SIEMENS

Top integration. Top efficiency. Top reliability. SITOP

SITOP Power Supply

siemens.com/sitop


SITOP PSU100C
SIEMENS
DC 24V/0.6A
24V O.K.
DC 24V/0.6A
6EP1331-5BA00
YSUA1
AC 100-230V
L1 N PE

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.

Seamlessly integrating the power supply

SITOP is setting new standards when it comes to integration: Power supplies that can be fully integrated into Totally Integrated Automation (TIA) and the TIA portal save time and money, are simple, and provide failure safety during engineering. For the first time, SITOP allows you to do this with the PSU8600 power supply system and the UPS1600 uninterruptible power supply. To improve productivity, all automation products also need to be capable of easy integration in all processes, from product selection and purchase to design and configuration. SITOP supports operators here with an intuitive selection tool for the fast selection of both the power supply and a DC UPS. In addition, it provides you with all mechanical and electrical design data and product documentation.

Optimizing energy efficiency

Rising energy prices have a direct impact on a company's competitiveness. This makes it all the more important to consistently improve energy efficiency, even for small loads – for example in the control cabinet. The power supply unit is, in this case, the central power source of the DC loads, and is where the high efficiency of regulated SITOP power supply units can offer a significant saving potential.

Boosting reliability

SITOP stands for a high-quality direct-current supply. The power supply units themselves provide reliable protection against many types of network faults that can occur even in the most modern power grids. But there are also external conditions that require additional protective measures, such as fluctuating grid quality to which plant manufacturers operating in global export markets must be able to respond. SITOP protects against faults on the supply network and the DC side with special add-on modules, thereby ensuring the necessary supply reliability.

SITOP – at the top in every respect

Since Siemens presented the first regulated power supplies at the price of unregulated in 1993, SITOP has become the world's best-selling industrial power supply solution. Our portfolio is the result of more than 20 years of continuous research, requirement analysis, and ongoing development. Today SITOP is the leading power supply across all industrial sectors, with a comprehensive range of expansion components for applications of every kind. As an element of the Siemens environmental portfolio, SITOP plays an important role in increasing sustainability in industry.

SITOP –

Reference in three dimensions

SITOP means top reliability

You think about the best possible power supply at the time you purchase it – and then you should 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, outstanding load characteristics, and all relevant certifications, the SITOP concept safeguards the availability of your plant. A host of expansion components compensate individual disturbance factors like system and voltage fluctuations, and enable operation even in regions with a varying quality of supply. That's applies to short power failures lasting a few seconds, longer power failures (blackouts) lasting up to several hours, as well as short voltage dips (brownouts). A fault-specific overload in the output circuits is selectively disconnected so that the supply to the other loads is maintained.

As a machine and plant manufacturer, you provide your customers with the basis for extremely reliable production when you use SITOP. As a plant operator, you are completely protected against production outages and avoid high follow-up costs as a result. 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, we make it easier for you to select the product you need. The product documentation available from the CAx online configurator, together with the electrical and mechanical design data, supports your planning process and helps keep costs calculable.

SITOP means top integration

Integration is productivity. That's why all SITOP power supplies have always been optimally matched to automation systems such as SIMATIC, SINUMERIK, and SIMOTION – and all SIMATIC power supplies are integrated in the TIA portal. The uninterruptible power supplies have been designed for simple integration into the PC-based automation system SIMATIC IPC. Status messages can be easily evaluated by the SIMATIC IPC and, in the case of a power failure, the PC with its applications is safely shut down.

And SITOP drives system integration further forward: the SITOP UPS1600 24 V DC uninterruptible power supply and the SITOP PSU8600 power supply system are fully integrated into TIA. This makes engineering in the TIA portal convenient and provides S7 function blocks for integration into user programs and WinCC faceplates for simple visualization of operating and diagnostic information. This makes SITOP a fully-fledged part of your automation solution.

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.

Overview of SITOP product lines

SITOP compact

The slim power supply for control boxes

LOGO!Power

The flat power supply for distribution boards

SITOP lite

The cost-effective basic power supply

SITOP smart

The powerful standard power supply

SITOP compact

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.

LOGO!Power

The miniature power supply units in the LOGO!Power series can be deployed in a large number of applications in the lower power range. Their extreme flexibility is made possible by the units' diverse output voltages, wide input voltage range with optional DC operation, and flat, stepped profile for installation in distribution boards.

SITOP lite

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.

SITOP smart

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.

		SITOP compact		LOGO!Power				SITOP lite	SITOP smart		SITOP modular	
Output	Rated voltages (V DC)	12	24	5	12	15	24	24	12	24	24	48
	Rated currents (A)	2/6.5	0.6/1.3/2.5/4	3/6.3	1.9/4.5	1.9/4	1.3/2.5/4	2.5/5/10	7/14	2.5/5/10/20/40	5/10/20/40	10/20
Input	1-phase		•			•		•	•	•	•	
	DC input		•			•					•	
	3-phase									•	•	
General	Overload characteristics					+				+	++	
	Energy efficiency		++			+		+		+	++	
	Switchable parallel		+			+		+		+	++	
	Signaling contact "Output voltage OK"									•	•	
	Ambient temperature range		++			++		•		+	++	
Safety	Explosion protection: ATEX or FM		•			•				•		
	Approved for shipbuilding: GL or ABS					•				•	•	
Expandable	- Selectivity/diagnostic model		•				•	•		•	•	
	- Selectivity/diagnostic model		•				•	•		•	•	
	- Buffer module									•	•	
	- DC UPS		•				•	•		•	•	

Selection matrix of SITOP product lines for mounting on top hat rails

SITOP modular

The technology power supply for demanding solutions

SIMATIC Design

The optimal supply for SIMATIC S7 and more

Special designs

Equipped for special functions and conditions

SITOP modular

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.

SITOP power supplies in SIMATIC design

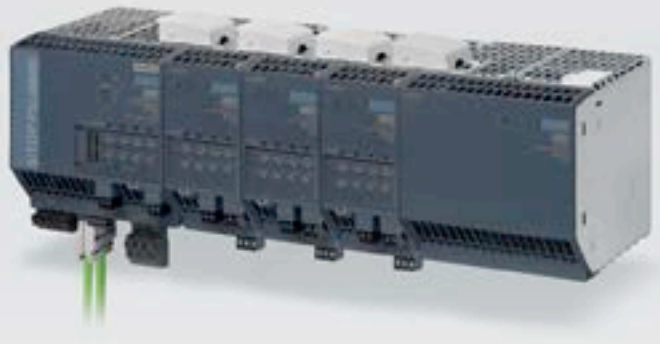
The design and functionality of the original SIMATIC power supplies merge into the SPS network. Together with the SIMATIC systems S7-300, S7-1200, S7-1500, and the distributed I/O modules ET 200pro, ET 200M, and ET 200MP they also supply other loads reliably with 24 V.

SITOP special design for special functions

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.

Complex systems place highest demands on their components in terms of efficiency, flexibility and reliability. The new power supply system from SITOP meets all of these – thanks, for example, to its high performance, comprehensive diagnostic information, complete integration into TIA, modular expansion capability and optimized support for power management.

SITOP PSU8600 – the modular power supply system with complete TIA integration



Top integration – with complete system integration into TIA

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 preassembled function modules for SIMATIC S7 user programs. Free SIMATIC Panel or WinCC faceplates are available for operating and monitoring purposes.

Meanwhile, the SINEMA Server network management software makes it easy to monitor device status and the network connection. The integrated web server also allows power supply monitoring or diagnosis to be performed remotely.

Support is also provided for integration into energy management systems via PROFINET or selectively switching off outputs using PROFIenergy, which saves power during break times and keeps operating costs down.

Top reliability – thanks to selectivity and monitoring

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.

The modular system toolbox

Base unit

Power supply 24 V/40 A, 4 selectively monitored outputs

Expansion modules

Expansion by up to 12 selectively monitored outputs

Buffer modules

Bridging brief power failures up to 600 ms at 40 A

Did you know that … the comprehensive diagnostic abilities of the SITOP PSU8600 provide support for preventive maintenance and increase system availability?

Because the voltage and current for each output can be continuously recorded and transmitted via PROFINET, dynamic, continuous or more frequent overload situations can be identified and plant downtimes prevented at an early stage.

System-specific buffer modules turn to benefit during brief voltage dips at the grid end (brownouts) – offering ideal protection specifically for sensitive production areas. The time of a power failure is recorded, which can subsequently serve as an indicator for the quality of the grid feed-in.

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 the compact base unit with an efficiency rating of 94% has four selectively monitored outputs, saving both space and wiring effort.

Individual parameterization of the outputs allows other voltages to be made available, which makes a separate power supply unit superfluous.

Expansions from the modular system toolbox – to monitor additional outputs or to buffer brief power failures – are available to meet highest requirements. And the innovative System Clip Link connection system means no additional wiring is required.

Current and voltage for all outputs are recorded during operation, and outputs can be selectively switched off via PROFIenergy. This supports higher-level power management – and in the process ensures even greater efficiency.

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.

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

Add-on modules

For increasing system availability to all-round protection

Safeguarding against failure through redundancy

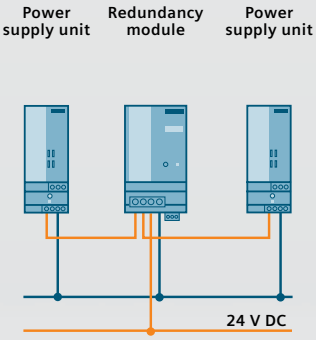
Two power supply units can be connected via the SITOP redundancy module for additional failure safety. If one unit fails, the other automatically takes over the power supply function. In this way the power supply is safeguarded in unstable conditions.

Selective disconnection of faulty 24-V feeders

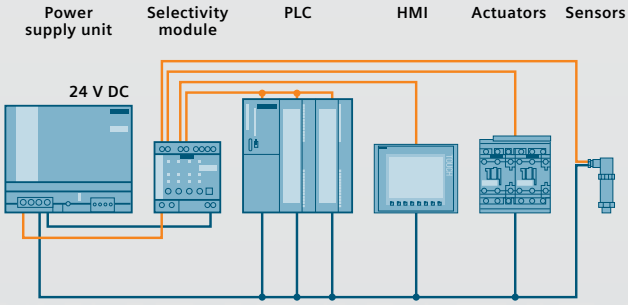
The selectivity module SITOP PSE200U is specially tailored to the characteristics of switched-mode power supplies. The electronics permit brief current peaks and switch longer overloads off-circuit, even on long thin cables and with earth leakages in which the current is limited by high resistance.

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 fault is output via a common signaling contact and indicated by an LED on the relevant load circuit. The option with single-channel signaling also allows remote channel-specific fault location.

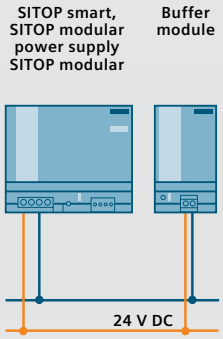
Configuration with redundancy module



Configuration with selectivity module



Configuration with buffer module



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

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 to sensitive production areas. 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 and reliably preserves interruption-free operation.

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

Power outages can bring a plant to a standstill, with high costs in terms of both time and money. The SITOP DC UPS provides perfect protection against unexpected downtimes and so guarantees uninterrupted plant operation. An in-house software solution supports ongoing processing of status messages, safe shutdowns, and correct restarting of your system.

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

DC UPS, uninterruptible DC power supply

Reliable 24-V supply – even when the power fails

SITOP DC UPS with capacitors

These highly-capacitive double-layer capacitors store sufficient energy to shut down PC-based systems safely.

Totally maintenance-free

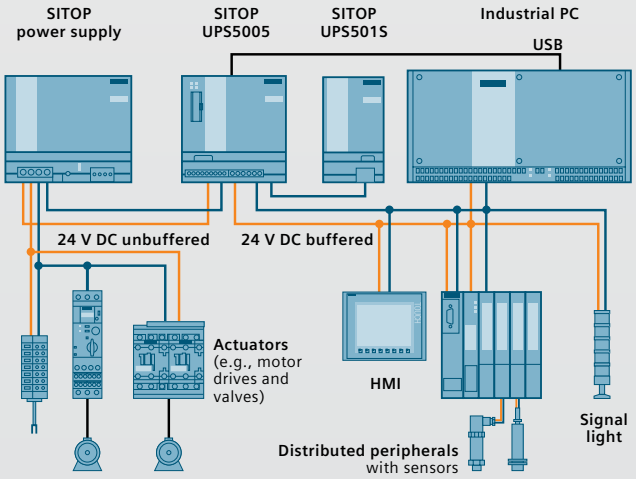
The capacitors have an extremely long life even at high ambient temperatures. No maintenance or replacement of the energy buffer is required, which means that the DC UPS pays for itself within a short time. And because the capacitors do not emit any gas, no ventilation of the control cabinet is required. 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 degree of protection and can be used on a distributed basis, for example, supplied by power supply unit SITOP PSU100P.

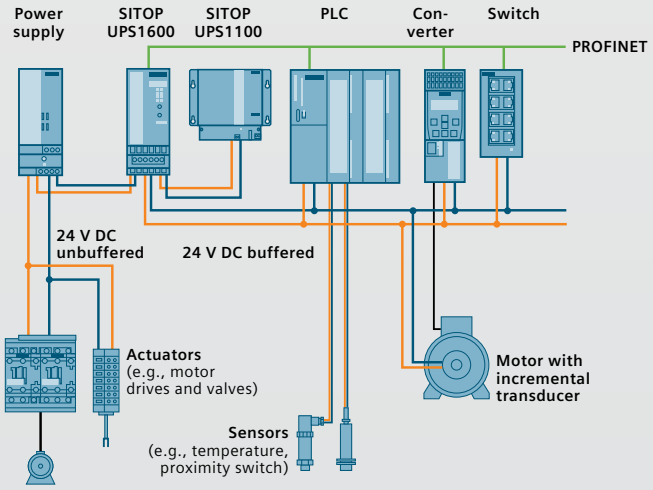
- Variant expandable up to 20 kW for longer buffering times
- IP65 version for environments with high levels of contamination and humidity
- Capacitors eliminate replacement of batteries
- Long life even at high temperatures
- No ventilation of the installation site required
- Communication via contacts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

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

Did you know that … you can configure, parameterize, and diagnose the SITOP UPS1600 uninterruptible power supply via the TIA portal easily, quickly, and reliably?

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

The sophisticated battery management ensures optimal charging of the batteries. The charging process is temperature-controlled thanks to the innovative SITOP UPS1600, which also increases the service life of the UPS1100 battery module. The active battery test function even checks the age of the battery. This means that precautionary replacement of the battery isn't necessary – a substantial cost saving for your plant.

- Monitoring of operational readiness, battery feeder and charging status
- Extended life of loads and batteries due to battery management
- Uninterrupted transition from readiness to buffering mode

Extremely communicative

All relevant messages are output via floating contacts, or optionally via a serial interface or USB port. With the SITOP UPS1600, open communication via Ethernet enables configuration and diagnosis via the SITOP UPS Manager PC-based software or remote monitoring with an integrated Web server. The UPS1600 can even be fully integrated into TIA via PROFINET.

- SITOP UPS1600 DC UPS modules (24 V and up to 40 A) and UPS1100 battery modules up to 12 Ah with maintenance-free rechargeable lead batteries
- Communication via contacts, USB, or two Ethernet/PROFINET ports

The suitable DC UPS with capacitor or battery technology can be selected using parameters such as buffering time and load current.

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

CAD and CAE data in the image database for simple configuration

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

Or you can simply install SITOP.

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.

Efficiency starts with selection

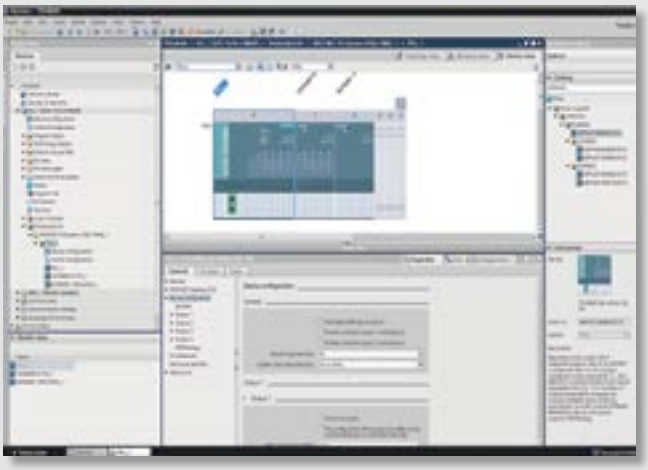
The SITOP Selection Tool navigates you to the optimum power supply for your requirements with a few mouse clicks. Simply enter the relevant parameters and select your solution. The table that compares a variety of devices offers additional oversight. Once you've opted for a solution, you can export the resulting product list into an Excel or PDF file, or move it directly to the Industry Mall shopping cart and order there.

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.

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.



Did you know that … you can also integrate the SITOP UPS1600 DC UPS in PC-based automation systems via USB or industrial Ethernet/PROFINET with the SITOP UPS Manager?

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

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

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Page 6
Page 7
Page 9
Page 10/1-phase
Page 11/3-phase
Pages 12 – 15
Page 8

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SIMATIC Design
The optimal supply for SIMATIC S7 and more

Three good reasons for a SITOP power supply

A reliable power supply is the basis for all production and for all plants, so it's only logical that you would be extra careful when selecting the best fitting power supply. Three factors of special importance: reliability, efficiency, and integration.

SITOP – Top in reliability

SITOP stands for a high-quality DC power supply. The power supply units even protect against faults such as mains fluctuations. But there are also external conditions that require specific measures. That's why expansion components that work perfectly together also protect against mains problems and problems on the DC side, thus improving the reliability of the entire plant.

Pages 16 – 19

Pages 20 – 23

Pages 24 –29

Special design

Equipped for special functions and conditions

Expansion modules

Expansion modules for boosting system availability

DC UPS, uninterruptible DC power supply

Reliable 24 volt – even during power failures

SITOP – Top in efficiency

With energy costs rising, efficiency is an increasingly important competitive argument. And that's where SITOP power supplies make a valuable contribution. Power loss is low over the entire load range, including in no-load operation. Because a power supply is rarely operated at full load, this provides excellent opportunities for savings. As a PROFIenergy device, the PSU8600 even saves additional energy by selectively switching off outputs during idle times.

SITOP – Top in integration

The more fully a power supply is integrated into its environment, the higher its productivity. That's why SITOP is optimally matched to automation systems such as SIMATIC, SINUMERIK, and SIMOTION. In addition, the power supply system PSU8600 and the uninterruptible power supply UPS1600 are completely integrated into TIA. This makes engineering in the TIA Portal convenient and provides S7 function modules for integration into STEP 7 user programs and preassembled WinCC faceplates for operation and monitoring.

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						
	1.3 A	6EP1331-5BA10	6EP1331-1SH03					
	2 A						6ES7307-1BA01-0AA0	6EP1331-1LD00
	2.5 A	6EP1332-5BA00	6EP1332-1SH43	6EP1332-1LB00	6EP1332-2BA20		6EP1332-1SH71	6EP1232-1AA00
	3 A						6EP1332-4BA00	6EP1332-1LD00
	3.5 A						6EP1332-1SH31	
	3.7 A							6EP1332-2BA00
	4 A	6EP1332-5BA10	6EP1332-1SH52					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				6EP1336-2BA10	6EP1336-3BA10		
	40 A					6EP1337-3BA00		
3-phase 400 – 500 V AC	5 A					6EP1333-3BA10 [1]		6EP1433-1AL12
	8 A						6ES7148-4PC00-0HA0	6ES7 148-4PC00-0HA0
	10 A				6EP1434-2BA10	6EP1334-3BA10 [1]		
	17A							6EP1436-3BA20
	20 A				6EP1436-2BA10	6EP3436-8SB00-0AY0		
	30 A							6EP1437-3BA20
	40 A				6EP1437-2BA20	6EP1437-3BA10		
						6EP3437-8MB00-2CY0		

[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 current	SITOP compact	LOGO!Power	SITOP smart	SITOP modular	SIMATIC Design	"Special design special use"
Output voltage 24 V DC							
24 – 110 V DC	2 A					6ES7305-1BA80-0AA0	
110 – 300 V DC	0.6 A	6EP1331-5BA00					
	1.3 A	6EP1331-5BA10	6EP1331-1SH03				
	2.5 A	6EP1332-5BA00	6EP1332-1SH43				
	4 A	6EP1332-5BA10	6EP1332-1SH52				
110 – 300 V DC	20 A				6EP1336-3BA10		
600 V DC	20 A						6EP1536-3AA00

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		6EP1311-1SH03			
	5 V/6.3 A		6EP1311-1SH13			
	12 V/1.9 A		6EP1321-1SH03			
	12 V/2.0 A	6EP1321-5BA00				
	12 V/3.0 A					6EP1321-1LD00
	12 V/4.5 A		6EP1322-1SH03			
	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		6EP1351-1SH03			
	15 V/4 A		6EP1352-1SH03			
	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					6EP1424-3BA00
3-phase 400 – 500 V AC	48 V/10 A				6EP1456-3BA00	
	48 V/20 A				6EP1457-3BA00	

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**
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 – 0.67 A 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 voltag – Tolerance – Setting range	24 V DC ± 3 % –	24 V DC ± 3 % 22.2...26.4 V DC	12 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 %/K)
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
Parallel switching	No	Yes [2]	Yes [2]	Yes [2]	Yes [2]	No	Yes [2]
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	0.17 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, ATEX, cCSAus Class I Div 2, GL, ABS	CE, cULus, cCSAus, CB, ATEX, cCSAus Class I Div 2, GL, ABS	CE, cULus, cCSAus, CB, ATEX, cCSAus Class I Div 2, GL, ABS	CE, cULus, cCSAus, CB, 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 [2] The maximum starting current is limited to the rated output current of one power supply
Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

LOGO!Power
Flat power supply for distribution boards

	New! In LOGO! 8 design								
									
Technical data	**54 mm design**				**72 mm design**				**90 mm design**
Output voltage / current	**5 V/3 A**	**12 V/1.9 A**	**15 V/1.9 A**	**24 V/1.3 A**	**5 V/6.3 A**	**12 V/4.5 A**	**15 V/4 A**	**24 V/2.5 A**	**24 V/4 A**
Article No.	6EP1311-1SH03	6EP1321-1SH03	6EP1351-1SH03	6EP1331-1SH03	6EP1311-1SH13	6EP1322-1SH03	6EP1352-1SH03	6EP1332-1SH43	6EP1332-1SH52
Rated input voltage – Range	100 – 240 V AC 85...264 V AC/ 110...300 V DC				100 – 240 V A 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)	0.36 – 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	0.71 – 0.37 A < 50 A	1.13 – 0.61 A < 55 A	1.24 – 0.68 A < 55 A	1.22 – 0.66 A < 46 A	1.95 – 0.97 A < 30 A
– Recommended miniature circuit breaker	10 A characteristic C resp. 16 A characteristic B				10 A characteristic C resp. 16 A characteristic B				10 A char. C resp. 16 A char. B
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	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
Output current – rated value – Derating	3.0 A from +55 °C (2 %/K)	1.9 from +55 °C (2 %/K	1.9 A from +55 °C (2 %/K)	1.3 A from +55 °C (2 %/K)	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.	77 %	80 %	80 %	85 %	83 %	85 %	85 %	88 %	89 %
No-load loss	< 1.5 W	< 1.8 W	< 2 W	< 2 W	< 1.5 W	< 1.9 W	< 2.3 W	< 1.8 W	< 2 W
Signaling contact "DC o. k."	No	No	No	No	No	No	No	No	No
Parallel switching	Yes				Yes				Yes
Electronic short-circuit protection	Yes, constant current				Yes, constant current				Yes, constant current
Radio interference suppression (EN 55022)	Class B				Class B				Class B
Supply harmonics limitation (EN 61000-3-2)	Not applicable				Not applicable				Yes
Degree of protection (EN 60529)	IP20				IP20				IP20
Ambient temperature	–20... +70 °C				–20... +70 °C				–20... +70 °C
Dimensions (WxHxD) in mm	54 x 90 x 55				72 x 90 x 55				90 x 90 x 55
Weight approx.	0.17 kg				0.25 kg				0.34 kg
Certification	CE, cULus, CB, FM, ATEX, cCSAus Class I Div 2, GL, ABS	CE, cULus, CB, FM, ATEX, cCSAus Class I Div 2, GL, ABS	CE, cULus, CB, FM, ATEX, cCSAus Class I Div 2, GL, ABS	CE, cULus, CB, FM, ATEX, SEMI F47, NEC Class 2, cCSAus Class I Div 2, GL, ABS, DNV, BV, LRS	CE, cULus, CB, FM, ATEX, cCSAus Class I Div 2, GL, ABS	CE, cULus,CB, FM, ATEX, cCSAus Class I Div 2, GL, ABS	CE, cULus, CB, FM, ATEX, cCSAus Class I Div 2, GL, ABS	CE, cULus, CB, FM, ATEX, SEMI F47, NEC Class2, cCSAus Class I Div 2, GL, ABS, DNV, BV, LRS	CE, cULus, CB, FM, ATEX, SEMI F47, cCSAus Class I Div 2, GL, ABS, DNV, BV, LRS

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

SITOP
in SIMATIC design







Technical data	SIMATIC S7-1200 design	SIMATIC S7-300 design			SIMATIC S7-1500 design		SIMATIC ET200pro -design
Output voltage / curr., 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	400 – 480 V 3 AC
– Range	85...132/176...264 V AC	85...132/170...264 V AC	85...132/170...264 V AC	85...132/170...264 V AC	85...132/176...264 V AC	85...132/176...264 V AC	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 charakt. B, 10 A charakt. C	3 A charakt. C	6 A charakt. C	10 A charakt. C	from 6 A charakt. C, from 10 A charakt. B	from 10 A charakt. C, from 16 A charakt. 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 characteristics (extra power for 5 s/min)	–	–	–	–	4.5 A	12 A	–
Efficiency at rated values, approx.	83 %	84 %	86 %	90 %	87 %	91 %	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
Electr. short-circuit protection	Yes, constant current char.	Yes, restart	Yes, restart	Yes, restart	Yes, restart	Yes, restart	Yes, restart
Radio suppression level (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 x 15 mm: 6EP1971-1BA00			on S7-1500 system carrier	on S7-1500 system carrier	Screw mounting, e.g., on SIMATIC ET 200pro system rail
Mass (W x H x D) 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, FM, ATEX, cULus Class I Div 2, IECEx, GL, ABS, BV, DNV		CE, ULus508

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**
Article No.	6EP1332-1LB00	6EP1333-1LB00	6EP1334-1LB00
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
Mains buffering	> 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
Rated input current – Inrush current (25 °C)	1.1 / 0.65 A < 27 A	2.1/1.15 A < 32 A	4.3 / 2.4 A < 65 A
– Recommended miniature circuit breaker	3 A Characteristic C	6 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
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)
Efficiency at rated values, approx.	85 %	86 %	89 %
Signaling contact “DC o. k.”	No	No	No
Parallel switching	Yes	Yes	Yes
Electronic short-circuit protection	Yes, constant current	Yes, constant current	Yes, constant current
Radio interference suppression (EN 55022)	Class A	Class A	Class A
Supply harmonics limitation (EN 61000-3-2)	Not applicable	Yes	No
Degree of protection (EN 60529)	IP20	IP20	IP20
Ambient temperature	0... +60 °C	0... +60 °C	0... +60 °C
Dimensions (WxHxD) in mm	32.5 x 125 x 125	50 x 125 x 125	70 x 125 x 125
Weight approx.	0.4 kg	0.5 kg	0.75 kg
Certification	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
– Rate	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 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 voltage – 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 % 22.8...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	0...+70 °C
Dimensions (WxHxD) in mm	32.5 x 125 x 125	50 x 125 x 125	50 x 125 x 125	70 x 125 x 125	70 x 125 x 125	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, 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)

			
Technical data	**SITOP smart 3-phase**		
Output voltage / current, type	**24 V/10 A, PSU300S**	**24 V/20 A, PSU300S**	**24 V/40 A, PSU300S**
Article No.	6EP1434-2BA10	6EP1436-2BA10	6EP1437-2BA20
Rated input voltage	400 – 500 V 3 AC	400 – 500 V 3 AC	400 – 500 V 3 AC
– Range	340...550 V 3 AC	340...550 V 3 AC	340...550 V 3 AC
Mains buffering	> 6 ms (at 400 V)	> 6 ms (at 400 V)	> 6 ms (at 400 V)
Rated line frequency	50/60 Hz	50/60 Hz	50/60 Hz
Rated input current – Inrush current (25 °C) – Recommended miniature circuit breaker	0.7 – 0.5 A < 36 A From 6 – 16 A charact. C 3-ph. coupled or 3 RV2011-1DA10 or 3 RV2711-1DD10	1.2 – 1.0 A < 36 A From 6 – 16 A charact. C 3-ph. coupled or 3 RV2011-1DA10 or 3 RV2711-1DD10	2,0 – 1,5 A < 60 A From 10 – 16 A charact. C 3-ph. coupled or 3 RV2011-1DA10 or 3 RV2711-1DD10
Rated output voltage – Tolerance – Setting range	24 V DC ± 3 % 24...28 V DC	24 V DC ± 3 % 24...28 V DC	24 V DC ± 3 % 24...28 V DC
Overload characteristics – Permanently up to +45 °C – Overload behavior (extra power for 5 s/min) – Derating	10 A 12 A 15 A –	20 A 24 A 30 A from +60 °C (5 %/K)	40 A 48 A 60 A from +60 °C (2.5 %/K)
Efficiency at rated values, approx.	91 %	91 %	91.5 %
Signaling contact "DC o. k."	Yes	Yes	Yes
Parallel switching	Yes	Yes	Yes
Electronic short-circuit protection	Yes, restart	Yes, restart	Yes, restart
Radio interference suppression (EN 55022)	Class B	Class B	Class B
Supply harmonics limitation (EN 61000-3-2)	Yes	Yes	Yes
Degree of protection (EN 60529)	IP20	IP20	IP20
Ambient temperature	0...+70 °C	0...+70 °C	0...+70 °C
Dimensions (WxHxD) in mm	90 x 145 x 150	90 x 145 x 150	150 x 145 x 150
Weight approx.	1.6 kg	1.6 kg	3.7 kg
Certification	CE, cULus, CB, ATEX, cCSAus Class I Div 2, GL, pending: IECEx	CE, cULus, CB, ATEX, cCSAus Class I Div 2, GL, pending: IECEx	CE, cULus, CB, ATEX, cCSAus Class I Div 2, GL, pending: IECEx

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

SITOP modular
Technology power supply for demanding solutions

	new!	new!			new!
					
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, PSU100M**	**24 V/5 A, PSU200M**
Article No.	6EP3333-8SB00-0AY0	6EP3334-8SB00-0AY0	6EP1336-3BA10	6EP1337-3BA00	6EP1333-3BA10
Rated input voltage – Range	120 – 230 V AC 85...275 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...132/176...264 V AC, start-up from 95/190 V	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)	> 25 ms (at 120/230 V)	> 20 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	2,1/1,2-10 A < 10A 6 A charact. C or 3RV1021-1xA10	4/1,9-10 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 < 125 A 20 A charact. C or 3RV2011-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 (extra power for 5 s/min)	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)		
– 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 %	88 %	88 %
Signaling contact "DC o. k."	Yes	Yes	Yes	No, possible via signaling module (6EP1961-3BA10)	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)	No	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	0...+70 ° C	–25...+70 ° C
Dimensions (WxHxD) in mm	45 x 125 x 125	55 x 125 x 125	90 x 125 x 125	240 x 125 x 125	70 x 125 x 121
Weight approx.	0,8 kg	1 kg	1.5 kg	2.9 kg	1.2 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)]	CE, cULus, ATEX, IECEx, SEMI F47[2)], GL, ABS, pending: 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 at +25 °C (unless otherwise specified)

new!





SITOP modular 1-phase and 2-phase[1]	SITOP modular 3-phase		SITOP modular 3-phase, 48 V	
24 V/10 A, PSU200M	**24 V/20 A, PSU8200**	**24 V/40 A, PSU8200**	**48 V/10 A, PSU300M**	**48 V/20 A, PSU300M**
6EP1334-3BA10	6EP3436-8SB00-0AY0	6EP1437-3BA10	6EP1456-3BA00	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...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)	> 6 ms (at 400 V)
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	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 % 24...28.8 V DC	24 V DC ± 3 % 24...28.8 V DC	48 V DC ± 3 % 42...56 V DC	48 V DC ± 3 % 42...56 V DC
10 A	20 A	40 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)	23A 15 A (Extra Power for 5 s/min) from +60 °C (3 %/K)	60A
91 %	94 %	93 %	93 %	90 %
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
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
–25...+70 ° C	–25...+70 °C	–25...+70 °C	–10...+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	240 x 125 x 125
1.4 kg	1.2 kg	3.4 kg	1.2 kg	3.2 kg
CE, cULus, ATEX, IECEx, SEMI F47[2], GL, ABS, pending: 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, 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 at +25 °C (unless otherwise specified)

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

Complete system integration

SITOP PSU8600 is the first power supply that can be completely integrated in TIA. Advantages include convenient engineering in the TIA Portal, preproduced function blocks for SIMATIC S7 user programs, as well as free WinCC faceplates. An integrated Web server makes remote diagnostics possible, and two integrated PROFINET ports are available for comprehensive data exchange.

A system with maximum reliability

Each of the four 10 A outputs of the SITOP PSU8600 is constantly monitored, allowing unusual overloads to be detected early. In the event of a fault, the affected output is selectively switched off. Expansion modules can be used to distribute the direct current to up to 16 outputs. Buffer modules can also be added as protection against short power failures on the grid side (brownouts). Comprehensive diagnostic information for preventive maintenance is available through PROFINET and can be evaluated directly in SIMATIC S7 and visualized in SIMATIC WinCC.

Efficiency across the board

With a narrow width of just 125 mm and integrated overload monitoring, the basic device saves space in the control cabinet. By means of the "System Clip Link," users can individually configure the system with no additional wiring effort. SITOP PSU8600 also supports energy management of a plant or machine, from collecting power data of the individual outputs and switching on and off individual outputs via PROFIenergy to direct integration in energy management systems.

	new!
	
Technical Data	**SITOP modular 3-phase basic unit**
Output voltage / current, type	**24 V/40 A/4x10 A, PSU8600**
Article No.	6EP3437-8MB00-2CY0
Rated input voltage	400 – 500 V 3 AC
– Range	320...575 V 3 AC
Mains buffering	> 15 ms (at 400 V), extendable via buffer modules
Rated line frequency	50/60 Hz
Rated input current	2.75-2.2 A
– Inrush current (25 °C)	< 14A
– Recommended miniature circuit breaker	10 – 16 A charact. C 3-ph. coupled or 3RV2011-1DA10 (setting 3 A) oder 3RV2711-1DD10
Rated output voltage	24 V DC
– Tolerance	± 3 %
– Setting range	DC 11...28 V via potentiometer, up to 28.8 V via IE/PN
Rated ouput current	40 A, 4 outputs at 10 A each, number can be increased via expansion modules
– Overload behavior (Extra Power)	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 480 W
– Switching threshold adjustment range	0.5 ... 10 A
Efficiency at rated values, approx.	94 %
Signaling contact "DC o. k."	Yes, and communication via PROFINET
Parallel switching	Parallel switching output 1 with 2 or output 3 with 4
Radio interference suppression (EN 55022)	Class B
Line harmonics limitation (EN 61000-3-2)	Yes
Degree of protection (EN 60529)	IP20
Ambient temperature	–25...+60 ° C
Dimensions (WxHxD) in mm	125 x 125 x 150
Weight approx.	2.65 kg
Certification	CE, cULus, CB, IECEx, ATEX; pending: cCSAus Class I Div 2, SEMI F47, GL, ABS

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

new!




Technical Data	Expansion module (max. 3)		Buffer module (max. 2)	
Typ	**4 x 5 A, CNX8600**	**4 x 10 A, CNX8600**	**100 ms/40 A, BUF8600**	**300 ms/40 A, BUF8600**
Article No.	6EP4436-8XB00-0CY0	6EP4437-8XB00-0CY0	6EP4297-8HB00-0XY0	6EP4297-8HB10-0XY0
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 three modules can be used in a group of systems. Data and power are transmitted via the System Clip Link connector.		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.	
Rated output voltage	24 V DC	24 V DC	Buffering of the output voltage for 100 ms at 40 A, accordingly longer at lower power demand, i.e. 200 ms at 20 A, 400 ms at 10 A, etc. Charging time: 19 s typical	Buffering of the output voltage for 300 ms at 40 A, accordingly longer at lower power demand, i.e. 600 ms at 20 A, 1.2 s at 10 A, etc. Charging time: 54 s typical
– Tolerance	± 3 %	± 3 %		
– Setting range	DC 11...28 V via potentiometer, up to 28.8 V via IE/PN			
Rated output current	20 A/4 outputs of 5 A each Comment: The max. output capacity of the overall PSU8600 system cannot be increased via expansion modules	40 A/4 outputs of 10 A each		
– Switching threshold adjustment range	0.2 A ... 5 A	0.5 A ... 10 A		
Dimensions (WxHxD) in mm	60 x 125 x 150	60 x 125 x 150	60 x 125 x 150	125 x 125 x 150
Weight approx.	1.15 kg	1.15 kg	1.33 kg	2.26 kg
Certification	CE, cULus, CB, IECEx, ATEX; pending: cCSAus Class I Div 2, SEMI F47, GL, ABS		CE, cULus, CB, IECEx, ATEX; pending: cCSAus Class I Div 2, SEMI F47, GL, ABS	

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

The PSU8600 basic device can be completely integrated in TIA using the Industrial Ethernet/PROFINET interface (two ports). This provides numerous configuration and diagnostic options on the TIA Portal.

Configuration options:
Switching on and off of individual outputs 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 fans

Operating and diagnostic information (selection):
Operating status of the basic device and the outputs (on, off, overload), input voltage, system load current, voltage and current values per output (which allows determination of energy data, incl. CNX8600 outputs), warning for exceeding a freely configurable threshold, system overload, overheating, logging of power and phase failure

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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)

					
Technical data	**DC/DC converter**		**High degree of protection**		
Output voltage / current, type	**24 V/20 A, PSU400M**	**12 V/2.5 A**	**24 V/5 A, PSU100P**	**24 V/8 A, PSU100P**	**24 V/ 8 A, ET200pro PS**
Article No.	6EP1536-3AA00	6EP1621-2BA00	6EP1333-7CA00	6EP1334-7CA00	6ES7 148-4PC00-0HA0
Rated input voltage – Range	600 V DC 300...900 V DC, start-up from approx. 340 V	24 V DC 18.5...30.2 V DC	120/230 V AC (automatic range switching) 85... 132 V/170... 264 V AC		400 – 480 V 3 AC 340...550 V 3 AC
Mains buffering	–	> 5 ms	> 40 ms (at $I_{A\,Nenn}$)	> 40 ms (at $I_{A\,Nenn}$)	3 ms (at 400 V)
Rated line frequency	–	–	50/60 Hz	50/60 Hz	50/60 Hz
Rated input current – Inrush current (25 °C) – Recommended miniature circuit breaker	0.85 A < 8 A –	1.6 A < 20 A for 20 ms 10 A charact. B	2.25 A/1.24 A < 15 A from 6 A charact. C/B	3.5 A/1.52 A < 15 A from 6 A charact. C/B	1 A < 40 A 3RV2021-4NA10
Rated output voltage – Tolerance – Setting range	24 V DC ± 3 % 24...28.8 V DC	12 V DC ± 3 % 12...14 V DC	24 V DC ± 3% –	24 V DC ± 3% –	24 V DC – 5 %/+3 % –
Rated ouput current – Overload behavior (Extra Power for 5 s/min) – Derating	20 A 30 A from +60 °C (5.5 %/K), 300...400 V DC , 820...900 V DC	2.5 A	5 A	8 A	8 A
Efficiency at rated values, approx.	95 %	80 %	90 %	93 %	88%
Signaling contact "DC o. k."	Yes	No	Yes	Yes	Yes, and for overheating
Parallel switching	Yes, output line switchable	Yes, 2 units	Yes, 2 units	Yes, 2 units	No
Electronic short-circuit protection	Yes, constant current (ca. 1.15 x $I_{A\,Nenn}$) or latching shutdown selectable	Yes, constant current	Yes, restart	Yes, restart	Yes, restart
Radio suppression level (EN 55022)	Class A (emission)	Class B	Class B	Class B	EN 61000-6-4 (Class A)
Line harmonics limitation (EN 61000-3-2)	No	Yes	Yes	Yes	No
Degree of protection (EN 60529)	IP20	IP20	IP67, UL: enclosure type 4 indoor	IP67, UL: enclosure type 4 indoor	IP67, UL: encl. type 5 indoor
Ambient temperature	–25...+70 ° C	0...+60 °C	-25...+60°C	-25...+60°C	–25...+55°C
Installation	DIN rail	DIN rail	Screw mounting	Screw mounting	Screw mounting, e.g., on SIMATIC ET 200pro system rail
Dimensions (WxHxD) in mm	90 x 125 x 125	32.5 x 125 x 125	120 x 181 (w/o connector) x 60.5		310 x 135 (w/o connector) x 90
Weight approx.	1.2 kg	0.26 kg	1.1 kg	1.1 kg	2.8 kg
Certification	CE, cULus, CB, GL	CE, cULus	CE, cULus	CE, cULus	CE, ULus508

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

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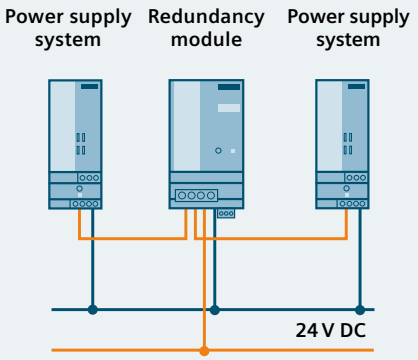
Technical data	two 15-V-outputs	flexible output 3 – 52 V	flat design	
Output voltage / current, type	**2 x 15 V/3.5 A, SITOP dual**	**3...52 V/10 A, SITOP flexi**	**24 V/5 A, flat design**	**24 V/10 A, flat design**
Article No.	6EP1353-0AA00	6EP1353-2BA00	6EP1333-1AL12	6EP1334-1AL12
Rated input voltage	120 – 230 V AC	120/230 V AC	120/230 V AC	120/230 V AC
– Range	93 ... 264 V AC	85...132 V/170...264 V AC	85...132/170...264 V AC	85...132/170...264 V AC
Mains buffering	> 10/40 ms (at 120/187 V)	> 10 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	1.6/1.0 A	2.2/0.9 A	2.2/1.2 A	4/2.5 A
– Inrush current (25 °C)	< 30 A, < 3 ms	< 32 A	< 32 A	< 65 A
– Recommended miniature circuit breaker	10 A charact. C, 16 A charact. B	6 A charact. C	6 A charact. C	10 A charact. C
Rated output voltage	2 x 15 V DC	24 V DC	24 V DC	24 V DC
– Tolerance	± 3 %	± 1 %	± 1 %	± 1 %
– Setting range	14.5...17 V DC	3...52 V DC	22...29 V DC	22...29 V DC
Output current – rated value	2 x 3.5 A	2 – 10 A (max. 120 W)	5 A	10 A
– Derating	from +45 °C (2 %/K)	–	–	–
Efficiency at rated values, approx.	80 %	84 % (at 24 V/5 A)	88 %	89 %
Signaling contact "DC o. k."	No	Yes, and current monitor signal 0 ... 2.5 V	No	No
Parallel switching	Yes	Yes	Yes	Yes
Electronic short-circuit protection	Yes, restart	Yes, constant current	Yes, restart	Yes, restart
Radio interference suppression (EN 55022)	Class A	Class B	Class B	Class B
Supply harmonics limitation (EN 61000-3-2)	No	Yes	No	No
Degree of protection (EN 60529)	IP20	IP20	IP20	IP20
Ambient temperature	0 ...+60 °C	0...+60 °C	0...+60 °C	0...+60 °C
Installation	DIN rail	DIN rail	DIN rail	DIN rail
Dimensions (WxHxD) in mm	75 x 125 x 125	75 x 125 x 125	160 x 130 x 60	160 x 130 x 60
Weight approx.	0.75 kg	0.9 kg	0.6 kg	0.72 kg
Certification	CE, cUL	CE, cULus	CE, cULus	CE, cULus

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

				
Technical data	**narrow design**	**power supplies for charging batteries**		
Output voltage/current, type	**24 V/5 A, PSU300E**	**12 V/20 A, PSU300B**	**24 V/17 A,, PSU300B**	**24 V/30 A, PSU300B**
Article No.	6EP1433-0AA00	6EP1424-3BA00	6EP1436-3BA20	6EP1437-3BA20
Rated input voltage	400 V 3 AC	400 – 500 V 3 AC	400 – 500 V 3 AC	400 – 500 V 3 AC
– Range	320...480 V 3 AC	320...575 V 3 AC	320...575 V 3 AC	320...575 V 3 AC
Mains buffering	> 50 ms (at 400 V)	> 20 ms (at 400 V)	> 20 ms (at 400 V)	> 20 ms (at 400 V)
Rated line frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Rated input current	0.36 A	0.7 – 0.6 A	1.2 – 1.0 A	1.6 – 1.3 A
– Inrush current (25 °C)	< 15 A	< 18 A	< 18 A	< 56 A
– Recommended miniature circuit breaker	6 – 10 A charact. C	6 – 16 A charact. C 3-ph. coupled or 3RV2011-1DA10 or 3RV2711-1DD10	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
Rated output voltage	24 V DC	12 V DC	24 V DC	24 V DC
– Tolerance	± 3%	± 3 %	± 3 %	± 3 %
– Setting range	24...29 V DC	12...14 V DC	24...28.8 V DC	24...28.8 V DC
Rated output current	5 A	20 A	17 A	30 A
– Derating	–	–	from +60 °C (2 %/K)	from +60 °C (1,7 %/K)
Efficiency at rated values, approx.	90 %	88 %	93 %	93 %
Signaling contact “DC o. k.”	Yes	Yes	Yes	Yes
Parallel switching	No	Yes	Yes	Yes
Electronic short-circuit protection	Yes, restart	Yes, constant current or latching shutdown selectable		
Radio interference suppression (EN 55022)	Class A	Class B	Class B	Class B
Supply harmonics limitation (EN 61000-3-2)	Yes	Yes	Yes	Yes
Degree of protection (EN 60529)	IP20	IP20	IP20	IP20
Ambient temperature	0...+60 °C	–25 °C...+70 °C	–25...+70 °C	–25 °C...+70 °C
Installation	DIN rail	DIN rail	DIN rail	DIN rail
Dimensions (WxHxD) in mm	42 x 125 x 125	70 x 125 x 125	70 x 125 x 125	150 x 125 x 150
Weight approx.	0.6 kg	1.2 kg	1.2 kg	3.4 kg
Certification	CE, cULus	CE, cULus	CE, GL (cULus pending)	CE, cULus

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

Configuration with redundancy 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
- 24 V/NEC class2 redundancy module limited to 100 VA
- Diagnostics signals via LEDs and signaling contacts
- Adjustable switching threshold for LEDs and signaling contacts

SITOP add-on modules for increasing availability

A reliable power supply system is the basis for any production process or plant. So it is only makes sense to not only carefully select the power supply unit, but protect the 24-V supply against faults in the input or output circuit. SITOP offers suitable add-on modules for this purpose.

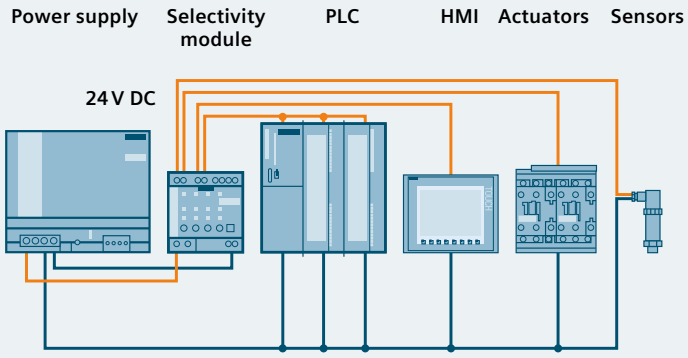
Redundancy modules for security against failure of power supply units

SITOP redundancy modules provide additional protection against failures of the 24-V supply. Because the two power supplies are decoupled via a redundancy module, one failed power supply unit has no effect on the 24-V supply. The redundancy module continually monitors the feeding power supply units and when one unit fails, the other unit automatically takes over the feed, thereby safeguarding the 24-V supply. In addition, a signal is sent via a signaling contact that can be evaluated by a controller, PC, or control system.

Redundancy modules

Redundant design of the power supply syste

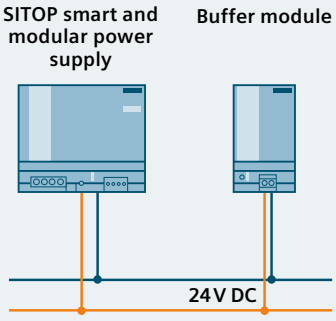
Configuration with selectivity module



Your benefits with the selectivity module:

- Protection against overloads and short circuits in the 24-V circuit
- Safe tripping of circuit breakers regardless of line lengths or cross-sections
- Four load feeders per module
- Variants with an adjustable output current variable from 0.5 to 3 A or from 3 to 10 A
- Possibility of sequential startup of feeders to reduce inrush current
- Diagnosis via a common signaling contact or single-channel signal
- Evaluation via free SIMATIC S7 or SIMOTION function block for modules with single-channel signaling

Configuration with buffer module



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

Selectivity modules to monitor 24-V feeders

In today's plants, all 24-V loads receive power from one shared, regulated, switched-mode power supply. To prevent faults in one load from disabling the entire plant, the 24-V supply circuit is divided into individual feeders and, in the case of a fault, selectively disconnected. The selectivity module monitors the current for each feeder and reliably prevents supply voltage failure, thus avoiding total failure of the plant. Thanks to channel-specific signaling and evaluation by means of SIMATIC S7 and SIMOTION function blocks, fault detection is extremely fast and downtimes are reduced.

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 to sensitive production areas. Used in combination with SITOP smart and modular power supply units, the buffer module bridges short-duration voltage dips with its electrolytic capacitors and reliably preserves interruption-free operation.

Selectivity modules

Electronic monitoring of 24-V feeders

Buffer module

Bridging for up to a period of seconds

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, 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)

						
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
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 %				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, cULus, UR, CB, ATEX, IEXEx, cCSAus Class I Div2, GL, ABS		CE, cULus, UR, ATEX, IEXEx, cCSAus Class I Div2, GL, ABS		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 6EP3437-8MB00-2CY0) and SITOP smart 24 V DC (except 6EP1 336-2BA10)
Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

SITOP-Module zur 24V-Pufferung	Buffer module	UPS500	UPS1600
Energy buffers			
24-V buffering	Max. 10 s	Minutes	Hours
Storage medium	Electrolytic capacitors	Double-layer capacitors	Lead batteries
Life (also temperature-dependent)	++	++	+
Functional range (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 server		•	in preparation
– Web server			•
– S7 function modules, WinCC faceplates			•
Downloading of multiple PCs/PLCs			•
Start from battery without supply voltage (island operation)			•
Engineering via			
– Software-tool (PC)		•	•
– TIA Portal			•

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 provides perfect protection against unexpected downtimes and so guarantees uninterrupted plant operation. SITOP add-on modules provide buffering solutions that range from seconds to hours.

SITOP Selection Tool for fast and easy selection

The SITOP Selection tool offers detailed selection assistance based on criteria such as buffering time, load current, peak current, and switch-on threshold. The DC UPS can also be selected and compared with just a few clicks of the mouse, just as easily as the power supply. You can export your selection directly to the Siemens Industry Mall. All required CAD data, circuit diagram macros, and other product information for simple, quick configuration can be called up in the CAx download manager.

Your benefits with the SITOP UPS500:

- Bridging for up to a period of minutes, depending on the load current and DC UPS design
- Totally maintenance-free double-layer capacitors
- Short charging times
- Long life even at high ambient temperatures
- No ventilation needed for the installation location
- IP65 variant for use outside the control cabinet
- Simple PC integration using a software tool
- USB port for PC communication

Your benefits with the SITOP UPS1600:

- Bridging for up to a period of hours, depending on power requirements
- Automatic detection of the UPS1100 battery modules by UPS1600
- Smart battery management for monitoring operational readiness, rechargeable battery feeder, aging, and charging status
- Temperature-controlled charging characteristic
- Communication via USB or Ethernet/PROFINET
- Integrated Web server
- Full integration in TIA: convenient engineering in the TIA Portal, function blocks for S7 user programs, and WinCC faceplates
- SITOP UPS Manager supports configuration and monitoring of PC-based systems

SITOP UPS500 with capacitors for safeguarding the plant status

When a plant shutdown is unavoidable, applications such as PC-based automation, visualization, and the archiving of operational data are especially in need of longer bridging times. Logging the failure, saving the plant status data, and powering down the PC in a controlled manner may require buffering times of up to a period of minutes. SITOP DC UPSs with highly-capacitive double-layer capacitors store sufficient energy to shut down PC-based systems safely.

SITOP UPS1600 with battery modules for maximum buffering time

Applications with powerful 24-V loads and processes in which plant sections must continue to be supplied with power in order to record measurement data or maintain communication channels all require high-capacity energy buffers. The SITOP DC UPS with maintenance-free lead batteries offers optimal security during long buffering times. Depending on the power requirements, it can supply power for up to a period of hours.

The first open, system-integrated DC UPS

The new UPS1600 automatically detects the UPS1100 battery modules and ensures optimum temperature-controlled charging. It can be easily integrated into the PC or PLC environment via Ethernet/PROFINET. The UPS1600 is the first UPS that is fully integrated in TIA.

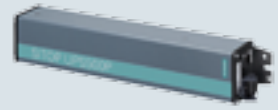
This makes engineering in the TIA Portal convenient. In addition, S7 function modules allow simple integration into STEP7 user programs and faceplates allow integration into operation and monitoring with SIMATIC panels and SIMATIC WinCC.

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...+60 °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 prepared 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

new!




Technical data	SITOP DC UPS, for longer power failures				
SITOP	**UPS1600**	**UPS1600**	**UPS1600**	**1100 UPS battery module**	**1100 UPS battery module**
Output voltage / current	**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. – with USB interface – with Ethernet/PROFINET interface	6EP4134-3AB00-0AY0 6EP4134-3AB00-1AY0 6EP4134-3AB00-2AY0	6EP4136-3AB00-0AY0 6EP4136-3AB00-1AY0 6EP4136-3AB00-2AY0	6EP4137-3AB00-0AY0 6EP4137-3AB00-1AY0 6EP4137-3AB00-2AY0	6EP4131-0GB00-0AY0	6EP4133-0GB00-0AY0
Input voltage	24 V DC, 22…29 V, infeed from 24 V SITOP power supply			Recomm. end-of-charge voltage: 26.4…27.3 V DC (> +20 °C), 27.3…29.0 V DC (< +20 °C) automatically set by SITOP UPS1600	
Rated input current	approx. 14 A at max. charging current (3 A)	approx. 25 A at max. charging (4 A)	approx. 46 A at max. charging (5 A)	Charging current max. 0.36 A	Charging current max. 0.96 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 – Overload behavior (power boost for 30 ms) – Overload behavior (extra power for 5 s/min)	10 A, Charging current max. 3 A 30 A 15 A	20 A, Charging current max. 4 A 60 A 30 A	40 A, Charging current max. 5 A 120 A 60 A	10 A	20 A
Efficiency at rated values, approx.	> 97.3 %	> 97.5 %	> 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	Yes
Radio interference suppression	Class B (EN 55022)	Class B (EN 55022)	Class B (EN 55022)	–	–
Degree of protection (EN 60529)	IP20	IP20	IP20	IP00	IP00
Ambient temperature (Derating from +60 °C)	–25…+70 °C	–25…+70 °C	–25…+70 °C	0…+40 °C	0…+40 °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	50 x 125 x 125	89 x 130 x 107	190 x 169 x 79
Weight approx.	0.4 kg without interface, 0.42 kg with USB, 0.45 kg with Ethernet/PROFINET interfaces		0.65 kg without interface, 0.65 kg with USB, 0.7 kg with Ethernet/PROFINET interfaces	1.8 kg	3.2 kg
Certification	CE, cULus, CB, ATEX, IEXEx, cCSAus Class I Div 2, pending: GL, ABS		CE, cULus, CB, ATEX, pending: IEXEx, cCSAus Class I Div 2, GL, ABS	CE, cULus, ATEX, IEXEx, cCSAus Class I Div 2, C-Tick, KCC, GL, ABS	CE, cULus, ATEX, IEXEx, cCSAus Class I Div 2, C-Tick, KCC, GL, ABS

*) Technical data subject to nominal input voltage value and +25 °C ambient temperature (unless stated otherwise)

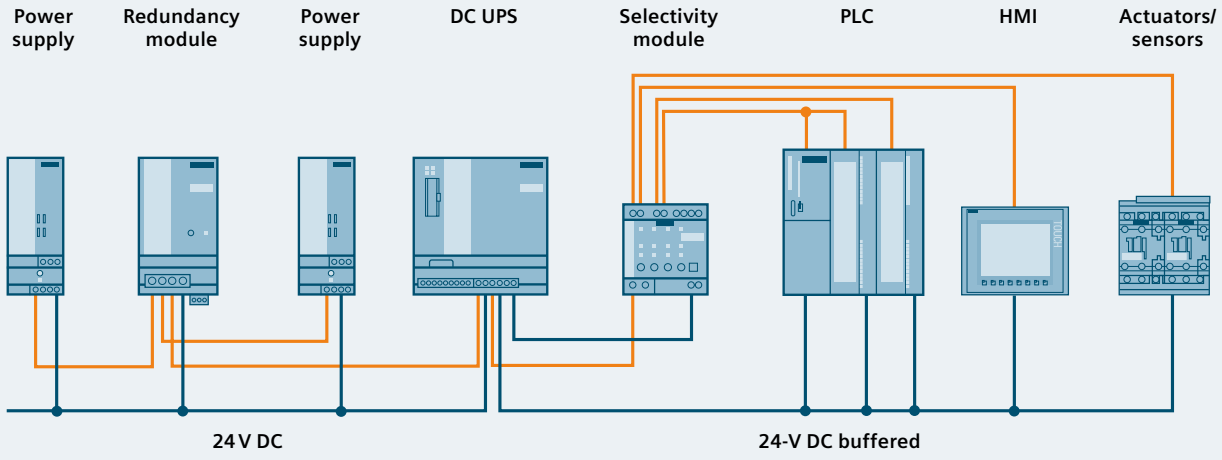
	new!	new!
		
SITOP DC UPS for longer power failures		
1100 UPS battery module	**Battery module UPS1100**	**UPS1100 battery module with extended temperature range**
24 V/7 Ah	**24 V/12Ah**	**24 V/2,5Ah**
for UPS1600 10 A and 20 A	for UPS1600 20 A and 40 A	for UPS1600 10 A
6EP4134-0GB00-0AY0	6EP4135-0GB00-0AY0	6EP4132-0GB00-0AY0
Recomm. end-of-charge voltage: 26.4...27.3 V DC (> +20°C), 27.3...29.0 V DC (< +20°C) automatically set by SITOP UPS1600		Recomm. end-of-charge voltage: DC 29.4...27.9 V (+60...+20°C) DC 27.9...29.0 V (+20...-10°C), automatically set by SITOP UPS1600
Charging current max. 2.1 A	Charging current max. 3 A	Charging current max. 5 A
24 V DC, 22...27.0 V DC (no-load operation)		
40 A	40 A	20 A
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
Yes	Yes	Yes
–	–	–
IP00	IP00	IP00
0...+40 °C	0...+40 °C	–40...+60 °C
Wall mounting	Wall mounting	DIN rail or wall mounting
186 x 168 x 110	253 x 168 x 110	265 x 115 x 63
6.1 kg	9.3 kg	3.7 kg
CE, cULus, CB, ATEX, IEXEx, cCSAus Class I Div 2, C-Tick, KCC, GL, ABS	CE, cULus, CB, ATEX, C-Tick, KCC, GL, ABS, pending: IECEx	

Selection table battery modules and buffer times

Load current	Battery module UPS1100 1.2 Ah	Battery module UPS1100 3.2 Ah	Battery module UPS1100 7 Ah	Battery module UPS1100 12 Ah	Battery module UPS1100 2.5 Ah
1 A	34.5 min	2.6 h	5.4 h	9 h	2 h
2 A	15.5 min	1 h	2.6 h	4.6 h	1 h
3 A	9 min	39.3 min	1.6 h	2.9 h	37.5 min
4 A	6.5 min	27.1 min	1.2 h	2.2 h	27 min
6 A	3.5 min	17.5 min	41 min	1.2 h	17.6 min
8 A	2 min	12.1 min	28.6 min	53.3 min	12.5 min
10 A	1 min	9 min	21.8 min	43.5 min	8.8 min
12 A	–	7 min	17.3 min	33.3 min	6.8 min
14 A	–	5 min	15.1 min	27.5 min	5.1 min
16 A	–	4 min	12.5 min	23.8 min	4.3 min
20 A	–	1 min	9.1 min	20.1 min	–
25 A	–	–	–	12.6 min	–
30 A	–	–	–	9.1 min	–
35 A	–	–	–	17.1 min (2x12 Ah)	–
40 A	–	–	–	13.5 min (2x12 Ah)	–

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 is being turned off.

All-round protection with a SITOP power supply system



SITOP
all-round protection à la carte

Our answers to your requirements for a reliable power supply: With the aid of various SITOP add-on modules, you can flexibly expand your power supply system to the point of all-round protection. Keep in mind that every power supply system failure can shut down a plant and cost you a great deal of time and money. With SITOP, these failures are a thing of the past.

The SITOP advantages for a reliable power supply:

- In the event of power network faults or load fluctuations:
  with their wide input voltage range and outstanding load characteristics, SITOP power supply units meet the highest quality standards
- In the event of a power supply unit failure:
  redundant design of the power supply system with SITOP redundancy modules
- Protection against overloads and short circuits in the 24-V circuit:
  selective disconnection of 24-V feeders with with SITOP selectivity modules
- In the event of a power failure:
  buffering of the power supply with SITOP DC UPS for up to a period of hours bis in den Stundenbereich
- Possibilities ranging from a customized configuration to all-round protection

Step 1

Step 2

Step 3

Step 1:
The appropriate power supplies are preselected based on the user's technical requirements

Step 1:
The appropriate power supplies are preselected based on the user's technical requirements

Step 3:
After the desired products have been selected from the product list, these selections can be exported or transferred directly to the user's Industry Mall shopping basket

SITOP Selection Tool
Making the perfect choice

A power supply unit has to meet many different requirements, and the choice of available solutions is correspondingly large. To reduce the time it can take to find a suitable solution, we support your planning and design process right from the start.

The SITOP selection tool shortens the time it takes to select not only your power supply but also the matching uninterruptible power supply (DC UPS) based on capacitor or battery technology. You can order the selected products easily via the Siemens Industry Mall. And you'll also receive further information such as product data sheets, 3D data, or circuit diagram macros for fast and easy project planning.

The tool is available on the Internet and in the Industry Mall:

www.siemens.com/sitop-selection-tool
www.siemens.com/industrymall

Further information

More about SITOP:
www.siemens.com/sitop

Information material for downloading:
www.siemens.com/sitop-infomaterial

Easy selection of the suitable power supply unit with the SITOP selection tool:
www.siemens.com/sitop-selection-tool

Manuals for downloading:
www.siemens.com/sitop/manuals

CAx data (2D, 3D, circuit diagram macro) for downloading:
www.siemens.com/sitop-cax

Compile all CAx data using the CAx online generator:
www.siemens.com/cax

Order electronically over the Internet using the Industry Mall:
www.siemens.com/industrymall

You can find your personal contact at:
www.siemens.com/automation/partner

Industrial Security

Siemens provides automation and drive products with industrial security functions that support the secure operation of plants or machines. They are an important component in a holistic industrial security concept. With this in mind, our products undergo continuous development. We therefore recommend that you keep yourself informed with respect to our product updates and that you use only the latest versions.
Please find further information on this subject at:
www.automation.siemens.com/support

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

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