated capacity of 120 percent, these slim power supplies are among the most reliable of their kind.

Pages 24 – 29

SITOP modular

The technology power supply for demanding solutions

SITOP modular provides maximum functionality for use in complex plants and machines. Its wide-range input allows it to be connected to any supply system in the world and also guarantees a high level of safety, even in the event of large voltage fluctuations. The power boost briefly delivers up to three times the rated current. And, in the case of an overload, you can choose between constant current with automatic restart or latching shutdown. This unit's high efficiency keeps the energy consumption and heat development in the control cabinet down to a low level, and the compact metal enclosure also saves space.

The innovative SITOP PSU8600 power supply system can also be fully integrated into networked automation applications and the TIA Portal, and enables entirely new parameterization and diagnostic options, including via OPC UA.

Page 30

SIMATIC Design

The optimal supply for SIMATIC S7 and more

The design and functionality of the original SIMATIC power supplies merge into the PLC network. Together with the SIMATIC systems S7-300, S7-1200, S7-1500, and the distributed I/O modules ET 200pro, ET 200M, and ET 200MP they also supply other loads reliably with 24 V.

Pages 31 – 33

Special designs

Equipped for special functions and conditions

Restricted installation conditions, harsh environmental conditions, or special input and output voltages: these standard power supplies meet even exceptional requirements. For example: low-cost 12 V and 24 V power supply units in rugged aluminum enclosures for direct wall mounting in various installation positions and power supplies in protection mode IP67. Or power supplies with special functions like battery charging and flexibly adjustable output voltage.

SITOP PSU8600 – the modular power supply system with complete integration in TIA or via OPC UA

Complex systems place highest demands on their components in terms of efficiency, flexibility and reliability. The innovative power supply system meets them all – thanks to a unique functionality, diagnostic capability, modular expandability, and complete integration in TIA or via OPC UA server in many other systems.

Did you know that... The ability to set each output individually reduces the number of additional power supply units that would otherwise be required for special voltages?

Top integration – with complete system integration into TIA or open integration via OPC UA

The innovative SITOP PSU8600 power supply system is completely integrated into Totally Integrated Automation (TIA) and is integrated directly into networked machines and systems via its Ethernet/PROFINET interface.

Engineering in the TIA Portal is convenient – whether in terms of product selection, network connection or device parameterization. Furthermore, the evaluation of extensive operational and diagnostic data is supported by ready-to-use function modules for SIMATIC S7 user programs.

Free SIMATIC Panel or WinCC faceplates are available for operating and monitoring purposes. The power supply system can also be integrated into automation applications with controllers or PCs from other vendors via the OPC UA open communication interface. The integrated web server enables remote diagnosis of the power supply. Equipment status and network connection can be checked using SINEMA Server network management software.

Top reliability – thanks to selectivity and buffering in the event of power failure

The comprehensive diagnostic options offered by the SITOP PSU8600 power supply system provide the basis for preventive maintenance. This means faults can be identified, traced and analyzed in the shortest possible time.

To prevent a short circuit or overload on a single load from causing an outage in the entire plant, all outputs, whose voltage and current threshold can be individually adjusted, are selectively monitored and individually switched off in the event of failure. Because the power from every output can be continuously recorded and transmitted via PROFINET, it is possible to detect overload conditions at an early stage.

The modular system toolbox

Base unit

Power supply 24 V/20 A or 40 A with one or four selectively monitored outputs

Expansion modules

Expansion up to 20 selectively monitored outputs

Buffer modules

Bridging short power failures up to 20 seconds at 40 A

This makes it possible to prevent a plant shutdown. With power failures that range from seconds to minutes, system-specific buffer modules with electrolytic or double-layer capacitors (Ultracaps) can be used – two buffer modules with Ultracaps buffer up to 20 seconds at 40 A. Because the buffering time is longer with a smaller load current, there is even time for PCs to be safely shut down.

The basic device records the time of the power failure, which makes it possible to subsequently check the network quality.

Top efficiency – from engineering through to operation

When machines and systems have to be configured and commissioned even more quickly and easily, and operated even more economically, SITOP PSU8600 is the ideal tool.

Even compact base units of up to 94 percent efficiency have one or four outputs that can be selectively monitored for excess current, saving both space and wiring effort.

Every output can be set to 5 -28 V, even dynamically during operation.

Expansions from the modular system toolbox – to monitor additional outputs or to buffer brief power failures – are available to meet the highest requirements. Plus, the System Clip Link eliminates the need for additional wiring.

The continuous measurement of current and voltage from all outputs supports the energy management, and targeted shutdown, e.g. via PROFIenergy, provides for even greater efficiency.

SITOP add-on modules – all-round protection à la carte

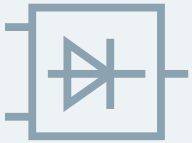
Processes and plants that are critical for a company's business generally require additional protection measures. SITOP add-on modules individually protect your production against many sources of risk.

Add-on modules

For increasing system availability to all-round protection

Protection against …	Redundancy module	Selectivity/ diagnostic module	Buffer module	DC UPS with capacitors	DC UPS with batteries
Failure of a power supply unit	•				
Overload in the 24-V circuit		•			
Power failure in the seconds range			•	•	•
Power failure up to the minutes range				•	•
Power failure up to the hours range					•

SITOP add-on module selection matrix



Safeguarding against failure through redundancy

Two power supply units can be connected via the SITOP redundancy module for additional failure safety. If one unit fails, the other automatically takes over the power supply function. In this way the power supply is safeguarded in unstable conditions.

Selective disconnection of faulty 24-V feeders

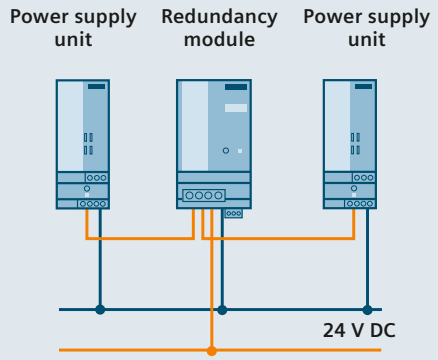
The SITOP PSE200U selectivity module is specifically tailored to switched-mode power supplies. The module permits brief current peaks and switches off the electricity for longer overloads, even on long thin cables and with creeping short circuits in which the current is limited by the high ohmic resistance. In this case the circuit-breakers do not trip, or they trip too late, even if the power supply could deliver the current. The selectivity module reliably disconnects the faulty load circuits, and the supply to the other loads continues with absolutely no interruption so that total failure of the plant can be avoided. The affected feeder is indicated by an LED. The option with single-channel signaling also allows remote channel-specific fault location.

Buffer module bridges brief power failures

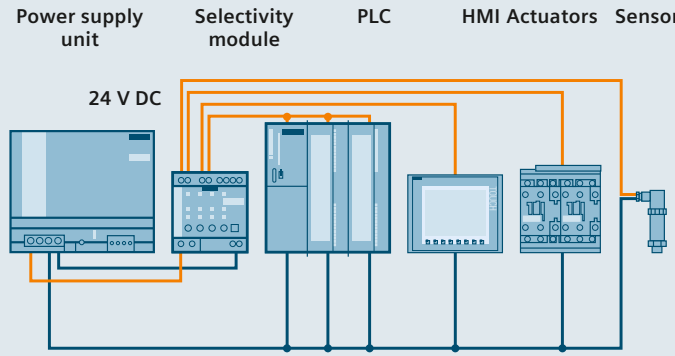
Power failures usually last only for fractions of a second – however, they can cause time- and cost-intensive damage. Used in combination with the 24-V DC power supply units of the SITOP smart product lines or SITOP modular power supply units, the buffer module bridges short-duration voltage dips with its electrolytic capacitors.

Did you know that ... our customers use SITOP power supply units in manufacturing, process and building automation in over 190 countries worldwide?

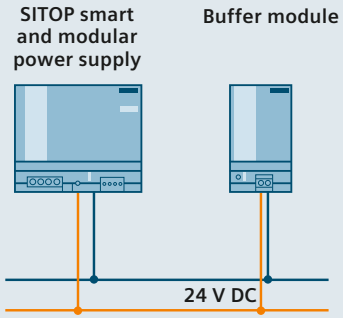
Configuration with redundancy module



Configuration with selectivity module



Configuration with buffer module



Your benefits with the redundancy module:

- Highly secure 24-V supply thanks to a redundant design
- Reliable supply even when one power supply fails
- Compact redundancy modules for power supply units up to 40 A
- 4 V/NEC Class 2 redundancy module limited to 100 VA
- Diagnostics signals via LEDs and signaling contacts

Your benefits with the selectivity module:

- Protection against overloads and short circuits in the 24-V circuit
- Reliable tripping, regardless of the line resistance
- Module with four feeders 0.5 – 3 A, 3 – 10 A or with 100-W limitation in accordance with NEC Class 2, tripping current can be adjusted individually
- Possibility of sequential startup of feeders to reduce inrush current
- Modules with single-channel signaling, disconnected feeders can be evaluated via SIMATIC S7 or SIMOTION function block
- Voltage measuring points for current measurement (1 V = 1 A)

Your benefits with the buffer module:

- Inexpensive protection against power failure up to max. 10 seconds
- Support of power supply unit for temporarily increased power requirements
- High load current up to 40 A
- Connection to the power supply unit only via two lines

SITOP ensures reliable 24-V supply – even when the power fails

Power outages can bring a plant to a standstill, with high costs in terms of both time and money. The SITOP DC UPS systems with different types of energy storage devices and communication interfaces offer solutions for all buffering time and plant integration requirements.

DC UPS module

For expansion to an uninterruptible 24 V power supply

SITOP DC UPS with capacitors

These high-capacitance double-layer capacitors (Ultracaps) store sufficient energy to shut down PC-based systems safely.

Totally maintenance-free

The capacitors have an extremely long life even at high ambient temperatures. No maintenance or replacement of the energy buffer is required, which means that the DC UPS pays for itself within a short time. And because the capacitors do not emit any gas, no ventilation of the control cabinet is required. Short recharging times quickly restore buffering capability following a power failure.

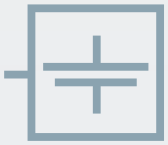
For use both inside and outside the control cabinet

The buffering time of the UPS500S for DIN rail mounting can be extended by adding expansion modules. The SITOP UPS500P is designed with IP65 protection and can be used on a de-centralised basis, for example, supplied by power supply unit SITOP PSU100P.

- Variant expandable up to 20 kWs for longer buffering times
- IP65 version for environments with high levels of contamination and humidity
- Capacitors eliminate replacement of batteries
- Long life even at high temperatures
- No ventilation of the installation site required
- Communication via contacts or USB

DC UPS module

For expansion to an uninterruptible 24 V power supply



SITOP DC UPS with battery modules

Compact DC UPS modules ensure continued operation, even over a period of hours, depending on battery capacity and power requirements.

High system availability thanks to battery management

Sophisticated battery management ensures optimal battery charging. The charging process is temperature-controlled thanks to the innovative SITOP UPS1600, which also increases the service life of the UPS1100 battery module.

- SITOP UPS1600 DC UPS modules (24 V DC and up to 40 A) and UPS1100 battery modules up to 12 Ah
- UPS1100 5 Ah lithium battery module (LiFePo4) with a constant power output and voltage throughout the discharging range as well as a long service life even with high ambient temperatures
- Monitoring of operational readiness, battery feeder, and charging status
- Extended battery life thanks to battery management

Did you know that … you can connect the uninterruptible power supply SITOP UPS1600 to various different systems via OPC UA?

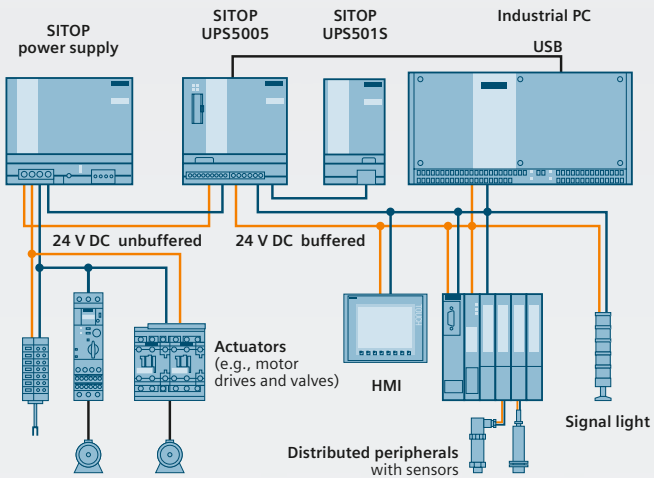
Extremely communicative

Optional communication via USB or Industrial Ethernet/ PROFINET. With open communication via Ethernet, the SITOP UPS Manager PC-based software allows easy configuration and diagnostics. The software includes an OPC UA server for the flexible integration of a wide variety of systems.

The UPS1600 can even be fully integrated into TIA via PROFINET. Remote monitoring is possible with support from the integrated Web server.

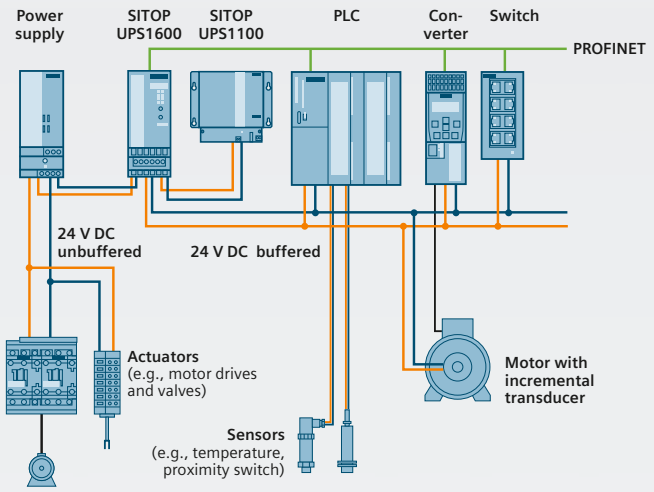
- Communication via contacts, USB, or two Ethernet/ PROFINET ports
- Easy engineering and extensive diagnostics in the TIA Portal
- Integrated web server
- OPC UA server for the flexible integration of a wide variety of automation, operating and monitoring systems

SITOP DC UPS configuration with capacitors



24-V buffering for saving process data and for correct PC shutdown

SITOP DC UPS configuration with battery modules



24-V buffering for maintaining communications, signaling, sensor-measured values and position values

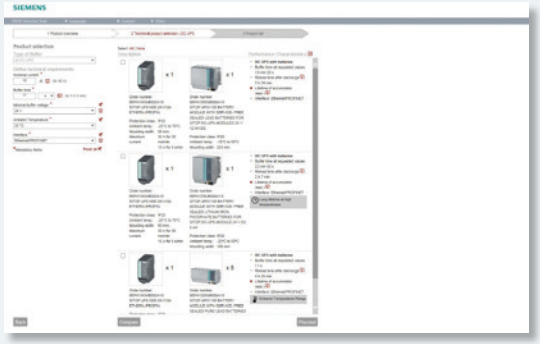
You can search a long time for the right power supply solution.

Or you can simply install SITOP.

CAD and CAE data in the image database for simple configuration

All product information is available per download via the CAx download manager.

No matter how many requirements a power supply must meet, SITOP always optimally supports your planning process – from product selection and mechanical and electrical design to project-specific plant documentation and engineering. With the SITOP Selection Tool, you can select your power supply and DC UPS faster and order it directly. In addition, you will automatically receive the required CAD data and circuit diagram macros. And using the TIA portal, you can even simply and reliably set the parameters for and diagnose the modular SITOP UPS8600 power supply system and the SITOP UPS1600 DC uninterruptible power supply.



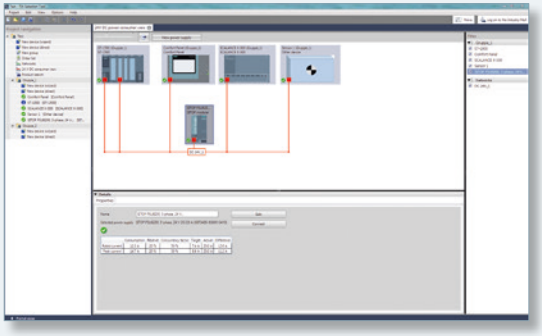
SITOP and TIA Selection Tool are used to select suitable a DC UPS in capacitor or battery technology.

Efficiency starts with selection

The SITOP Selection Tool guides you to the optimum power supply for your requirements with a few mouse clicks. Simply enter the relevant parameters. In the event of there being multiple solutions, an overview offers a comparison table containing several devices. Once you've opted for a solution, you can export the resulting product list into an Excel or PDF file, or move it directly to the Siemens Industry Mall shopping cart and order there. In addition, the TIA Selection Tool makes selection easy by calculating the electricity demands of the supplied automation products.

Everything you need for planning

Additional information such as 3D data, circuit diagram macros, certificates, and operating instructions are available with the click of mouse. You can download this planning data in DXF, STEP, and EPLAN format and use them directly for your planning. They are also available via the CAx download manager. You not only save valuable time when planning, but also benefit from the configurable manuals when creating the individual project documentation with the My Documentation Manager.



TIA Selection Tool: In the 24 V DC Power consumer view, the necessary SITOP power supply can be easily selected for the chosen automation products.

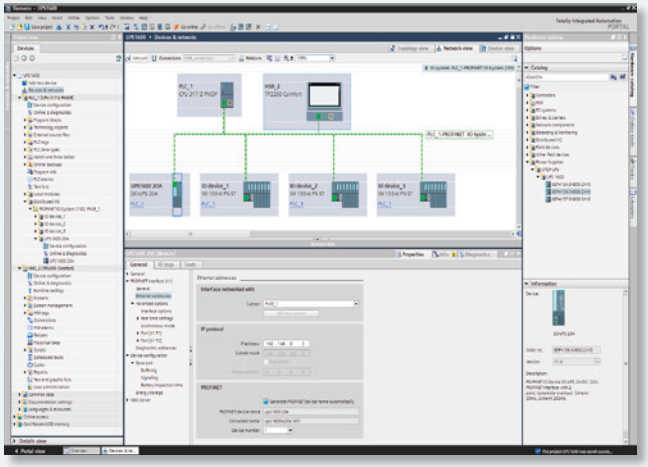
Did you know that … SITOP PSU8600 and SITOP UPS1600 (version with IE/PN interface) have integrated webservers that they can use for commissioning and remote diagnostics?

Convenient engineering in the TIA Portal

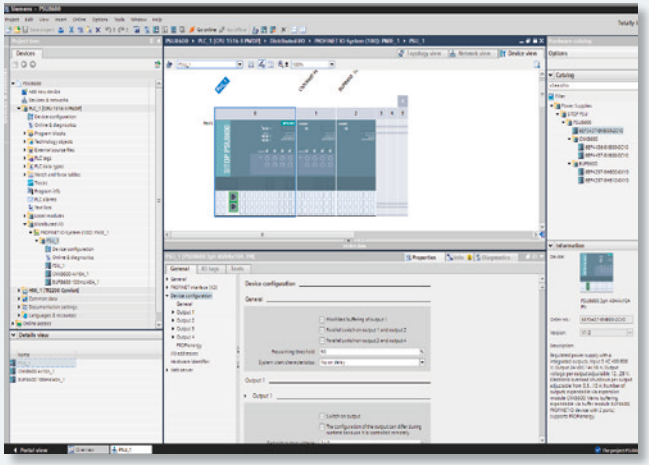
You can easily perform the engineering tasks for the SITOP PSU8600 power supply system and the SITOP UPS1600 uninterruptible power supply via the TIA Portal. Device selection and network connection are a simple matter of drag-and-drop or copy-and-paste. In addition, function blocks for SIMATIC S7-300, 400, 1200, and 1500 are available for integrating the power supply system and DC UPS into STEP7 user programs. There are also tailor-made faceplates to visualize the operational and diagnostic data using SIMATIC operating and monitoring systems. All of this helps reduce engineering effort and saves costs.

Your advantages of system integration of the SITOP UPS1600 and SITOP PSU8600

- Time and cost savings during configuration and operation
- Convenient engineering in the TIA portal
- Quick product selection and network integration in PROFINET
- Comprehensive parameterization of devices
- Comprehensive diagnostic options
- Simple integration into STEP 7 user programs with function blocks for S7-300/400/1200/1500
- Fast integration into operation and monitoring with faceplates for SIMATIC panels and SIMATIC WinCC



Integrating the SITOP UPS1600 DC UPS into PROFINET is easy and fail-safe via the TIA Portal.



Configuring and setting parameters for the PSU8600 power supply system in the TIA Portal is both intuitive and convenient.

SITOP – The right power supply for every application.

Our answers to your requirements with regard to a high-performance power supply:

The selection of the power supply unit is based on the input and output data. On the following two pages (pages 16 and 17), you will find a selection table with the available SITOP power supply units and the product lines to which they belong. The technical data is located on the subsequent pages under the corresponding product line.

But which product line is the right one for my application?

As a decision-making aid, you can refer to the selection matrix containing the most important data, properties, functions, certificates, and expansion options for increasing the 24 V availability.

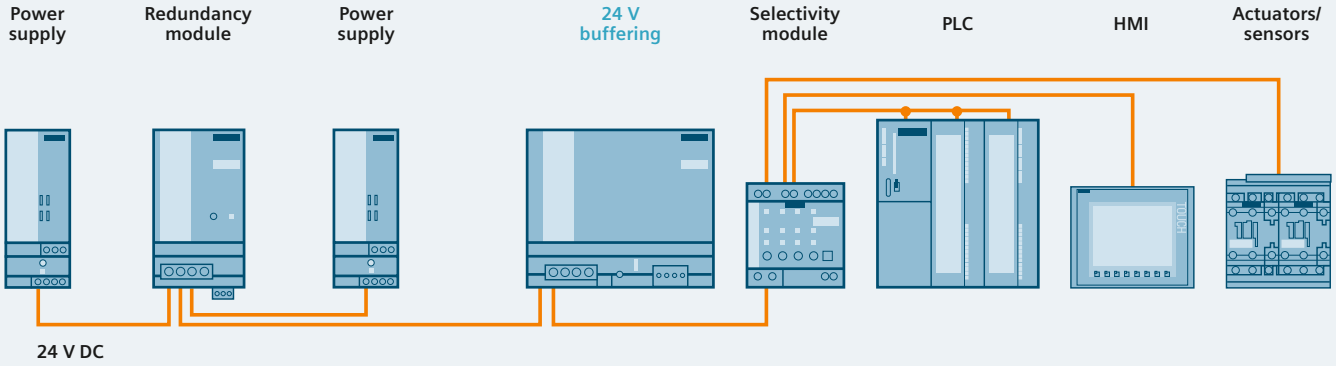
			SITOP compact	LOGO! Power	SITOP lite	SITOP smart	SITOP modular	
			The slim power supply unit for control boxes	The flat power supply for distribution boards	The cost-effective basic power supply	The powerful standard power supply	The technology power supply for demanding solutions	SITOP PSU8600 power supply system with complete TIA integration
Input/output	Input	AC/DC	1 ~ =	1 ~ =	1 ~	1,3 ~	1,2,3 ~ =	3 ~
	Rated power up to approx.	P	100 W	100 W	480 W	960 W	960 W	960 W
	Rated output voltages	U	DC 12/24 V	DC 5/12/15/24 V	24 V DC	DC 12/24 V	DC 24/36/48 V	DC 5 - 28 V
	Rated output currents (24 V)	I	0.6 - 4.0 A	0.6 - 4.0 A	2.5 - 20 A	2.5 - 40 A	5 - 40 A	20 - 40 A
Properties	Overload behavior	P_{max}				Extra Power	Extra Power, Power Boost	Extra Power
	Energy efficiency		+ +	+ +	+	+ +	+ + +	+ + +
	Automation integration					DC o.k.	DC o.k. Remote on/off	PROFINET OPC UA
Safety, environment	Explosion protection: ATEX, IECEx, or FM		•	•		•	•	•
	Marine approval: GL or ABS			•		•	•	•
	Ambient temperature range		-20 ... +70 °C	-25 ... +70 °C	0 ... +60 °C	-25 ... +70 °C	-25 ... +70 °C	-25 ... +60 °C
24 V power supply units expandable with ...	Redundancy module		•	•	•	•	•	•
	Selectivity module	I >	•	•	•	•	•	integrated
	Buffer module	s				•	•	integrated
	DC UPS with UltraCaps min	min	•	•	•	•	•	integrated
	DC UPS with batteries	h	•	•	•	•	•	•

Selection matrix of the SITOP DIN rail power supply units according to performance data and range of functions.

SITOP all-round protection for maximum 24 V availability

Our answers to the requirements with regard to a reliable power supply:

Using different add-on modules, you can flexibly expand the 24 V power supply units to develop all-round protection.



For protection against power failure, the buffer module or the UPS500 or UPS1600 DC UPS systems are available for optional expansion. As a decision-making aid, in the table you will find the most important properties and SITOP module options for 24 V buffering.

SITOP module for 24 V buffering	Buffer module	UPS500	UPS1600	
Energy storage device				
24 V buffering	max. 10 s	Minutes	Hours	
Storage medium	Electrolytic capacitors	Double-layer capacitors	Lead batteries	Lithium batteries
Service life (also temperature dependent)	++	++	•	+
Application area (temperature, degree of protection, ventilation)	+	++	•	+
UPS module/electronics				
max. rated output current	40 A	15 A	40 A	
Overload capacity	++	+	++	
Interfaces		I/O, serial, USB	I/O, USB, Ethernet/PROFINET	
Operating and diagnostic information via				
– Signaling contacts		•	•	
– OPC UA server, webserver, S7-FBs, WinCC faceplate			•	
Shutting down multiple PCs/PLC			•	
Start from battery without mains voltage (island operation)			•	
Engineering via OPC UA			•	
Engineering via software tool (PC)		•	•	
Engineering via TIA Portal			•	
Engineering via STEP 7, WinCC			•	

Selection table SITOP power supplies

Input voltage	Output current	SITOP compact	LOGO!Power	SITOP lite	SITOP smart	SITOP modular	SIMATIC Design	"Special design, special use"
Output voltage 24 V DC								
1-phase 120 V AC, 230 V AC	0.6 A	6EP1331-5BA00	6EP3330-6SB00-0AY0					
	1.3 A	6EP1331-5BA10	6EP3331-6SB00-0AY0					
	2 A						6ES7307-1BA01-0AA0	6EP1331-1LD00
	2.5 A	6EP1332-5BA00	6EP3332-6SB00-0AY0	6EP1332-1LB00	6EP1332-2BA20		6EP1332-1SH71	6EP1232-1AA00
	3 A						6EP1332-4BA00	6EP1332-1LD00
	3.5 A						6EP1332-1SH31	
	3.7 A	6EP1332-5BA20						
	4 A	6EP1332-5BA10	6EP3333-6SB00-0AY0					6EP1332-1LD10
	5 A			6EP1333-1LB00	6EP1333-2BA20	6EP1333-3BA10	6ES7307-1EA01-0AA0	6EP1333-1AL12
						6EP3333-8SB00-0AY0	6ES7307-1EA80-0AA0	6EP1333-7CA00
	6.2 A							6EP1333-1LD00
	8 A						6EP1333-4BA00	6EP1334-7CA00
	10 A			6EP1334-1LB00	6EP1334-2BA20	6EP1334-3BA10	6ES7307-1KA02-0AA0	6EP1334-1AL12
					6EP1334-2AA01-0AB0	6EP3334-8SB00-0AY0		
	12.5 A							6EP1334-1LD00
	20 A			6EP1336-1LB00	6EP1336-2BA10	6EP1336-3BA10		
	40 A					6EP1337-3BA00		
3-phase 400 – 500 V AC	5 A				6EP1433-2BA20	6EP1333-3BA10[1)]		6EP1433-0AA00
	8 A						6ES7148-4PC00-0HA0	6ES7 148-4PC00-0HA0
	10 A				6EP1434-2BA10	6EP1334-3BA10[1)]		
	17A							6EP4436-8UB00-0AY0
	20 A				6EP1436-2BA10	6EP3436-8SB00-0AY0		
						6EP3436-8MB00-2CY0		
	20 A/4 x 5 A					6EP3436-8SB00-2CY0		
	30 A							6EP1437-3BA20
	40 A				6EP1437-2BA20	6EP1437-3BA10		
						6EP3437-8MB00-2CY0		
	40 A/ 4 x 10 A					6EP3437-8SB00-2CY0		
24 – 110 V DC	2 A						6ES7305-1BA80-0AA0	
110 – 300 V DC	0.6 A	6EP1331-5BA00	6EP3330-6SB00-0AY0					
	1.3 A	6EP1331-5BA10	6EP3331-6SB00-0AY0					
	2.5 A	6EP1332-5BA00	6EP3332-6SB00-0AY0					
	4 A	6EP1332-5BA10	6EP3333-6SB00-0AY0					
88...350 (370) V DC	20 A			6EP1336-1LB00		6EP1336-3BA10		
600 V DC	20 A							6EP1536-3AA00

[1)] Connection to 2 phases 230 – 500 V AC – see data sheet SITOP modular 1-/2-phase

Grey: more information in the Industry Mall

Input voltage	Output	SITOP compact	LOGO!Power	SITOP smart	SITOP modular	"Special design, special use"
Output voltage 5, 12, 15, 48, ... V DC						
1-phase 120 V AC, 230 V AC	5 V/3 A		6EP3310-6SB00-0AY0			
	5 V/6.3 A		6EP3311-6SB00-0AY0			
	12 V/0.9 A		6EP3320-6SB00-0AY0			
	12 V/1.9 A		6EP3321-6SB00-0AY0			
	12 V/2.0 A	6EP1321-5BA00				
	12 V/3.0 A					6EP1321-1LD00
	12 V/4.5 A		6EP3322-6SB00-0AY0			
	12 V/6.5 A	6EP1322-5BA10				
	12 V/7 A			6EP1322-2BA00		
	12 V/8.3 A					6EP1322-1LD00
	12 V/14 A			6EP1323-2BA00		
	15 V/1.9 A		6EP3321-6SB10-0AY0			
	15 V/4 A		6EP3322-6SB10-0AY0			
	3 – 52 V/2 – 10 A					6EP1353-2BA00
	2 x 15 V/3.5 A					6EP1353-0AA00
24 V DC	12 V/2.5 A					6EP1621-2BA00
	12 V/20 A					6EP4424-8UB00-0AY0
3-phase 400 – 500 V AC	36 V/13 A				6EP3446-8SB10-0AY0	
	48 V/10 A				6EP3446-8SB00-0AY0	
	48 V/20 A				6EP1457-3BA00	

LOGO!Power
Flat power supply for distribution boards

	new! 4th generation		new! 4th generation			
Technical data	**18 mm design**		**36 mm design**			
Output voltage/current	**12 V/0.9 A**	**24 V/0.6 A**	**5 V/3 A**	**12 V/1.9 A**	**15 V/1.9 A**	**24 V/1.3 A**
NEC Class 2	yes	yes	yes	yes	yes	yes
Article No.[1]	6EP3320-6SB00-0AY0	6EP3330-6SB00-0AY0	6EP3310-6SB00-0AY0	6EP3321-6SB00-0AY0	6EP3321-6SB10-0AY0	6EP3331-6SB00-0AY0
Rated input voltage – Range	100–240 V AC 85...264 V AC/110...300 V DC		100–240 V AC 85...264 V AC/110...300 V DC			
Mains buffering	> 40 ms (at 187 V)	> 40 ms (at 187 V)	> 40 ms (at 187 V)			
Rated line frequency	50/60 Hz	50/60 Hz	50/60 Hz			
Rated input current – Inrush current (25 °C)	0.3–0.2 A <20 A	0.3–0.2 A <20 A	0.36–0.22 A < 26 A	0.53–0.30 A < 25 A	0.63 –0.33 A < 25 A	0.70–0.35 A < 25 A
– Recommended miniature circuit breaker	from 6 A characteristic B or from 2 A characteristic C		from 6 A characteristic B or from 2 A characteristic C			
Rated output voltage – Tolerance – Setting range	12 V DC ± 3% none	24 V DC	5 V DC ± 3% 4.6...5.4 V DC	12 V DC 10.5...16.1 V DC		24 V DC 22.2...26.4 V DC
Rated output current – Derating	0.9 A	0.6 A	3.0 A from +55 °C (2%/K)	1.9 A from +55 °C (2%/K)		1.3 A from +55 °C (2%/K)
Efficiency at rated values, approx.	78%	81%	76%	81%		86%
Signaling contact "DC o. k."	no		no	no		no
No-load loss	< 0.3 W		< 0.3 W			
Electronic short-circuit protection	yes, constant current		yes, constant current			
Radio interference suppression (EN 55022)	Class B		Class B			
Supply harmonics limitation (EN 61000-3-2)	Not applicable		Not applicable			
Degree of protection (EN 60529)	IP20		IP20			
Ambient temperature	–25... +70 °C		–25... +70 °C			
Dimensions (WxHxD) in mm	18 x 90 x 53		36 x 90 x 53			
Weight approx.	0.07 kg	0.07 kg	0.12 kg			
Certification	CE, CB Scheme, cULus, cURus, NEC Class 2, ATEX, IECEx, Class 1 Div 2, FM, DNV GL, ABS, EAC		CE, CB Scheme, cULus, cURus, NEC Class 2, ATEX, IECEx, Class 1 Div 2, FM, DNV GL, ABS, EAC		CE, CB Scheme, cULus, cURus, NEC Class 2, ATEX, IECEx, Class 1 Div 2, FM, DNV GL, ABS, EAC	CE, CB Scheme, cULus, cURus, NEC Class 2, ATEX, IECEx, Class 1 Div 2, FM, DNV GL, ABS, SEMI F47, BV, LRS, EAC

[1] Planned start of delivery: June 2017. The predecessor series (Article No. 6EP13..., 3rd generation LOGO!Power) can be ordered up until around the end of 2017. The new generation is technically compatible and has a slimmer shape, lower no-load losses, and more functionality for the same price

Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

	new! 4th generation				new! 4th generation
Technical data	**54 mm design**				**92 mm design**
Output voltage/current	**5 V/6.3 A**	**12 V/4.5 A**	**15 V/4 A**	**24 V/2.5 A**	**24 V/4 A**
NEC Class 2	no	no	yes	yes	no
Article No.[1]	6EP3311-6SB00-0AY0	6EP3322-6SB00-0AY0	6EP3322-6SB10-0AY0	6EP3332-6SB00-0AY0	6EP3333-6SB00-0AY0
Rated input voltage – Range	100–240 V AC 85...264 V AC/ 110...300 V DC				100–240 V AC 85...264 V AC/ 110...300 V DC
Mains buffering	> 40 ms (at 187 V)				> 40 ms (at 187 V)
Rated line frequency	50/60 Hz				50/60 Hz
Rated input current – Inrush current (25 °C)	0.71–0.37 A < 50 A	1.13–0.61 A < 50 A	1.24–0.68 A < 55 A	1.22–0.66 A < 52 A	1.95–0.97 A < 31 A
– Recommended miniature circuit breaker	from 10 A characteristic B or from 6 A characteristic C				from 10 A characteristic B or from 6 A characteristic C
Rated output voltage – Tolerance – Setting range	5 V DC ± 3% 4.6...5.4 V DC	12 V DC 10.5...16.1 V DC	15 V DC 10.5...16.1 V DC	24 V DC 22.2...26.4 V DC	24 V DC ± 3% 22.2...26.4 V DC
Rated output current – Derating	6.3 A from +55 °C (2%/K)	4.5 A from +55 °C (2%/K)	4.0 A from +55 °C (2%/K)	2.5 A from +55 °C (2%/K)	4.0 A from +55 °C (2%/K)
Efficiency at rated values, approx.	80%	87%	88%	90%	89%
Signaling contact "DC o. k."	no	no	no	no	no
No-load loss	< 0.3 W				< 0.3 W
Electronic short-circuit protection	yes, constant current				yes, constant current
Radio interference suppression (EN 55022)	Class B				Class B
Supply harmonics limitation (EN 61000-3-2)	Not applicable				yes
Degree of protection (EN 60529)	IP20				IP20
Ambient temperature	–25... +70 °C				–25... +70 °C
Dimensions (WxHxD) in mm	54 x 90 x 53				72 x 90 x 53
Weight approx.	0.2 kg				0.29 kg
Certification	CE, CB Scheme, cULus, cURus, ATEX, IECEx, Class 1 Div 2, FM, DNV GL, ABS, EAC	CE, CB Scheme, cULus, cURus, NEC Class 2, ATEX, IECEx, Class 1 Div 2, FM, DNV GL, ABS, EAC	CE, CB Scheme, cULus, cURus, NEC Class 2, ATEX, IECEx, Class 1 Div 2, FM, DNV GL, ABS, EAC	CE, CB Scheme, cULus, cURus, NEC Class 2, ATEX, IECEx, Class 1 Div 2, FM, DNV GL, ABS, SEMI 47, BV, LRS, EAC	CE, CB Scheme, cULus, cURus, ATEX, IECEx, Class 1 Div 2, FM, DNV GL, ABS, SEMI F47, BV, LRS, EAC

[1] Planned start of delivery: June 2017. The predecessor series (Article No. 6EP13..., 3rd generation LOGO!Power) can be ordered up until around the end of 2017.
The new generation is technically compatible and has a slimmer shape, lower no-load losses, and more functionality for the same price
Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

SITOP compact
Slim power supply for control boxes

Technical data	**Overall width 22.5 mm**	**Overall width 30 mm**		**Overall width 45 mm**	**Overall width 52.5 mm**		
Output voltage / current, type	**24 V/0.6 A, PSU100C**	**24 V/1.3 A, PSU100C**	**12 V/2 A, PSU100C**	**24 V/2.5 A, PSU100C**	**24 V/4 A, PSU100C**	**24 V/3.7 A, PSU100C NEC Class 2**	**12 V/6.5 A, PSU100C**
NEC Class 2	Yes	Yes	No	Yes	No	Yes	No
Article No.	6EP1331-5BA00	6EP1331-5BA10	6EP1321-5BA00	6EP1332-5BA00	6EP1332-5BA10	6EP1332-5BA20	6EP1322-5BA10
Rated input voltage – Range	100 – 230 V AC 85…264 V AC/ 110…300 V DC	100 – 230 V AC 85…264 V AC/ 110…300 V DC	100 – 230 V AC 85…264 V AC/ 110…300 V DC	100 – 230 V AC 85…264 V AC/ 110…300 V DC	100 – 230 V AC 85…264 V AC/ 110…300 V DC	100 – 230 V AC 85…264 V AC/ 110…300 V DC	100 – 230 V AC 85…264 V AC/ 110…300 V DC
Mains buffering	> 20 ms (at 120/230 V AC)	> 20 ms (at 120/230 V AC)	> 20 ms (at 120/230 V AC)	> 20 ms (at 120/230 V AC)	> 20 ms (at 120/230 V AC)	> 20 ms (at 120/230 V AC)	> 20 ms (at 120/230 V AC)
Rated line frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Rated input current – Recommended miniature circuit breaker	0.28–0.18 A 10 A characteristic C 16 A characteristic B	0.63–0.31 A 10 A characteristic C, 16 A characteristic B	0.63–0.31 A 10 A characteristic C, 16 A characteristic B	1.33–0.67A 10 A characteristic C, 16 A characteristic B	2.25–1.15 A 10 A characteristic C, 16 A characteristic B	1.21–0.67 A 10 A characteristic C, 16 A characteristic B	1.6–0.75 A 10 A characteristic C, 16 A characteristic B
Rated output voltage – Tolerance – Setting range	24 V DC ± 3 % –	24 V DC ± 3 % 22.2…26.4 V DC	24 V DC ± 3 % 10.5…12.9 V DC	24 V DC ± 3 % 22.2…26.4 V DC	24 V DC ± 3 % 22.2…26.4 V DC	24 V DC ± 3 % –	12 V DC ± 3 % 10.5…12.9 V DC
Rated output current – Derating	0.6 A from +55 °C (3 %/K)	1.3 A from +55 °C (3 %/K)	2 A from +55 °C (3 %/K)	2.5 A from +50 °C (3.5 %/K)	4 A from +50 °C (3.5 %/K)	3.7 A from +50 °C (3.5 %/K)	6.5 A from +50 °C (3.5 %)
Efficiency at rated values, approx.	82 %	86 %	82 %	87 %	88 %	87 %	86 %
No-load loss	< 0.75 W	< 0.75 W	< 0.75 W	< 0.75 W	< 0.75 W	< 0.75 W	< 0.75 W
Signaling contact “DC o. k.”	No	No	No	No	No	No	No
Electronic short-circuit protection	Yes, restart	Yes, restart	Yes, restart	Yes, restart	Yes, restart	Yes, restart	Yes, restart
Radio interference suppression (EN 55022)	Class B	Class B	Class B	Class B	Class B	Class B	Class B
Supply harmonics limitation (EN 61000-3-2)	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Yes
Degree of protection (EN 60529)	IP20	IP20	IP20	IP20	IP20	IP20	IP20
Ambient temperature	–20…+70 °C	–20…+70 °C	–20…+70 °C	–20…+70 °C	–20…+70 °C	–20…+70 °C	–20…+70 °C
Dimensions (WxHxD) in mm	22.5 x 80 x 100	30 x 80 x 100	30 x 80 x 100	45 x 80 x 100	52.5 x 80 x 100	52.5 x 80 x 100	52.5 x 80 x 100
Weight approx.	0.12 kg	0.17 kg	0.12 kg	0.22 kg	0.32 kg	0.32 kg	0.32 kg
Connections [1]	Removable screw terminal	Removable screw terminal	Removable screw terminal	Removable screw terminal	Removable screw terminal	Removable screw terminal	Removable screw terminal
Certification	CE, cULus, cCSAus, CB, NEC Class 2, ATEX, cCSAus Class I Div 2, GL, ABS	CE, cULus, cCSAus, CB, NEC Class 2, ATEX, cCSAus Class I Div 2, GL, ABS	CE, cULus, cCSAus, CB, ATEX, cCSAus Class I Div 2, GL, ABS	CE, cULus, cCSAus, CB, NEC Class 2, ATEX, cCSAus Class I Div 2, GL, ABS	CE, cULus, cCSAus, CB, ATEX, cCSAus Class I Div 2, GL, ABS	CE, cULus, CB, NEC class 2, cCSAus Class I Div 2, GL, ABS	CE, cULus, cCSAus, CB, ATEX, cCSAus Class I Div 2, GL, ABS

[1] Accessory: removable spring-type terminal, Article No. 6EP1971-5BA00,
Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

SITOP lite
Cost-effective basic power supply

Technical data			**SITOP lite**	
Output voltage / current, type	**24 V / 2.5 A, PSU100L**	**24 V / 5 A, PSU100L**	**24 V / 10 A, PSU100L**	**24 V/20 A, PSU100L**
Article No.	6EP1332-1LB00	6EP1333-1LB00	6EP1334-1LB00	6EP1336-1LB00
Rated input voltage – Range	120 / 230 V AC 93...132 /187...264 V AC	120 / 230 V AC 93...132 /187...264 V AC	120 / 230 V AC 93...132 /187...264 V AC	100-230 V AC 85...264V /DC 88...370V AC
Mains buffering	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)
Rated line frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Rated input current – Inrush current (25 °C)	1.1 / 0.65 A < 27 A	2.1 / 1.15 A < 32 A	4.3 / 2.0 A < 65 A	5.55 / 2.35 A < 45 A
– Recommended miniature circuit breaker	3 A characteristic C	6 A characteristic C	10 A characteristic C	10 A characteristic C
Rated output voltage – Tolerance – Setting range	24 V DC ± 3 % 22.8...26.4 V DC	24 V DC ± 3 % 22.8...26.4 V DC	24 V DC ± 3 % 22.8...26.4 V DC	24 V DC ± 3 % 22.8...28 V DC
Rated output current – Derating	2.5 A from +45 °C (1.5 %/K)	5 A from +45 °C (1.5 %/K)	10 A from +45 °C (2 %/K)	20 A from +45 °C (2.5 %/K)
Efficiency at rated values, approx.	85 %	86 %	89 %	92 %
Signaling contact "DC o. k."	No	No	No	No
Parallel switching	Yes	Yes	Yes	Yes
Electronic short-circuit protection	Yes, constant current	Yes, constant current	Yes, constant current	Yes, constant current
Radio interference suppression (EN 55022)	Class A	Class A	Class A	Class A
Supply harmonics limitation (EN 61000-3-2)	Not applicable	No	No	Yes
Degree of protection (EN 60529)	IP20	IP20	IP20	IP20
Ambient temperature	0... +60 °C	0... +60 °C	0... +60 °C	-25... +70 °C
Dimensions (WxHxD) 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.	0.4 kg	0.5 kg	0.75 kg	1.8 kg
Certification	CE, cULus, CB	CE, cULus, CB	CE, cULus, CB	CE, cULus, CB

Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

SITOP smart
Powerful standard power supply

Technical data	SITOP smart 1-phase					
Output voltage / current, type	**24 V/2.5 A, PSU100S**	**24 V/5 A, PSU100S**	**12 V/7A, PSU100S**	**24 V/10 A, PSU100S**	**12 V/14 A, PSU100S**	**24 V/20 A, PSU100S**
Article No.	6EP1 332-2BA20	6EP1 333-2BA20	6EP1 322-2BA00	6EP1 334-2BA20	6EP1 323-2BA00	6EP1336-2BA10
Rated input voltage	120/230 V AC	120/230 V AC	120/230 V AC	120/230 V AC	120/230 V AC	120/230 V AC
– Range	85...132/170...264 V AC, automatic range switching					
Mains buffering	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	> 20 ms (at 120/230 V)
Rated line frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Rated input current – Inrush current (25 °C) – Recommended miniature circuit breaker	1.25 A/0.74 A < 33 A from 3 A characteristic C	2.34 A/1.36 A < 40 A from 6 A characteristic C	1.73 A/0.99 A < 45 A from 6 A characteristic C	4.49 A/1.91 A < 60 A from 10 A characteristic C	3.24 A/1.41 A < 60 A from 10 A characteristic C	7.5/3.5 A < 11 A from 10 A characteristic C
Rated output current – Tolerance – Setting range	24 V DC ± 3 % 22.8...28 V DC	24 V DC ± 3 % 22.8...28 V DC	12 V DC ± 3 % 11.5...15.5 V DC	24 V DC ± 3 % 22.8...28 V DC	12 V DC ± 3 % 11.5...15.5 V DC	24 V DC ± 3 % 24...28 V DC
Rated output current – Permanently up to +45°C – Overload behavior (extra power for 5 s/min) – Derating	2.5 A 3 A 3.75 A from +60 °C (3 %/ K)	5 A 6 A 7.5 A from +60 °C (3 %/ K)	7 A 7 A 10.5 A from +55 °C (5 %/ K)	10 A 12 A 15 A from +60 °C (3 %/ K)	14 A 14 A 21 A from +55 °C (5 %/ K)	20 A 24 A 30 A from + 60 °C (5 %/K)
Efficiency at rated values, approx.	85 %	88 %	84 %	90 %	87 %	90 %
Signaling contact "DC o. k."	Yes	Yes	Yes	Yes	Yes	Yes
Parallel switching	Yes	Yes	Yes	Yes	Yes	Yes
Electronic short-circuit protection	Yes, constant current	Yes, constant current	Yes, constant current	Yes, constant current	Yes, constant current	Yes, restart
Radio interference suppression (EN 55022)	Class B	Class B	Class B	Class B	Class B	Class B
Supply harmonics limitation (EN 61000-3-2)	Not applicable	Yes	Yes	Yes	Yes	Yes
Degree of protection (EN 60529)	IP20	IP20	IP20	IP20	IP20	IP20
Ambient temperature	–25...+70 °C	–25...+70 °C	–25...+70 °C	–25...+70 °C	–25...+70 °C	–25 ...+70 °C
Dimensions (WxHxD) in mm	32.5 x 125 x 120	50 x 125 x 120	50 x 125 x 120	70 x 125 x 120	70 x 125 x 120	115 x 145 x 150
Weight approx.	0.32 kg	0.5 kg	0.5 kg	0.8 kg	0.8 kg	2.4 kg
Certification	CE, cULus, CB, ATEX, IECEx, cCSAus Class I Div 2, GL, BV	CE, cULus, CB, ATEX, IECEx, cCSAus Class I Div 2, GL, BV	CE, cULus, CB, ATEX, IECEx, cCSAus Class I Div 2, GL	CE, cULus, CB, ATEX, IECEx, cCSAus Class I Div 2, GL, BV	CE, cULus, CB, ATEX, IECEx, cCSAus Class I Div 2, GL	CE, cULus, CB, ATEX, IECEx, cCSAus Class I Div 2, GL

Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

SITOP smart 3-phase			
24 V/5 A, PSU300S	**24 V/10 A, PSU300S**	**24 V/20 A, PSU300S**	**24 V/40 A, PSU300S**
6EP1433-2BA20 [2)]	6EP1434-2BA20[2)]	6EP1436-2BA10	6EP1437-2BA20
400-500 V 3 AC	400-500 V 3 AC	400-500 V 3 AC	400-500 V 3 AC
340 ... 550 V 3 AC	340 ... 550 V 3 AC	340 ... 550 V 3 AC	340 ... 550 V 3 AC
> 6 ms (at 400 V)	> 6 ms (at 400 V)	> 6 ms (at 400 V)	> 6 ms (at 400 V)
50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
0.45 - 0.4 A < 40 A 6 – 16 A charact. C 3-ph. coupled or 3 RV2011-1DA10 or 3 RV2711-1DD10	0.7 – 0.6 A < 50 A 6 – 16 A charact. C 3-ph. coupled or 3 RV2011-1DA10 or 3 RV2711-1DD10	1.2 – 1.0 A < 36 A 6 – 16 A charact. C 3-ph. coupled or 3 RV2011-1DA10 or 3 RV2711-1DD10	2.0 – 1.5 A < 60 A 10–16 A charact. C 3-ph. coupled or 3 RV2011-1DA10 or 3 RV2711-1DD10
24 V DC ± 3 % 24...28 V DC	24 V DC ± 3 % 24...28 V DC	24 V DC ± 3 % 24...28 V DC	24 V DC ± 3 % 24...28 V DC
5 A 6 A 7.5 A from +60 °C (3 %/ K)	10 A 12 A 15 A from +60 °C (3%/K)	20 A 24 A 30 A from +60 °C (5 %/K)	40 A 48 A 60 A from +60 °C (2.5 %/K)
89 %	91 %	91 %	91.5 %
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes, restart	Yes, restart	Yes, restart	Yes, restart
Class B	Class B	Class B	Class B
Yes	Yes	Yes	Yes
IP20	IP20	IP20	IP20
-25...+70 °C	–25...+70 °C	0...+70 °C	0...+70 °C
50 x 125 x 120	70 x 125 x 120	90 x 145 x 150	150 x 145 x 150
0.43 kg	0.67 kg	1.6 kg	3.7 kg
CE, cULus, CB, ATEX, UL Class I Div 2, IECEx, GL	CE, cULus, CB, ATEX, UL Class I Div 2, IECEx, GL	CE, cULus, CB, ATEX, cCSAus Class I Div 2, GL, IECEx	CE, cULus, CB, ATEX , cCSAus Class I Div 2, GL, IECEx

Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

SITOP modular
Technology power supply for demanding solutions

Technical data	SITOP modular 1-phase				SITOP modular 1-phase and 2-phase[1]
Output voltage / current, type	**24 V/5 A, PSU8200**	**24 V/ 10 A, PSU8200**	**24 V/20 A, PSU8200**	**24 V/40 A, PSU8200**	**24 V/5 A, PSU200M**
Article No.	6EP3333-8SB00-0AY0	6EP3334-8SB00-0AY0	6EP1336-3BA10	6EP3337-8SB00-0AY0	6EP1333-3BA10
Rated input voltage – Range	120 – 230 V AC 85...132 V/170...264 V AC, automatic range switching		120 – 230 V AC 85...275 V AC or 88...350 V DC	120/230 V AC 85...132/170...264 V AC, automatic range switching	120 – 230/230 – 500 V AC 85...264/176...550 V AC
Mains buffering	>35 ms (at 120/230 V)	>35 ms (at 120/230 V)	> 20 ms (at 120/230 V)	> 25 ms (at 230 V)	> 25 ms (at 120/230 V)
Rated line frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Rated input current – Inrush current (25 °C) – Recommended miniature circuit breaker	2.1/1.2 A < 10A 6 A charact. C or 3RV1021-1xA10	4/1.9 A < 10 A 10 A charact. C or 3RV1021-1xA10	4.6 – 2.5 A < 20 A 10 A charact. C or 3RV1021-1xA10	15.0/8.0 A < 35 A 20 A charact. C or 3RV2411-xxA10	2.2 – 1.2/1.2 – 0.61 A < 35 A 6 A charact. C or 3RV2011 -1xA10
Rated output voltage – Tolerance – Setting range	24 V DC ± 3 % 24...28.8 V DC	24 V DC ± 3 % 24...28.8 V DC	24 V DC ± 3 % 24...28.8 V DC	24 V DC ± 3 % 24...28.8 V DC	24 V DC ± 3 % 24...28.8 V DC
Rated output current	5 A	10 A	20 A	40 A	5 A
– Overload behavior (power boost for 25 ms)	15 A	30 A	60 A	120 A	15 A
– Overload behavior	7.5 A (extra power for 5 s/min)	15 A (extra power for 5 s/min)	30 A (extra power for 5 s/min)	60 A (extra power for 5 s/min)	
– Derating	—	from +60 °C (2%/K)	from +60 °C (3 %/K)	from +60 °C (2.5%/K)	from +60 °C (2%/K)
Efficiency at rated values, approx.	93 %	94 %	93 %	92 %	88 %
Signaling contact "DC o. k."	Yes	Yes	Yes	Yes	Yes
Parallel switching	Yes, output characteristic can be switched to parallel operation				
Electronic short-circuit protection	Yes, constant current or latching shutdown selectable. Constant current: approx. 1.15 x rated output current				
Radio interference suppression (EN 55022)	Class B	Class B	Class B	Class B	Class B
Supply harmonics limitation	Yes (EN 61000-3-2)	Yes (EN 61000-3-2)	Yes (EN 61000-3-2)	Yes (EN 61000-3-2)	Yes (EN 61000-3-2)
Degree of protection (EN 60529)	IP20	IP20	IP20	IP20	IP20
Ambient temperature	–25...+70 ° C	–25...+70 ° C	–25...+70 °C	–25...+70 ° C	–25...+70 ° C
Dimensions (WxHxD) in mm	45 x 125 x 125	55 x 125 x 125	90 x 125 x 125	145 x 145 x 150	70 x 125 x 121
Weight approx.	0.8 kg	1 kg	1.5 kg	3.1 kg	0.6 kg
Certification	CE, cULus, ATEX, IECEx, cCSAus Class I Div 2, SEMI F47[2], GL, ABS		CE, cULus, ATEX, IECEx, UL Class I Div 2, GL, ABS	CE, cULus, ATEX, IECEx, cCSAus Class I Div 2, SEMI F47[3], GL, ABS	CE, cULus, ATEX, IECEx, SEMI F47[2], GL, ABS, UL Class I Div 2

[1] Connection to two phases of a three-phase supply system [2] At input voltage 208 to 230 V AC [3] In conjunction with two buffer modules
Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

new!

SITOP modular 1-phase and 2-phase[1]	SITOP modular 3-phase		SITOP modular 3-phase, 36 V	SITOP modular 3-phase, 48 V	
24 V/10 A, PSU200M	**24 V/20 A, PSU8200**	**24 V/40 A, PSU8200**	**36 V/13 A, PSU8200**	**48 V/10 A, PSU8200**	**48 V/20 A, PSU300M**
6EP1334-3BA10	6EP3436-8SB00-0AY0	6EP1437-3BA10	6EP3446-8SB10-0AY0	6EP3446-8SB00-0AY0	6EP1457-3BA00
120 – 230/230 – 500 V AC 85...264/176...550 V AC	400 – 500 V 3 AC 320...575 V 3 AC	400 – 500 V 3 AC 320...575 V 3 AC	400–500 V 3 AC 320...575 V 3 AC	400 – 500 V 3 AC 320...575 V 3 AC	400 – 500 V 3 AC 320...550 V 3 AC, start-up from 340 V
> 25 ms (at 120/230 V)	> 15 ms (at 400 V)	> 15 ms (at 400 V)	> 15 ms (at 400 V)	> 15 ms (at 400 V)	> 6 ms (at 400 V)
50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
4.4 – 2.4/2.4–1.1 A < 35 A 6 A charact. C or 3RV2011-1xA10	1.2 – 1.0 A < 18 A 6 – 16 A charact. C 3-ph. coupled or 3RV2011-1DA10 or 3RV2711-1DD10	2.6 – 2.1 A < 56 A 10 – 16 A charact. C 3-ph. coupled or 3RV2011-1DA10 or 3RV2711-1DD10	1.2-1.0 A < 18 A 6 – 16 A charact. C 3-ph. coupled or 3RV2011-1DA10 or 3RV2711-1DD10	1.2 – 1.0 A < 18 A 6 – 16 A charact. C 3-ph. coupled or 3RV2011-1DA10 or 3RV2711-1DD10	2.2 A (with 400 V) < 70 A 10 – 16 A charact. C 3-ph. coupled or 3RV2011-1DA10 or 3RV2711-1DD10
24 V DC ± 3 % 24...28.8 V DC	24 V DC ± 3 % DC 24...28,8 V	24 V DC ± 3 % DC 24...28,8 V	DC 36 V ± 3 % DC 32...40 V	DC 48 V ± 3 % DC 42...56 V	DC 48 V ± 3 % DC 42...56 V
10 A	20 A	40 A	13 A	10 A	20 A
30 A from +60 °C (2%/K)	60 A 30 A (extra power for 5 s/min) from +60 °C (3 %/K)	120 A 60 A (extra power for 5 s/min) from +60 °C (3,8 %/K)	39 A 19,5 A (extra power for 5 s/min) from +60 °C (3 %/K)	23A 15 A (extra power for 5 s/min) from +60 °C (3 %/K)	60A
91 %	94 %	93 %	94 %	93 %	90 %
Yes	Yes	Yes	Yes	Yes	No, via signaling contact module (6EP1961-3BA10)
Yes, output characteristic can be switched to parallel operation					
Yes, constant current or latching shutdown selectable. Constant current: approx. 1.15 x rated output current					
Class B	Class B	Class B	Class B	Class B	Class B
Yes (EN 61000-3-2)	Yes (EN 61000-3-2)	Yes (EN 61000-3-2)	Yes (EN 61000-3-2)	Yes (EN 61000-3-2)	Yes (EN 61000-3-2)
IP20	IP20	IP20	IP20	IP20	IP20
–25...+70 ° C	–25...+70 °C	–25...+70 °C	–10...+70 °C	–25...+70 °C	0...+60 °C
70 x 125 x 121	70 x 125 x 125	150 x 125 x 150	70 x 125 x 125	70 x 125 x 125	240 x 125 x 125
1.4 kg	1.2 kg	3.4 kg	1.2 kg	1.2 kg	3.2 kg
CE, cULus, ATEX, IECEx, SEMI F47[2], GL, ABS, UL Class I Div 2	CE, cULus, CB, ATEX, IECEx, cCSAus Class I Div 2, SEMI F47, GL, ABS	CE; cULus, CB, ATEX, IECEx, cCSAus Class I Div 2, SEMI F47, GL, ABS	CE; cULus, CB, cCSAus Class I Div 2, GL, ABS	CE; cULus, CB, ATEX, IECEx, cCSAus Class I Div 2, GL, ABS	CE, UL, CSA, GL, ABS

[1] Connection to two phases of a three-phase supply system [2] At input voltage 208 to 230 V AC
Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

SITOP modular
The first power supply system with integration in TIA – SITOP PSU8600

Technical data	**SITOP modular 3-phase basic unit, 1 output**	
Output voltage / current, type	**24 V/20 A, PSU8600**	**24 V/40 A, PSU8600**
Article No.	6EP3436-8SB00-2AY0 [1]	6EP3437-8SB00-2AY0 [1]
Rated input voltage	400 – 500 V 3 AC	400 – 500 V 3 AC
– Range	320...575 V 3 AC	320...575 V 3 AC
Mains buffering	> 15 ms (at 400 V), extendable via buffer modules	
Rated line frequency	50/60 Hz	50/60 Hz
Rated input current	1.4 – 1.1 A	2.75 – 2.2 A
– Inrush current (25 °C)	14 A	14 A
– Recommended miniature circuit breaker	6-16 A charact. C 3-ph. coupled or 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10	
Rated output voltage	24 V DC	24 V DC
– Tolerance	± 3 %	± 3 %
– Setting range	5...28 V DC	5...28 V DC
Rated ouput current	20 A, one output, number can be increased via expansion modules	40 A, one output, number can be increased via expansion modules
– Overload behavior (Extra Power)	30 A for 5 s/min	60 A for 5 s/min
– Derating	from +50°C (2.5%/K). No derating in connection with expansion module and total load of basic device's outputs up to 240 W (20 A devices) or up to 480 W (40 A devices)	
– Switching threshold adjustment range	2...20 A	4...40 A
– Shutdown behavior per output	Load current 101...149% of the setting: shutdown after 5 s; load current 150% of the setting: shutdown after 200 ms	
Efficiency at rated values, approx.	93 %	94 %
Signaling contact "DC o. k."	Yes	Yes
Interface	Industrial Ethernet/PROFINET with two ports	Industrial Ethernet/PROFINET with two ports
Parallel switching	Yes	Yes
Radio interference suppression (EN 55022)	Class B	Class B
Line harmonics limitation (EN 61000-3-2)	Yes	Yes
Degree of protection (EN 60529)	IP20	IP20
Ambient temperature	–25...+60 ° C	–25...+60 ° C
Dimensions (WxHxD) in mm	80 x 125 x 150	125 x 125 x 150
Weight approx.	1.8 kg	2.65 kg
Certification	CE, cULus, IECEx, ATEX, CB, cCSAus Class I Div 2, SEMI F47, GL, ABS	
Add-on modules	up to four CNX8600 expansion modules, up to two BUF8600 buffer modules	

Specifications at rated input voltage and ambient temperature at +25 °C (unless otherwise specified)

Technical data	**SITOP modular 3-phase basic unit, 4 outputs**	
Output voltage / current, type	**24 V/20 A/4x5 A, PSU8600**	**24 V/40 A/4x10 A, PSU8600**
Article No.	6EP3436-8MB00-2CY0 [1)]	6EP3437-8MB00-2CY0
Rated input voltage	400 – 500 V 3 AC	400 – 500 V 3 AC
– Range	320...575 V 3 AC	320...575 V 3 AC
Mains buffering	> 15 ms (at 400 V), extendable via buffer modules	
Rated line frequency	50/60 Hz	50/60 Hz
Rated input current	1.4 – 1.1 A	2.75–2.2 A
– Inrush current (25 °C)	14 A	14 A
– Recommended miniature circuit breaker	6-16 A charact. C 3-ph. coupled or 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10	
Rated output voltage	24 V DC	24 V DC
– Tolerance	± 3 %	± 3 %
– Setting range	5...28 V DC	5...28 V DC
Rated ouput current	20 A, 4 outputs at 5 A each, number can be increased via expansion modules	40 A, 4 outputs at 10 A each, number can be increased via expansion modules
– Overload behavior (Extra Power)	30 A for 5 s/min	60 A for 5 s/min
– Derating	from +50°C (2.5%/K). No derating in conjunction with expansion module and total load on the output of the basic device up to 240 W (20 A devices) or up to 480 W (40 A devices)	
– Switching threshold adjustment range	0.5...5 A	0.5...10 A
– Shutdown behavior per output	101...149% of the setting: shutdown after 5 s; 150% of setting: shutdown after 200 ms	
Efficiency at rated values, approx.	93 %	94 %
Signaling contact “DC o. k.”	Yes	Yes
Interface	Industrial Ethernet/PROFINET with two ports	
Parallel switching	Parallel connection output 1 with 2 or output 3 with 4 selectable via DIP switch	
Radio interference suppression (EN 55022)	Class B	Class B
Line harmonics limitation (EN 61000-3-2)	Yes	Yes
Degree of protection (EN 60529)	IP20	IP20
Ambient temperature	–25...+60 ° C	–25...+60 ° C
Dimensions (WxHxD) in mm	100 x 125 x 150	125 x 125 x 150
Weight approx.	2.0 kg	2.65 kg
Certification	CE, cULus, IECEx, ATEX, CB, cCSAus Class I Div 2, SEMI F47, GL, ABS	CE, cULus, CB, IECEx, ATEX, cCSAus Class I Div 2, SEMI F47, GL, ABS
Add-on modules	up to four CNX8600 expansion modules, up to two BUF8600 buffer modules	

SITOP modular
The first power supply system with integration in TIA – SITOP PSU8600

Technical data	Expansion module	
Typ	**4 x 5 A, CNX8600**	**4 x 10 A, CNX8600**
Article No.	6EP4436-8XB00-0CY0	6EP4437-8XB00-0CY0
Product/function description	Expansion module for PSU8600 basic devices for distribution of the direct current to another four load circuits and monitoring for overload; selective switch-off of defective circuits, switching threshold individually configurable. A total of four modules can be used in a group of systems. Data and power are transmitted via the System Clip Link connector.	
Rated output voltage	24 V DC	24 V DC
– Tolerance	± 3 %	± 3 %
– Setting range	5...28 V DC	
Rated output current	20 A/4 outputs of 5 A each	40 A/4 outputs of 10 A each
	Comment: The max. output capacity of the overall PSU8600 system cannot be increased via expansion modules	
– Switching threshold adjustment range	0.5...5 A	0.5...10 A
– Shutdown behavior per output	Load current 101...149% of the setting: shutdown after 5 s, load current 150% of the setting: shutdown after 200 ms	
Dimensions (WxHxD) in mm	60 x 125 x 150	60 x 125 x 150
Weight approx.	1.15 kg	1.15 kg
Certification	CE, cULus, IECEx, ATEX, CB, cCSAus Class I Div 2, SEMI F47, GL, ABS	

Technical data	Buffer module			
Typ	**100 ms/40 A, BUF8600**	**300 ms/40 A, BUF8600**	**4 s/40 A, BUF8600**	**10 s/40 A, BUF8600**
Article No.	6EP4297-8HB00-0XY0	6EP4297-8HB10-0XY0	6EP4293-8HB00-0XY0	6EP4295-8HB00-0XY0
Product/function description	Expansion module for PSU8600 basic devices for extending the outputs' buffer time during power failure. A total of two modules can be used in a group of systems. Data and power are transmitted via the System Clip Link connector.			
Energy storage	Electrolytic capacitors		Double-layer capacitors (Ultracaps)	
Buffer time with 24 V DC and load current				
5 A	800 ms	2.4 s	40 s	80 s
10 A	400 ms	1.2 s	20 s	40 s
20 A	200 ms	600 ms	10 s	20 s
40 A	100 ms	300 ms	4 s	10 s
Typical charging time	19 s	54 s	5 min	10 min
Max. power during buffer operation	60 A for 5 s/min	60 A for 5 s/min	40 A	60 A for 5 s/min
Status messages via 3-color LED	Normal operation, buffer operation, charging, error		Normal operation, buffer operation, charging, error	
Status messages via signal contact	-		Charging status >x%, buffer operation	
Status messages via PROFINET (basic unit)	Normal operation, buffer operation, charging, error		Normal operation, buffer operation, charging, error, charging status > x%,	
Additional functions			– Remote ON/OFF contact for deactivating buffering, e.g. when shutting down the plant to prevent unnecessary discharge.	
Dimensions (WxHxD) in mm	60 x 125 x 150	125 x 125 x 150	60 x 125 x 150	125 x 125 x 150
Weight approx.	1.33 kg	2.26 kg	1.25 kg	1.95 kg
Certification	CE, cULus, IECEx, ATEX, CB, cCSAus Class I Div 2, SEMI F47, GL, ABS		CE, cULus, IECEx, ATEX, CB, cCSAus Class I Div 2, SEMI F47, GL, ABS	

Specifications at rated input voltage and ambient temperature at +25 °C (unless otherwise specified)

SITOP modular
The first power supply system with integration in TIA and OPC UA server – SITOP PSU8600

The power supply system can be fully integrated in TIA via the Industrial Ethernet/PROFINET interface (2 ports) on the PSU8600 basic unit. This offers comprehensive setting and diagnostic options in TIA Portal or via Step7.

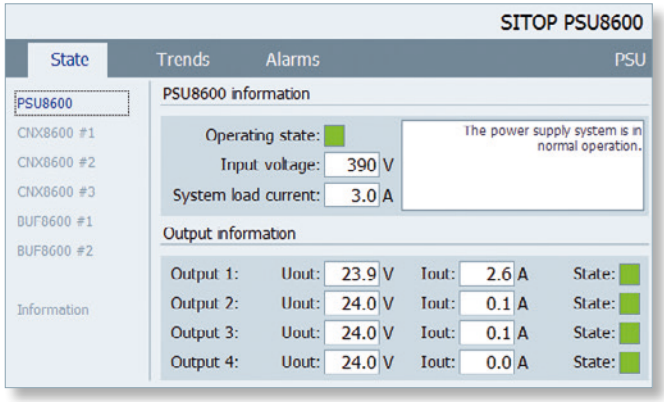
Thanks to the integrated OPC UA server, other automation systems can also be used for parameterization and fault diagnosis of the power supply system.

The power supply system already offers numerous setting options via DIP switch and potentiometer. Additional settings are, however, possible via PROFINET or OPC UA interface, which can also be controlled dynamically via a program. The comprehensive diagnostics options are only possible with network integration.

Manual setting options:

Via DIP switch on the basic unit
- Prioritized buffering of output 1 in case of power outage; i.e. longest possible buffering of the first output
- Selectable overload response: electronic disconnection or constant current
- Inrush delay between the outputs: 0 ms, 25 ms, 100 ms, load-optimized
- Parallel operation of outputs 1 + 2 or 3 + 4
- Release of the web server

Via potentiometer on the basic unit or expansion module
- Setting of the output voltage: DC 5...28 V
- Response threshold value in case of overload, according to output: 0.5...5 A, 0.5...10 A, 2...20 A or 4...40 A



Up-to-date voltage and current values as well as the status of the outputs can be displayed via free WinCC faceplates.

Additional setting options via PROFINET or OPC UA:

- Switching on and off individual outputs for the direct control of loads or for saving energy, for example using the PROFIenergy protocol
- Program-controlled changing of the output voltage of each output for the variable supply of loads, such as DC motors (e.g. in fans or belt drives)
- Threshold value below the tripping current for preventive maintenance messages

Diagnostics options via PROFINET/ OPC UA:

- Early detection of dynamic, continuous, or more frequently occurring overload conditions with the help of up-to-date values
- Status message for outputs (on, off, overload)
- Detection and logging of short-term power and phase failures for the analysis of network quality
- Advance warning of system overload and excessively high temperature
- Recording of the energy data (current, voltage) for each output for identifying potential energy savings

SITOP
in SIMATIC design

Technical data	SIMATIC S7-1200-Design	SIMATIC S7-300-Design			SIMATIC S7-1500-Design		SIMATIC ET200pro-Design
Output voltage/current, type	**24 V/2.5 A, PM1207**	**24 V/2 A, PS307**	**24 V/5 A, PS307**	**24 V/10 A, PS307**	**24 V/3 A, PM1507**	**24 V/8 A, PM1507**	**24 V/8 A, ET200pro PS**
Article No.	6EP1332-1SH71	6ES7307-1BA01-0AA0	6ES7307-1EA01-0AA0	6ES7307-1KA02-0AA0	6EP1332-4BA00	6EP1333-4BA00	6ES7 148-4PC00-0HA0
Rated input voltage	120/230 V AC automatic range selection	120/230 V AC automatic range selection	120/230 V AC automatic range selection	120/230 V AC automatic range selection	120/230 V AC automatic range selection	120/230 V AC automatic range selection	3 AC 380 – 480 V
– Range	AC 85...132 V/176...264 V	AC 85...132 V/170...264 V	AC 85...132 V/170...264 V	AC 85...132 V/170...264 V	AC 85...132 V/176...264 V	AC 85...132 V/176...264 V	340 ... 550 V 3 AC
Mains buffering	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	3 ms (at 400 V)
Rated line frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Rated input current	1.2/0.67 A	0.9/0.5 A	2.3/1.2 A	4.2/1.9 A	1.4 A/0.8 A	3.7 A/1.7 A	1 A
– Inrush current (25 °C)	< 13 A	< 22 A	< 20 A	< 55 A	< 23 A	< 67 A	< 40 A
– Recommended miniature circuit breaker	16 A charact. B, 10 A charact. C	3 A charact. C	6 A charact. C	10 A charact. C	from 6 A charact. C, from 10 A charact. B	from 10 A charact. C, from 16 A charact. B	3RV2021-4NA10
Rated output voltage	24 V DC	24 V DC	24 V DC	24 V DC	24 V DC	24 V DC	24 V DC
– Tolerance	± 3 %	± 3 %	± 3 %	± 3 %	± 3 %	± 3 %	– 5 %/+3 %
– Setting range	–	–	–	–	–	–	–
– On/off switch	No	Yes	Yes	Yes	Yes	Yes	No
Rated output current	2.5 A	2 A	5 A	10 A	3 A	8 A	8 A
– Overload behavior (Extra Power für 5 s/min)	–	–	–	–	4.5 A	12 A	–
Efficiency at rated values, approx.	83 %	84 %	87 %	90 %	87 %	90 %	88 %
Signaling contact "DC o. k."	No	No	No	No	No	No	Yes, and for overheating
Parallel switching	Yes	Yes	Yes	Yes	Yes	Yes	No
Electronic short-circuit protection	Yes, constant current char.	Yes, restart	Yes, restart	Yes, restart	Yes, restart	Yes, restart	Yes, restart
Radio interference suppression (EN 55022)	Class B	Class B	Class B	Class B	Class B	Class B	EN 61000-6-4 (Class A)
Supply harmonics limitation (EN 61000-3-2)	Not applicable	Not applicable	Yes	Yes	Not applicable	Yes	No
Degree of protection (EN 60529)	IP20	IP20	IP20	IP20	IP20	IP20	IP67, UL: encl. type 5 indoor
Ambient temperature	0...+60 °C	0...+60 °C	0...+60 °C	0...+60 °C	0...+60 °C	0...+60 °C	–25°C...+55°C
Installation	DIN rail or wall mounting	Can be mounted on S7 rail. Mounting adapter for DIN rail 35 x15 mm: 6EP1971-1BA00			on S7-1500 system carrier	on S7-1500 system carrier	Screw mounting, e.g., on SIMATIC ET 200pro system rail
Dimensions (WxHxD) in mm	70 x 100 x 75	40 x 125 x 120	60 x 125 x 120	80 x 125 x 120	50 x 147 x 135	75 x 147 x 135	310 x 135.5 w/o connector x 90
Weight approx.	0.3 kg	0.4 kg	0.6 kg	0.8 kg	0.45 kg	0.74 kg	2.8 kg
Certification	CE, cULus, CB, FM, ATEX, cCSAus Class I Div 2, GL, ABS, DNV	CE, cULus, ATEX, cULus Class I Div 2, GL, ABS, DNV			CE, cULus, CB, ATEX, IECEx, cULus Class I Div 2, FM, GL, ABS, BV		CE, ULus508

Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

SITOP
in special design, for special uses

Technical data	Wall/panel mounting						
Output voltage / curr., type	**12 V/3 A PSU100D**	**24 V/2.1 A PSU100D**	**24 V/3.1 A PSU100D**	**24 V/4.1 A PSU100D**	**12 V/8.3 A PSU100D**	**24 V/6.2 A PSU100D**	**24 V/12.5 A PSU100D**
Article No.	6EP1321–1LD00	6EP1331–1LD00	6EP1332–1LD00	6EP1332-1LD10	6EP1322-1LD00	6EP1333-1LD00	6EP1334-1LD00
Rated input voltage	100 – 240 V AC	100 – 240 V AC	100 – 240 V AC	100 – 240 V AC	100 – 240 V AC	100 – 240 V AC	100 – 240 V AC
– Range	85...264 V AC	85...264 V AC	85...264 V AC	85...264 V AC	85...264 V AC	85...264 V AC	85...264 V AC
Mains buffering	> 15 ms (at 115/230 V)	> 15 ms (at 115/230 V)	> 15 ms (at 115/230 V)	> 15 ms (at 115/230 V)	> 15 ms (at 115/230 V)	> 15 ms (at 115/230 V)	> 15 ms (at 115/230 V)
Rated line frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Rated input current	0.75 – 0.5 A	1.1 – 0.7 A	1.5 – 1.0 A	2.0 – 1.1 A	2.0 – 1.1 A	3.1 – 2.0 A	4.0 – 2.0 A
– Inrush current (25 °C)	< 60 A	< 60 A	< 60 A	< 75 A	< 75 A	< 75 A	< 60 A
– Recommended miniature circuit breaker	10 A characteristic C, 16 A characteristic B						
Rated output voltage	12 V DC	12 V DC	12 V DC	24 V DC	12 V DC	24 V DC	24 V DC
– Tolerance	+/- 2 %	+/- 2 %	+/- 2 %	+/- 2 %	+/- 2 %	+/- 2 %	+/- 2 %
– Setting range	11...14 V DC	22...28 V DC	22...28 V DC	22...28 V DC	11...14 V DC	22...28 V DC	22...28 V DC
Output current – rated value – Derating	3 A from +50 °C (2.5 %/K)	2.1 A from +50 °C (2.5 %/K)	3.1 A from +50 °C (2.5 %/K)	4.1 A from +50°C (2,5 %/ K)	8.3 A from +50°C (2,5 %/ K)	6.2 A from +50°C (2,5 %/ K)	12.5 A from +50°C (2,5 %/ K)
Efficiency at rated values, approx.	84 %	86 %	86 %	86 %	84 %	86 %	86 %
Signaling contact "DC o. k."	No	No	No	No	No	No	No
Parallel switching	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Electronic short-circuit protection	Yes, restart	Yes, restart	Yes, restart	Yes, restart	Yes, restart	Yes, restart	Yes, restart
Radio interference suppression (EN 55022)	Class B	Class B	Class B	Class B	Class B	Class B	Class B
Supply harmonics limitation (EN 61000-3-2)	Not applicable	Not applicable	Yes	Yes	Yes	No	Yes
Degree of protection (EN 60529)	IP20	IP20	IP20	IP20	IP20	IP20	IP20
Ambient temperature	–10 °C ...+70 °C	–10°C...+70°C	–10°C...+70°C	–10°C...+70°C	–10°C...+70°C	–10°C...+70°C	–10°C...+70°C
Installation	Wall mounting, variable installation position						
Dimensions (WxHxD) in mm	97 x 98 x 38	97 x 128 x 38	97 x 128 x 38	97 x 158 x 38	97 x 158 x 38	97 x 178 x 38	105 x 199 x 41
Weight approx.	0.37 kg	0.35 kg	0.37 kg	0.50 kg	0.57 kg	0.55 kg	0.81 kg
Certification	CE, cULu, cURus	CE, cULus, cURus	CE, cULus, cURus	CE, cULus, cURus	CE, cULus, cURus	CE, cULus, cURus	CE, cULus, cURus

Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

SITOP
in special design, for special uses

Technical data	DC/DC converter		two 15-V-outputs	flexible output 3 – 52 V	High degree of protection	
Output voltage / current, type	**24 V/20 A, PSU400M**	**12 V/2.5 A**	**2 x 15 V/3.5 A, SITOP dual**	**3...52 V/10 A, SITOP flexi**	**24 V/5 A, PSU100P**	**24 V/8 A, PSU100P[1)]**
Article No.	6EP1536-3AA00	6EP1621-2BA00	6EP1353-0AA00	6EP1353-2BA00	6EP1333-7CA00	6EP1334-7CA00
Rated input voltage	600 V DC	24 V DC	120 – 230 V AC	120/230 V AC	120/230 V AC (automatic range switching)	
– Range	300...900 V DC, start-up from approx. 340 V	18.5...30.2 V DC	93 ... 264 V AC	85...132 V/170...264 V AC	85... 132 V/170... 264 V AC	
Mains buffering	–	> 5 ms	> 10/40 ms (at 120/187 V)	> 10 ms (at 93/187 V)	> 40 ms (at $I_{Out\ rated}$)	> 40 ms (at $I_{Out\ rated}$)
Rated line frequency	–	–	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Rated input current	0.85 A	1.6 A	1.6/1.0 A	2.2/0.9 A	2.25 A/1.24 A	3.5 A/1.52 A
– Inrush current (25 °C)	< 8 A	< 20 A for 20 ms	< 30 A, < 3 ms	< 32 A	< 15 A	< 15 A
– Recommended miniature circuit breaker	–	10 A charact. B	10 A charact. C, 16 A charact. B	6 A charact. C	from 6 A charact. C/B	from 6 A charact. C/B
Rated output voltage	24 V DC	12 V DC	2 x 15 V DC	24 V DC	24 V DC	24 V DC
– Tolerance	± 3 %	± 3 %	± 3 %	± 1 %	± 3%	± 3%
– Setting range	24...28.8 V DC	12...14 V DC	14.5...17 V DC	3...52 V DC	–	–
Rated ouput current	20 A	2.5 A	2 x 3.5 A	2 – 10 A (max. 120 W)	5 A	8 A
– Overload behavior (Extra Power for 5 s/min)	30 A					
– Derating	from +60 °C (5.5 %/K), 300...400 V DC , 820...900 V DC		from +45 °C (2 %/K)	–		
Efficiency at rated values, approx.	95 %	83 %	80 %	84 % (at 24 V/5 A)	90 %	93 %
Status signaling			No	Yes, and current monitor signal 0 ... 2.5 V	LED green for “DC ok” and “Overload/ short circuit.” Signal contact for “DC ok”	
Parallel switching	Yes, output line switchable	Yes, 2 units	Yes	Yes	Yes, 2 units	Yes, 2 units
Electronic short-circuit protection	Yes, constant current or latching shutdown selectable	Yes, constant current	Yes, restart	Yes, constant current	Yes, restart	Yes, restart
Radio suppression level (EN 55022)	Class A (emission)	Class B	Class A	Class B	Class B	Class B
Line harmonics limitation (EN 61000-3-2)	No	Yes	No	Yes	Yes	Yes
Degree of protection (EN 60529)	IP20	IP20	IP20	IP20	IP67, UL: enclosure type 4 indoor	
Ambient temperature	–25...+70 ° C	0...+60 °C	0 ...+60 °C	0...+60 °C	–25...+60°C	–25...+60°C
Installation	DIN rail	DIN rail	DIN rail	DIN rail	Screw mounting	Screw mounting
Dimensions (WxHxD) in mm	90 x 125 x 125	32.5 x 125 x 125	75 x 125 x 125	75 x 125 x 125	120 x 181 (w/o connector) x 60.5	
Weight approx.	1.2 kg	0.32 kg	0.75 kg	0.9 kg	1.1 kg	1.3 kg
Certification	CE, cULus, CB, GL	CE, cULus	CE, cULus	CE, cULus	CE, cULus	CE, cULus

[1)] 3-phase version: see page 30: SIMATIC ET200pro PS

Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

flat design		narrow design	power supplies for charging batteries		
24 V/5 A, flat design	**24 V/10 A, flat design**	**24 V/5 A, PSU300E**	**12 V/20 A, PSU3800**	**24 V/17 A, PSU3800**	**24 V/30 A, PSU300B**
6EP1333-1AL12	6EP1334-1AL12	6EP1433-0AA00	6EP3424-8UB00-0AY0	6EP3436-8UB00-0AY0	6EP1437-3BA20
120/230 V AC	120/230 V AC	400 V 3 AC	400 – 500 V 3 AC	400 – 500 V 3 AC	400 – 500 V 3 AC
85...132/170...264 V AC	85...132/170...264 V AC	320...480 V 3 AC	320...575 V 3 AC	320...575 V 3 AC	320...575 V 3 AC
> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	> 50 ms (at 400 V)	> 15 ms (at 400 V)	> 15 ms (at 400 V)	> 20 ms (at 400 V)
50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
2.2/1.2 A	4/2.5 A	0.36 A	0.7 – 0.6 A	1.2 – 1.0 A	1.6 – 1.3 A
< 32 A	< 65 A	< 15 A	< 18 A	< 18 A	< 56 A
6 A charact. C	10 A charact. C	6 – 10 A charact. C	6 – 16 A charact. C 3-ph. coupled or 3RV2011-1DA10 or 3RV2711-1DD10		10 – 16 A charact. C 3-ph. coupled or 3RV2011-1DA10 or 3RV2711-1DD10
24 V DC	24 V DC	24 V DC	12 V DC	24 V DC	24 V DC
± 1 %	± 1 %	± 3%	± 3 %	± 3 %	± 3 %
22...29 V DC	22...29 V DC	24...29 V DC	12...14 V DC	24...28.8 V DC	24...28.8 V DC
5 A	10 A	5 A	20 A	17 A	30 A
–	–	–	–	from +60 °C (1.7%/K)	from +60 °C (1,7 %/K)
88 %	89 %	90 %	94 %	94 %	93 %
No	No	Yes	Yes	Yes	Yes
Yes	Yes	No	Yes	Yes	Yes
Yes, restart	Yes, restart	Yes, restart	Yes, constant current or latching shutdown selectable		
Class B	Class B	Class A	Class B	Class B	Class B
No	No	Yes	Yes	Yes	Yes
IP20	IP20	IP20	IP20	IP20	IP20
0...+60 °C	0...+60 °C	0...+60 °C	–25 °C...+70 °C	–25...+70 °C	–25 °C...+70 °C
DIN rail	DIN rail	DIN rail	DIN rail	DIN rail	DIN rail
160 x 130 x 60	160 x 130 x 60	42 x 125 x 125	70 x 125 x 125	70 x 125 x 125	150 x 125 x 150
0.6 kg	0.72 kg	0.6 kg	1.2 kg	1.2 kg	3.4 kg
CE, cULus	CE, cULus	CE, cULus	CE, cULus,ATEX (EX) II 3G Ex nA nC IIC T4; cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T4		CE, cULus

Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

SITOP expansion modules to increase system availability

Technical data	**Redundancy**		
SITOP	**SITOP PSE202U redundancy module**		
Article No.	6EP1964-2BA00	6EP1962-2BA00	6EP1961-3BA21
Rated input voltage – Range	24 V DC 19...29 V DC	24 V DC 19...29 V DC	24 V DC 24...28.8 V DC
Brief description of product/function	Module for redundancy mode. Floating relay contact and green LED for signaling "Infeed 1 and 2 o.k.", switching threshold adjustable between 20 to 25 V DC.		
	Decoupling of two 24-V power supplies up to 5 A or one 10 A power supply per redundancy module.	Decoupling and limitation of the output to Class 2 limit (100 V A) of two 24-V power supplies 5 to 40 A.	Decoupling of two 24-V power supplies 5 A to 20 A or one 40 A power supply per redundancy module.
Rated output current – Setting range	10 A (total output current)	3,5 A[1)]	40 A (total output current)
Efficiency at rated values, approx.	97 %	95 %	97 %
Parallel switching	No	No	No
Electronic short-circuit protection	No	No	No
Radio interference suppression (EN 55022)	Class B	Class B	Class B
Degree of protection (EN 60529)	IP20	IP20	IP20
Ambient temperature	–20...+70 °C	–20...+70 °C	0...+60 °C
Dimensions (WxHxD) in mm	30 x 80 x 100	30 x 80 x 100	70 x 125 x 125
Weight approx.	0.125 kg	0.125 kg	0.5 kg
Certification	CE, cULus	CE, cULus, NEC Class 2	CE, cULus, cCSAus Class I Div 2, ATEX, IECEx, GL, ABS

[1)] Max. 8 A summation current in fault case in accordance with NEC Class 2
Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

	new! Variant with NEC Class 2		new! Variant with NEC Class 2			
Technical data	**Monitoring**					**Mains buffering**
SITOP	**SITOP PSE200U selectivity module with common signaling contact**		**SITOP PSE200U selectivity module with single channel signaling**		**SITOP select diagnosis module**	**Buffer module[1] SITOP PSE201U**
Article No.	6EP1961-2BA11	6EP1961-2BA21	6EP1961-2BA31	6EP1961-2BA41	6EP1961-2BA00	6EP1961-3BA01
Article No. with NEC Class 2	6EP1961-2BA51		6EP1961-2BA61			
Rated input voltage – Range	24 V DC 22...30 V DC				24 V DC 22...30 V DC	24 V DC 24...28.8 V DC
Brief description of product/ function	Module for distributing the 24 V supply over up to four load circuits and their monitoring for overload; selective shutdown of faulty load circuits, rated current individually adjustable; universal use for all power supplies.					Buffer module for mains buffering; parallel connection at output of 24-V SITOP modular and SITOP smart power supplies; buffering time 200 ms at 40 A to 1.6 s at 5 A load current; multiplication possible through parallel connection; maximum buffering time 10 s.
	Individual load circuits can be switched on sequentially. Status indication via 3-color LED per channel; remote reset with 24 V signal and reset via pushbutton per channel; common signaling contact.		Individual load circuits can be switched on sequentially. Status indication via 3-color LED per channel; remote reset with 24 V signal and reset via pushbutton per channel; single channel signaling for channel-specific analysis via SIMATIC S7 or SIMOTION function block.		Individual load circuits can be switched on sequentially. Status indication via 2-color LED per channel; common reset via pushbutton, plug-in fuse per channel; status indication via 3-color LED per channel; common signaling contact.	
Rated output current	4 x 3 A	4 x 10 A	4 x 3 A	4 x 10 A	4 x 10 A	40 A
– Setting range	0.5...3 A	3...10 A	0.5...3 A	3...10 A	2...10 A	
Efficiency at rated values, approx.	97 %	99 %	97 %	99 %	97 %	Not applicable
Parallel switching	No				No	Yes
Electronic short-circuit protection	Yes				Yes	Yes
Radio interference suppression (EN 55022)	Class B				Class B	Class B
Degree of protection (EN 60529)	IP20				IP20	IP20
Ambient temperature	0...+60 °C				0...+60 °C	0...+60 °C
Dimensions (WxHxD) in mm	72 x 80 x 72				72 x 90 x 90	70 x 125 x 125
Weight approx.	0.2 kg				0.4 kg	1.2 kg
Certification	CE, UL, cURus, CB, cCSAus Class I Div 2, ATEX, IECEx, GL[2], ABS[2], 6EP1961-2BA51/6EP1961-2BA61: NEC Class 2				CE, cULus, UR, cCSAus Class I Div 2, ATEX	CE, UL, CSA, ATEX, IECEx UL Class I Div 2, GL, ABS

[1] Can only be combined with SITOP modular power supply (except PSU8600) and SITOP smart 24 V DC (except 6EP1 336-2BA10)
[2] 6EP1961-2BA51 and 6EP1961-2BA61: GL and ABS in preparation
Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

Uninterruptible power supplies –
SITOP UPS500 maintenance-free DC UPS with capacitor technology

Technical data	**Maintenance-free DC UPS**				
SITOP	**UPS500S – basic unit 15 A**		**UPS501S – expansion module**	**UPS500P – basic unit 7 A, degree of protection IP65**	
Energy	2.5 kWs	5 kWs	5 kWs	5 kWs	10 kWs
Article No.	6EP1933-2EC41	6EP1933-2EC51	6EP1935-5PG01	6EP1933-2NC01[1)]	6EP1933-2NC11[1)]
Input voltage	24 V DC, 22...29 V, infeed from SITOP 24 V		Infeed from basic unit	24 V DC, 22.5...29 V, infeed from SITOP 24 V	
Rated input current	15.2 A + approx. 2.3 A in charging mode		Description: expansion module for extending the buffering time, up to 3 units can be switched in parallel with one UPS500S basic unit	7 A + approx. 2 A in charging mode	
Rated output voltage	In buffer and normal mode 24 V DC +/–3 %			In buffer mode and normal mode 24 V DC +/–3 %	
Rated output current	15 A, charging current 1 A (factory setting) or 2 A selectable			7 A, charging current 2 A	
Efficiency at rated values, approx.	97.5 %			96.5 %	
Overload and short-circuit protection	Electronic, automatic restart			Electronic, automatic restart	
Parallel switching	No		Yes, up to 3 units	No	No
Radio interference suppression (EN 55022)	Class B	Class B	Class B	Class B	Class B
Degree of protection (EN 60529)	IP20	IP20	IP20	IP65	IP65
Ambient temperature	0...+60 °C	0...+60 °C	0...+60 °C	0...+55 °C	0...+55 °C
Installation	DIN rail	DIN rail	DIN rail	Screw mounting in all mounting positions	
Dimensions (WxHxD) in mm	120 x 125 x 125	120 x 125 x 125	70 x 125 x 125	400 (without connector) x 80 x 80	470 (without connector) x 80 x 80
Weight approx.	1.0 kg	1.0 kg	0.7 kg	1.9 kg	2.2 kg
Certification	CE, cULus, ATEX, cCSAus Class I Div 2, GL, ABS, CB			CE	CE

1) Connector set with input and output connector as well as finished USB cable in 2 m length: Article No. 6EP1975-2ES00

Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

Buffering times and charging times
SITOP UPS500

	SITOP UPS500S/501S configurations								UPS500P	
Basic unit	2.5 kWs	5 kWs	2.5 kWs	5 kWs	2.5 kWs	5 kWs	2.5 kWs	5 kWs	5 kWs	10 kWs
Expansion modules	–	–	1 x 5 kWs	1 x 5 kWs	2 x 5 kWs	2 x 5 kWs	3 x 5 kWs	3 x 5 kWs	–	–
Total energy	2.5 kWs	5 kWs	7.5 kWs	10 kWs	12.5 kWs	15 kWs	17.5 kWs	20 kWs	5 kWs	10 kWs
Buffering times										
Load current										
0.5 A	134 sec	236 sec	390 sec	478 sec	632 sec	748 sec	851 sec	1007 sec	284 sec	647 sec
0.8 A	90 sec	167 sec	266 sec	346 sec	440 sec	527 sec	580 sec	706 sec	190 sec	435 sec
1 A	75 sec	138 sec	219 sec	296 sec	365 sec	414 sec	490 sec	572 sec	153 sec	351 sec
2 A	38 sec	76 sec	122 sec	156 sec	203 sec	230 sec	265 sec	306 sec	80 sec	152 sec
3 A	26 sec	52 sec	82 sec	106 sec	136 sec	159 sec	186 sec	213 sec	53 sec	108 sec
4 A	19 sec	39 sec	61 sec	81 sec	101 sec	120 sec	139 sec	160 sec	40 sec	84 sec
5 A	15 sec	31 sec	49 sec	65 sec	81 sec	95 sec	111 sec	130 sec	30 sec	68 sec
6 A	12 sec	26 sec	40 sec	55 sec	67 sec	80 sec	94 sec	106 sec	25 sec	57 sec
7 A	10 sec	21 sec	34 sec	47 sec	58 sec	69 sec	81 sec	82 sec	21 sec	49 sec
8 A	8 sec	18 sec	29 sec	40 sec	50 sec	59 sec	69 sec	79 sec	–	–
10 A	6 sec	15 sec	23 sec	32 sec	39 sec	47 sec	54 sec	62 sec	–	–
12 A	4 sec	12 sec	19 sec	26 sec	32 sec	38 sec	44 sec	52 sec	–	–
15 A	3 sec	9 sec	14 sec	20 sec	25 sec	30 sec	35 sec	40 sec	–	–
Charging times										
Charging current										
2 A	54 sec	120 sec	158 sec	223 sec	263 sec	318 sec	355 sec	417 sec	130 sec	360 sec
1 A	110 sec	205 sec	311 sec	425 sec	503 sec	625 sec	695 sec	816 sec	–	–

Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

Uninterruptible power supplies
SITOP DC UPS with battery modules for bridging longer power failures

Technical data	**SITOP DC UPS for longer power failures**				
SITOP	**UPS1600**	**UPS1600**	**UPS1600**	**Battery module UPS1100**	**Battery module UPS1100**
Energy storage				**Lead batteries**	**Lead batteries**
Output voltage/current or charge	**24 V/10 A**	**24 V/20 A**	**24 V/40 A**	**24 V/1.2 Ah**	**24 V/3.2 Ah**
				for UPS1600 10 A	for UPS1600 10 A and 20 A
Article No.	6EP4134-3AB00-0AY0	6EP4136-3AB00-0AY0	6EP4137-3AB00-0AY0	6EP4131-0GB00-0AY0	6EP4133-0GB00-0AY0
– with USB interface	6EP4134-3AB00-1AY0	6EP4136-3AB00-1AY0	6EP4137-3AB00-1AY0		
– with Ethernet/PROFINET interface	6EP4134-3AB00-2AY0	6EP4136-3AB00-2AY0	6EP4137-3AB00-2AY0		
Input voltage	24 V DC, 22…29 V, infeed from 24 V SITOP power supply			Recommended end of charge voltage (set automatically by SITOP UPS1600)	
Rated input current	approx. 14 A for max. charging current (3 A)	approx. 25 A at max. charging (4 A)	approx. 46 A at max. charging (5 A)	Charging current max. 0,3 A	Charging current max. 0,9 A
Rated output voltage	24 V DC (upstream SITOP device or battery), charging voltage: 27.0 V			24 V DC, 22…27.0 V DC (no-load operation)	
Rated output current	10 A, Charging current max. 3 A	20 A, Charging current max. 4 A	40 A, Charging current max. 5 A	10 A	20 A
– Overload behavior (power boost for 30 ms)	30 A	60 A	120 A		
– Overload behavior (extra power for 5 s/min)	15 A	30 A	60 A		
Efficiency at rated values, approx.	> 97.7 %	> 98.2 %	> 98.8 %	Not applicable	Not applicable
Overload and shortcircuit protection	Yes, restart in normal mode			Installed battery fuse: 15 A/32 V	Installed battery fuse: 25 A/32 A
Parallel switching	No	No	No	Yes, up to 6 units	Yes, up to 6 units
Radio interference suppression	Class B (EN 55022)	Class B (EN 55022)	Class B (EN 55022)	–	–
Degree of protection (EN 60529)	IP20	IP20	IP20	IP20	IP20
Ambient temperature (Derating from +60 °C)	–25…+70 °C	–25…+70 °C	–25…+70 °C	–15…+50 °C	–15…+50 °C
Installation	DIN rail	DIN rail	DIN rail	DIN rail or wall mounting	
Dimensions (WxHxD) in mm	50 x 125 x 125	50 x 125 x 125	70 x 125 x 150	89 x 130 x 107	190 x 169 x 79
Weight approx.	0.38 kg/ 0.4 kg/0.44 kg	0.39 kg/0.41 kg/0.45 kg	0.65 kg/0.65 kg/0.7 kg	1.9 kg	3.8 kg
Certification	CE, cULus, CB, ATEX, IECEx, cCSAus Class I Div 2, GL, ABS		CE, cULus, CB, ATEX, IECEx, cCSAus Class I Div 2, GL, ABS	CE, cURus, CB, ATEX, IECEx, cCSAus Class I Div 2, GL, ABS	CE, cURus, CB, ATEX, IECEx, cCSAus Class I Div 2, GL, ABS

Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

Battery module selection table and buffering times

SITOP DC UPS, for longer power failures			
1100 UPS battery module	**Battery module UPS1100**	**UPS1100 battery module with extended temperature range**	**UPS1100 battery module, lithium technology**
Lead batteries	**Lead batteries**	**Pure-lead batteries**	**LiFePo4 batteries**
24 V/7 Ah	**24 V/12Ah**	**24 V/2.5Ah**	**24 V/ 5 Ah**
for UPS1600 10 A, 20 A and 40 A	for UPS1600 10 A, 20 A and 40 A	for UPS1600 10 A and 20 A	for UPS1600 10 A and 20 A
6EP4134-0GB00-0AY0	6EP4135-0GB00-0AY0	6EP4132-0GB00-0AY0	6EP4133-0JB00-0AY0 [1]
Recommended end of charge voltage: set automatically by SITOP UPS1600			
Charging current max. 2.1 A	Charging current max. 3.6 A	Charging current max. 0.7 A	Charging current max. 2.1 A
24 V DC, 22...27,0 V DC (no-load operation)			DC 24 V, DC 22...28,8 V (no load operation)
40 A	40 A	20 A	20 A
Not applicable	Not applicable	Not applicable	Not applicable
Installed battery fuse: 2 x 25 A/32 A	Installed battery fuse: 2 x 25 A/32 V	Installed battery fuse: 25 A/32 V	Installed battery fuse: 25 A/32 V
Yes, up to 6 units	Yes, up to 6 units	Yes, up to 6 units	Yes, up to 6 units
–	–	–	–
IP20	IP20	IP20	IP20
–15...+50 °C	–15...+50 °C	–40...+60 °C	–20...+50 °C
Wall mounting	Wall mounting	DIN rail or wall mounting	DIN rail or wall mounting
186 x 186 x 110	253 x 186 x 110	265 x 115 x 76	189 x 186 x 113
6.1 kg	9.3 kg	3.7 kg	3.4 kg
CE, cURus, CB, ATEX, IECEx, cCSAus Class I Div 2, GL, ABS	CE, cURus, CB, ATEX, IECEx, cCSAus Class I Div 2, GL, ABS	CE, cURus, CB, ATEX, IECEx, cCSAus Class I Div 2, GL, ABS	CE, cURus, CB, GL, ABS

UPS1100 battery module	**1.2 Ah**	**3.2 Ah**	**7 Ah**	**12 Ah**	**2.5 Ah**	**5 Ah**
Load current	**Buffering times [1]**					
1 A	27 min	2 h	5 h	8 h 30 min	1 h 30 min	4 h
2 A	14 min	1 h	2 h 40 min	4 h 30 min	50 min	2 h 10 min
3 A	10 min	45 min	1 h 50 min	3 h 10 min	36 min	1 h 30 min
4 A	7 min 50 s	34 min	1 h 20 min	2 h 30 min	26 min	1 h 10 min
6 A	4 min 40 s	21 min	48 min	1 h 30 min	15 min	48 min
8 A	3 min	15 min	34 min	1 h	11 min	37 min
10 A	1 min 30 s	9 min 30 s	21 min	42 min	6 min 40 s	26 min
12 A	–	8 min 10 s	19 min	37 min	5 min 40 s	23 min
14 A	–	6 min 50 s	16 min	32 min	4 min 40 s	21 min
16 A	–	5 min 30 s	13 min	27 min	3 min 40 s	18 min
20 A	–	2 min 50 s	7 min 50 s	17 min	1 min 40 s	13 min
30 A	–	–	3 min 50 s	10 min	–	–
40 A	–	–	1 min 40 s	5 min 30 s	–	–
Ambient temperature	**Approximate service life (drop to 50% of the original capacity), depending on the battery temperature**					
+20 °C	4 years	4 years	4 years	4 years	10 years	15 years
+30 °C	2 years	2 years	2 years	2 years	7 years	10 years
+40 °C	1 year	1 year	1 year	1 year	3 years	9 years
+50 °C	0.5 years	0.5 years	0.5 years	0.5 years	1.5 years	2 years
+60 °C					1 year	

[1] Buffer time determination was based on the discharging time of new and completely charged battery modules with a minimum battery temperature of +25 °C until DC UPS (19 Volt) turns off.
The SITOP Selection Tool can be used to determine buffer times for additional values: siemens.com/sitop-selection-tool.

Find out more:

siemens.com/sitop

Additional information on SITOP:

- SITOP Selection Tool: siemens.com/sitop-selection-tool
- Operating instuctions as download: siemens.com/sitop/manuals
- Request CAx data via the CAx download manager: siemens.com/cax

More about SITOP on YouTube

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You may also register for a product-specific newsletter at this address.

To ensure the secure operation of a plant or machine it is also necessary to take suitable preventive action (e.g. cell protection concept) and to integrate the automation and drive components into a state-of-the-art holistic industrial security concept for the entire plant or machine. Any third-party products that may be in use must also be taken into account. Please find further information at: www.siemens.com/industrialsecurity