





SITOP PSU6200 – the all-around power supply for a wide range of applications

The new SITOP PSU6200 product line offers high-performance, standard power supplies with comprehensive diagnostics options, connection technology, and high operational reliability. Find out for yourself what the new all-arounder has in store – see pages 8/9.

siemens.com/sitop-psu6200





SITOP power supplies bring production plants to life.

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. For decades, SITOP – the heart of automation – has been bringing production plants to life. The complete, precisely coordinated range of products guarantees a reliable power supply, and is especially suited to the growing demands of our time.



SITOP means top reliability

SITOP has proven its reliability in nearly all networks around the world. With a flexible, wide-range input, outstanding load characteristics, and all the relevant certifications, SITOP power supply units safeguard the availability of your plant. Add-on modules prevent problems on the line or DC side. And when upgraded to an uninterruptible power supply, the 24-V power supply units bridge power failures for a period of seconds, minutes, or hours. In the event of a fault-specific overload or short circuit in the output circuit, selective disconnection of

the feeder ensures continued operation, because the supply to other loads is maintained. For highly critical applications, redundant power supply solutions are also an option. If a replacement is ever needed, our global customer service ensures the fastest possible delivery: All SITOP products can be supplied from stock.



SITOP means top efficiency

Reduced energy costs are a valuable competitive advantage. SITOP makes an important contribution, because the primary switched-mode power supply units operate highly efficiently. For example, SITOP PSU8200 and 6200 have an efficiency of up to 95 percent. Losses are low throughout the entire load range, even in no-load operation. This is because a power supply is rarely operated at full load. SITOP PSU8600, on the other hand, records power data from all outputs, which is then further processed in energy management systems. And via PROFlenergy, power supply outputs can be switched off selectively: for example, during breaks.

Efficiency also characterizes the product lifecycle. That's why we offer you special tools to make it easy to select a power supply and DC UPS. We provide you with all the design data for all common CAE systems as well as the corresponding product documentation.



SITOP is top in integration

SITOP sets a benchmark in terms of integration: Complete integration of the SITOP PSU8600 power supply system and SITOP UPS1600 DC UPS in Totally Integrated Automation, the TIA Portal, and the new SITOP Manager saves time and money and facilitates fail-safe engineering. For the SITOP PSE200U selectivity module and the new SITOP PSU6200 product line, S7 function blocks evaluate important diagnostic information. The SITOP UPS1600 can easily be integrated via USB or Ethernet to protect PC-based automation systems from power failures. And the SITOP library for

SIMATIC PCS 7 enables a transparent 24-V supply in the process control system during ongoing operation.

Besides PROFINET, SITOP PSU8600 and SITOP UPS1600 also communicate via OPC UA. With the OPC UA server, it's also possible to directly integrate units such as controllers or PCs into automation applications with OPC UA clients from different vendors.

Three SITOP categories for the different demands on an industrial power supply

Advanced power supplies

The switched-mode power supply units in the Advanced performance class are the optimal choice for maximum reliability and functionality as required in the process and automotive industries, in special-purpose machine manufacturing, and in harsh environments. The SITOP PSU8200 product line meets these extreme requirements thanks, for example, to their overload behavior, efficiency, and compactness. SITOP PSU8600 also offers a power supply system with open communication for optimal integration into the digital environment.

Standard power supplies

Our standard portfolio was designed for industrial applications like those in special-purpose machine manufacturing. Development of the new SITOP PSU6200 all-around power supply was based on our experience with the proven SITOP smart product line. This new SITOP standard power supply features even higher efficiency, comprehensive diagnostic options, and greater ruggedness.

Basic power supplies

From flat power supplies for distribution boards to costeffective basic power supplies and slim power supply units for control boxes — even in the low-performance range, SITOP leaves nothing to be desired. LOGO!Power offers you miniature power supply units in the LOGO!8 module design. The extremely space-saving SITOP compact devices are ideal for distributed applications. And SITOP lite meets the most important requirements for reliable primary switched-mode regulators at an affordable price.

Overview of SITOP product lines

Advanced power supplies



SITOP PSU8600

The power supply system with complete TIA integration and open communication up to the cloud

The innovative SITOP PSU8600 power supply system is fully integrated into Totally Integrated Automation and the TIA Portal. It's integrated directly into networked automation applications via its Ethernet/PROFINET interface or OPC UA. SITOP PSU8600 not only offers brand-new functions and diagnostics options, it also supports the energy management of a plant or machine.

Pages 20-23



SITOP PSU8200

The technology power supply for demanding solutions

SITOP PSU8200 is ideal for complex plants and machines. The wide-range input allows it to be connected to any supply system and also to withstand large voltage fluctuations. The power boost briefly delivers up to three times the rated current. And in the event of an overload, you can choose between constant current with automatic restart or latching shutdown. The high degree of efficiency reduces energy consumption, while the compact metal enclosure saves space.

Pages 24-25

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.

Standard power supplies





SITOP PSU6200

The all-around power supply for a wide range of applications

SITOP PSU6200 is the new, extremely high-performance power supply for standard applications. The single-phase 12-V and 24-V power supply units offer comprehensive functions and features for focused diagnostics, fast installation, and dependable operation. Whether it's LED status indicators, integration into preventive maintenance, push-in terminals, or rugged AC input – SITOP PSU6200 has it all.

Pages 26-27



SITOP smart

The powerful standard power supply

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

Pages 28-29

Basic power supplies



SITOP lite

The cost-effective basic power supply

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

Page 32



LOGO!Power

The flat power supply for distribution boards

Small. Clever. LOGO!Power. The fourth generation of the globally proven miniature power supply units with a flat, stepped profile features high performance in a small space. The comprehensive functionality with flexible installation, current monitoring, and high energy efficiency permits universal use in applications with 5 V, 12 V, 15 V, and 24 V.

Pages 30-31



SITOP compact

The slim power supply for control boxes

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

Page 33

SIMATIC Design

The optimal supply for SIMATIC S7 and more

Page 34

SITOP DC/DC converters

Stable power supply despite fluctuating DC voltage

Page 35

Special designs

Equipped for special functions and conditions

Pages 36-37

SITOP PSU8600 – the power supply system with complete TIA integration and open communication up to the cloud

Complex systems place highest demands on their components in terms of efficiency, flexibility, and reliability. The innovative power supply system SITOP PSU8600 meets them all – thanks to a unique functionality, diagnostic capability, modular expandability, and complete integration in TIA or via OPC UA server in many other systems.

Advanced power supplies



Did you know that...

even in buffer operation, the outputs exactly hold their set voltage and do not vary with battery voltage, as is common in other DC UPS systems?



Top Integration – with complete TIA integration and open communication up to the cloud

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

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

Free SIMATIC Panels or WinCC faceplates are available for operation and monitoring. The power supply system can also be integrated into automation applications with controllers or PCs from other vendors via the OPC UA open communication interface. Parameterization and the necessary operation and monitoring can be performed via the user-friendly SITOP Manager engineering and diagnostics software. Remote access is enabled by the integrated Web server.



Top efficiency – from engineering through to operation

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

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

Every output can be set to 4–28 V, even dynamically during operation.

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

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

The modular system toolbox



Base unit

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

Expansion modules

Expansion to up to 36 selectively monitored outputs

Buffer modules

Bridging short power failures

DC UPS and battery modules

Bridging long power failures





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

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

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

This makes it possible to prevent a plant shutdown. For power failures in the range of seconds to minutes, system-specific buffer modules with electrolytic or double-layer capacitors (Ultracaps) are used.

The DC UPS module buffers up to the hours range to protect against longer power failures. Processes can be kept running or PCs shut down safely using battery modules with lead or lithium iron phosphate technology.

SITOP PSU6200 – the all-around power supply for a wide range of applications

A new benchmark in the area of standard power supplies: With its award-winning industrial design, space-saving width, optimized terminals, comprehensive diagnostics options, and high operational reliability, SITOP PSU6200 offers attractive prospects for a variety of different applications and areas of operations.

Standard power supplies



Focused diagnostics. Top integration.

With SITOP PSU6200, you benefit from a high degree of transparency in operation. Thanks to an integrated diagnos-tics monitor, devices as of 10 A signal the load on the power supply unit and show whether the device is nearing the end of its service life via LEDs on the front of the enclosure. This enables you to respond to critical states early on in order to prevent unscheduled plant shutdowns.

Via the power supply unit's diagnostics interface, additional important operating parameters and statuses such as current, voltage, overload, operating hours, temperature, and device/type can be transferred to the controller and incorporated in condition monitoring. The signal is evaluated by means of a free S7 function block. In addition, a faceplate for visualizing the data on an HMI is available for download.

Did you know that only one digital input is required on the PLC for transferring comprehensive diagnoses?

Diagnostics monitor/Diagnostics interface SITOP PSU6200 power supply units as of 24 V/10 A and 12 V/12 A have a diagnostics monitor and a diagnostics interface. The diagnostics monitor indicates their operating status, current utilization, and end of service life via 5 LEDs. Output voltage o.k. Utilization < 30% > 30% > 60% > 90%

Output voltage o.k.

Service life

< 10%



The diagnostics interface outputs a serial code to a digital input

The all-around power supply





Fast installation. Top efficiency.

Space savings, front labeling, push-in terminals – with SITOP PSU6200, you make no compromises when installing and wiring. Inside the control cabinet, space is a valuable commodity. You can make even better use of this space, thanks to the extremely narrow width of the new power supply units. And thanks to optimized heat dissipation and an efficiency rate up to 95 percent, the units require no lateral clearance between components, which also saves space on the DIN rail.

The all-around power supplies also facilitate and speed up fail-safe wiring. Unique terminal labeling makes correct wire connection easier, and push-in terminals make wiring fast. An additional, uniquely identified minus terminal also makes it easier to ground PELV (protective extra-low voltage) circuits according to the Machinery Directive.



Dependable operation. Top reliability.

Dependable overload behavior, robust AC inputs, and a metal enclosure for optimal heat dissipation – with SITOP PSU6200, you're on the safe side. Their extra power means that the high-performance power supply units provide a 50 percent higher rated current for up to five seconds in the event of an overload. If the overload is extremely high, they keep the current constant and change to hiccup mode for self-protection only when the output voltage drops to 15 volts. Once the overload has been corrected, they continue in normal operation.

You're also well-equipped to handle deterioration in AC line quality: Thanks to a robust AC input, the all-around power supplies are well-protected from undervoltages and overvoltages from the grid. Power supply units as of 10 A also have active power factor correction (PFC) that keeps the reactive current and inrush current low.

New redundancy and selectivity modules in the attractive SITOP PSU6200 design ensure even higher availability. See pages 12 and 13.



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

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

Uninterruptible power supply



DC UPS module

For expansion to an uninterruptible 24-V power supply

DC UPS module
For expansion to an uninterruptible
24-V power supply







SITOP DC UPS with capacitors

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

Totally maintenance-free

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

For use both inside and outside the control cabinet

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

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

SITOP DC UPS with battery modules

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

High system availability thanks to battery management

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

- DC PSU module SITOP UPS1600 with 24 V and up to 40 A as well as battery module UPS1100 up to 12 Ah (total 72 Ah)
- SITOP UPS1100 5-Ah lithium battery module (LiFePo) with a constant power output and voltage throughout the discharging range as well as a long service life even with high ambient temperatures
- Monitoring of operational readiness, battery feeder, and charging status
- Extended battery life thanks to battery management

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

| SITOP module for 24-V buffering | Buffer module | UPS500 | UPS | 1600 |
|---|-------------------------|----------------------------|-------------------|----------------------|
| Energy storage device | | | | |
| 24-V buffering | max. 10 s | Minutes | Но | urs |
| Storage medium | Electrolytic capacitors | Double-layer capacitors | Lead batteries | Lithium batteries |
| Service life (also temperature-dependent) | ++ | ++ | • | + |
| Application area (temperature, degree of protection, ventilation) | + | ++ | • | + |
| UPS module/electronics | | | | |
| max. rated output current | 40 A | 15 A | 40 |) A |
| Overload capacity | ++ | + | + | ++ |
| Interfaces | | I/O, serial, USB | | USB, PROFINET |
| Operating and diagnostic information via | | | | |
| – Signaling contacts | | • | | • |
| – OPC UA server, Web server, S7 FBs, WinCC faceplate | | | | • |
| Shutting down multiple PCs/PLCs | | | | • |
| Start from battery without mains voltage (island operation) | | | | • |
| Engineering via software tool (PC) | | • | | • |
| Engineering via TIA Portal, STEP 7, WinCC, or OPC UA | | | | • |
| SITOP library for SIMATIC PCS 7 | | | | • |

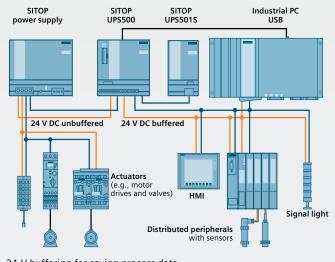
Extremely communicative

Optional communication via USB or Industrial Ethernet/ PROFINET. With open communication via Ethernet, configuration and diagnostics are conveniently performed by the SITOP Manager. This PC software with a user interface based on a Web browser permits simple parameterization: for example, for safely shutting down multiple PCs.

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

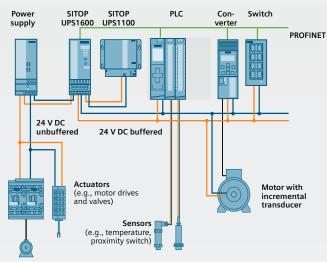
- Communication via contacts, USB, or two Ethernet/ **PROFINET** ports
- Easy engineering and extensive diagnostics in the TIA Portal
- OPC UA server for the flexible integration of a wide variety of automation, operating, and monitoring systems
- User-friendly SITOP Manager engineering and diagnostics tool for simple integration into open systems (more details on page 16)

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

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

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

Add-on-Module



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. Even in the event of a short circuit inside a power supply unit, the power supply remains reliable. Thanks to its high dielectric strength, the new RED1200 redundancy module also decouples power supplies without output voltages up to 48 V.



Selective disconnection of faulty 24-V feeders

The SITOP selectivity modules are specifically tailored to switched-mode power supplies. The modules permit brief current peaks and switch off the electricity for longer overloads, even on long, thin cables and with creeping short circuits in which the current is limited by the high ohmic resistance. In this case the circuit-breakers do not trip, or they trip too late, even if the power supply could deliver the current. The selectivity modules reliably disconnect the faulty load circuits, and the supply to the other loads continues with absolutely no interruption so that total failure of the plant can be avoided. The affected feeder is indicated by an LED. The option with single-channel signaling also allows remote output-specific fault location. The new SEL1200 and SEL1400 eight-channel modules also have an interface with comprehensive diagnostics options for each output.

| Selection matrix of the SITOP add-on modules for protection from | Redundancy module | Selectivity diagnostic | Butter module | OC Ups Gpacifors with | OC UPS With batteri |
|--|----------------------|---------------------------|---------------|--------------------------|------------------------|
| Failure of a power supply unit | • | | | | |
| Overload in the 24-V circuit | | • | | | |
| Power failure in the seconds range | | | • | • | • |
| Power failure in the seconds range | | | | • | • |
| Power failure up to the hours range | | | | | • |

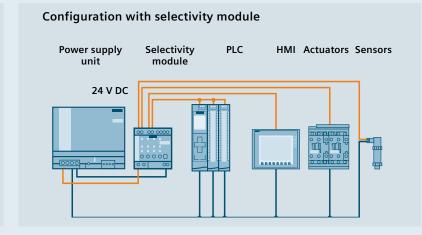


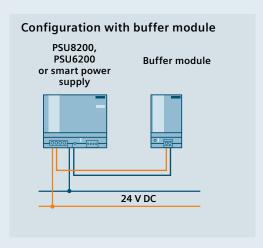
Buffer module bridges brief power failures

Power failures usually last only for a fraction of a second – but they can cause time- and cost-intensive damage. Used in combination with the 24-V DC power supply units from the SITOP smart, PSU6200, and PSU8200 product lines, the buffer module bridges short-duration voltage dips with its electrolytic capacitors and reliably preserves interruption-free operation.

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

Power supply Redundancy Power supply unit module Power supply unit





Your benefits with the redundancy module:

- Highly secure DC supply thanks to a redundant design
- Reliable supply even when one power supply fails
- Compact redundancy modules for power supply units up to 48V and 40 A
- 24-V/NEC Class 2 redundancy module limited to 100 VA
- Decoupling of parallel-connected power supply units to enhance performance or of series-connected power supply units to increase voltage

Your benefits with the selectivity module:

- Protection against overloads and short circuits in the 24-V circuit
- Reliable tripping, regardless of the line resistance
- SEL1200: switch-off characteristic for standard protection and high starting currents
- SEL1400/PSE200U: power limiting to meet high protection requirements by stabilizing the 24 V
- Sequential connection reduces total inrush current
- Common signaling contact or evaluation of individual channels
- SEL1200/1400: 8 outputs, each with diagnostics of voltage, current, set threshold, reason for disconnection (if applicable)
- PSE200U: 4 outputs with voltage measuring point for current (1 V \triangleq 1 A)

Your benefits with the buffer module:

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

Comprehensive support from planning to operation



CAD and CAE data in the image database for simple configuration

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

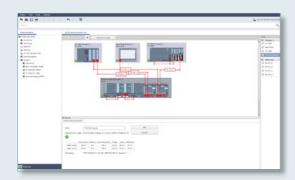
No matter how many requirements a power supply must meet, SITOP always optimally supports your planning process – from product selection and mechanical and electrical design to project-specific plant documentation and engineering. With the SITOP Selection Tool, you can select your power supply and DC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

Efficiency starts with selection

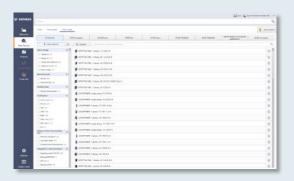
With just a few mouse clicks, the TIA Selection Tool guides you to the optimal power supply for your requirements. Simply enter the relevant parameters. If there are multiple solutions, an overview offers a comparison table containing several devices. Once you've opted for a solution, you can export the resulting product list in various formats to other CAE (for example, EPLAN) or engineering systems (like the TIA Portal) and continue using it. With a single mouse click, you can transfer the selected products to the Industry Mall shopping cart and conveniently order them from there. The 24-V consumer view in the TIA Selection Tool helps you easily select the power supply for your project by automatically calculating the power requirements of the automation products to be supplied.

Everything you need for planning

Additional information – including 3D data, circuit diagram macros according to IEC or ANSI, certificates, and operating instructions – are available at the click of a mouse. With the aid of the CAx Manager, you can download engineering data in the DXF, STEP, EPLAN, and eCl@ss advanced formats and apply it directly to your project engineering. Not only does this save you a significant amount of valuable engineering time, but you also benefit from the configurable manuals when creating custom project documentation using My Documentation Manager.



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



TIA Selection Tool: Power supply selection based on technical specifications

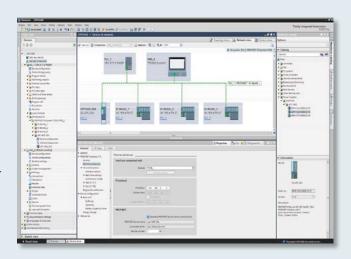
Did you know that... SITOP PSU8600 and SITOP UPS1600 (version with IE/PN interface) have integrated Web servers that they can use for commissioning and remote diagnostics?

Convenient engineering in the TIA Portal

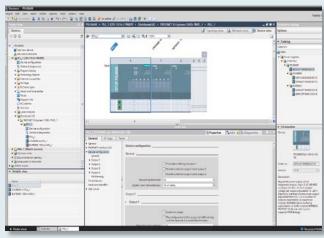
You can easily perform the engineering tasks for the SITOP PSU8600 power supply system and the SITOP UPS1600 uninterruptible power supply via the TIA Portal. Device selection and network connection are a simple matter of dragand-drop or copy-and-paste. In addition, function blocks for SIMATIC S7-300, 400, 1200, and 1500 are available for integrating the power supply system and DC UPS into STEP 7 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 through system integration of 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 \$7-300/400/1200/1500
- Fast integration into operation and monitoring with faceplates for SIMATIC panels and SIMATIC WinCC



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



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



siemens.com/ tia-selection-tool

SITOP Manager – new software for easily integrating SITOP PSU8600 and SITOP UPS1600 to open systems



Did you know that ... with the SITOP Manager software tool, you can conveniently configure, commission, and diagnose all communication-capable SITOP power supplies?

Optimal interoperability with different control systems: SITOP Manager – the new Windows software for the SITOP PSU8600 power supply system and SITOP UPS1600 uninterruptible power supply is available free of charge.

High performance for configuration

With the SITOP Manager software, all the power supplies in a network can be parameterized and diagnosed by a PC with the Windows 7 or 10 operating system. This is ideal, especially if plant configuration and programming isn't performed via the TIA Portal or SIMATIC Step 7. Thanks to a user interface based on a Web browser, the application can also run on mobile terminals and automatically adapts the display size.

With the user-friendly SITOP Manager software, it's easy to parameterize the SITOP PSU8600 power supply system, including UPS8600 and the SITOP UPS1600 uninterruptible power supply – for example, to define output voltages and current thresholds or to safely shut down PCs in the event of a power failure.

Uncompromising when it comes to security

Communication between SITOP Manager and the connected power supplies is via the open, multi-vendor, Ethernet-based OPC UA communication standard. This standard meets extremely high security requirements for secure data transmission.



The status of the communication-capable SITOP devices can be conveniently obtained via online diagnostics in the SITOP Manager. Here is the operating data for the SITOP UPS1600/UPS1100.

SITOP – the right power supply for every application

| | | Advanced po | ower supplies | lies Standard power supplies | | Basic power supplies | | | |
|--|---|-------------------------------|---|---|--|---|--|---|---|
| | | | SITOP PSU8600 – power supply system with PROFINET and OPC UA | SITOP PSU8200 – The technology power supply for demanding solutions | SITOP PSU6200 – the all-around power supply for a wide range of applications | SITOP smart – The powerful standard power supply | SITOP lite – The costeffec- tive basic power supply | LOGO!Power – The flat power supply for distri- bution boards | SITOP compact – The slim power supply unit for control boxes |
| Selection matrix of the SITOP DIN rail power supply units according to performance data and range of functions | | | | | | | | | |
| Input/output | Input | AC/DC | $_{ m 3}\sim$ | 1,2,3 ~ = | 1 ~ = | 1,3 \sim | 1 \sim | 1 ~ = | 1 ~ = |
| | Rated power up to approx. | Р | 960 W | 960 W | 480 W | 960 W | 480 W | 100 W | 100 W |
| \rightarrow \sim | Rated output voltages | U | 4–28 V DC | 24/36/48 V DC | 12/24 V DC | 12/24 V DC | 24 V DC | 5/12/15/24 V DC | 12/24 V DC |
| | Rated output currents (24 V) | 1 | 20–40 A | 5–40 A | 1.3–20 A | 2.5–40 A | 2.5–20 A | 0.6-4.0 A | 0.6-4.0 A |
| Properties | Overload behavior | P _{max} | Extra Power | Extra Power Power Boost | Extra Power | Extra Power | | Extra power on startup | |
| | Energy efficiency | | +++ PROFEnergy | + + + | + + + | + + | + | + + | + + |
| Stands . | Automation integration | | epogu ndedn sopc ua | —— DC o.k. Remote on/off | DC o.k. Diagnostics interface | —— DC o.k. | | | |
| Safety, environment | Explosion protection: ATEX, IECEx, or FM | $\langle \xi_{\rm X} \rangle$ | • | • | | • | | • | • |
| | Marine approval: DNV GL or ABS | <u> </u> | • | • | in preparation | • | | • | |
| 2 | Ambient temperature range | | −25 +60 °C | −25 +70 °C | −25+70 °C | −25 +70 °C | 0 +60 °C | −25 +70 °C | −20 +70 °C |
| 24-V power supply units expandable | Redundancy module | | • | • | • | • | • | • | • |
| with | Selectivity module | -D 1> | integrated | • | • | • | • | • | • |
| [325) | Buffer module | | integrated | • | • | • | | | |
| | DC UPS with Ultracaps | min | integrated | • | • | • | • | • | • |
| | DC UPS with batteries | - <u>+</u> h | integrated | • | • | • | • | • | • |

Our answers to your requirements with regard to a highperformance power supply:

The selection of the power supply unit is based on the input and output data. On the following two pages (pages 18 and 19), you will find a selection table with the available SITOP power supply units and the product lines to which they belong. The technical data is located on the subsequent pages under the corresponding product line.

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

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

Selection table SITOP power supplies

| Input voltage | Output | | | | | | | | | SITOP DC/DC |
|---------------------|------------------|--------------------|-----------------------------|--------------------|--------------------|---------------|---------------------|---------------------------|--------------------------|----------------------------|
| | current | Advanced po | ower supplies | Standard po | ower supplies | | Basic power supplie | | SIMATIC design | converter |
| | | SITOP PSU8600 | SITOP PSU8200 | SITOP PSU6200 | SITOP smart | SITOP lite | LOGO!Power | SITOP compact | | |
| DC 24-V output v | voltage | | | | | | | | | |
| 1-phase | 0.6 A | | | | | | 6EP3330-6SB00-0AY0 | 6EP1331-5BA00 | | |
| 120 V, 230 V AC | 1.3 A | | | 6EP3331-7SB00-0AX0 | | | 6EP3331-6SB00-0AY0 | 6EP1331-5BA10 | | |
| | 2 A | | | | | | | | 6ES7307-1BA01-0AA0 | |
| | 2.5 A | | | 6EP3332-7SB00-0AX0 | 6EP1332-2BA20 | 6EP1332-1LB00 | 6EP3332-6SB00-0AY0 | 6EP1332-5BA00 | 6EP1332-1SH71 | |
| | 3 A | | | | | | | | 6EP1332-4BA00 | |
| | 3.5 A | | | | | | | | 6EP1332-1SH31 | |
| | 3.7 A | | | 6EP3333-7LB00-0AX0 | | | | 6EP1332-5BA20 | | |
| | 4 A | | | | | | 6EP3333-6SB00-0AY0 | 6EP1332-5BA10 | | |
| | 5 A | | 6EP1333-3BA10 | 6EP3333-7SB00-0AX0 | 6EP1333-2BA20 | 6EP1333-1LB00 | | | 6ES7307-1EA01-0AA0 | |
| | | | 6EP3333-8SB00-0AY0 | | | | | | 6ES7307-1EA80-0AA0 | |
| | | | | | | | | | 6EP7133-6AB00-0BN0 | |
| | 6.2 A | | | | | | | | | |
| | 8 A | | | | | | | | 6EP1333-4BA00 | |
| | 10 A | | 6EP1334-3BA10 | 6EP3334-7SB00-3AX0 | | 6EP1334-1LB00 | | | 6ES7307-1KA02-0AA0 | |
| | | | 6EP3334-8SB00-0AY0 | | 6EP1334-2AA01-0AB0 | | | | 6EP7133-6AE00-0BN0 | |
| | 12.5 A | | | | | | | | | |
| | 20 A | | 6EP1336-3BA10 | 6EP3336-7SB00-3AX0 | 6EP1336-2BA10 | 6EP1336-1LB00 | | | | |
| | 40 A | | 6EP3337-8SB00-0AY0 | | | | | | | |
| 3-phase | 5 A | | 6EP1333-3BA10 ¹⁾ | | 6EP1433-2BA20 | | | | | |
| 400-500 V AC | 8 A | | | | | | | | 6ES7148-4PC00-0HA0 | |
| | 10 A | | 6EP1334-3BA10 ¹⁾ | | 6EP1434-2BA20 | | | | | |
| | 17A | | | | | | | | | |
| | 20 A | | 6EP3436-8SB00-0AY0 | | 6EP1436-2BA10 | | | | | |
| | | 6EP3436-8SB00-2AY0 | | | | | | | | |
| | 20 A/ 4 x 5 A | 6EP3436-8MB00-2CY0 | | | | | | | | |
| | 30 A | | | | | | | | | |
| | 40 A | | 6EP3437-8SB00-0AY0 | | 6EP1437-2BA20 | | | | | |
| | | 6EP3437-8SB00-2AY0 | | | | | | | | |
| | 40 A/ | CED2427 OMBOO 26VO | | | | | | | | |
| | 4 x 10 A | 6EP3437-8MB00-2CY0 | | | | | | | | |
| 12 V DC | 4 A | | | | | | | | | 6EP3133-0TA10-0AY0 |
| 24-110 V DC | 2 A | | | | | | | | 6ES7305-1BA80-0AA0 | |
| 24 V DC | 5 A | | | | | | | | | 6EP3133-0TA00-0AY0 |
| | 10 A | | | | | | | | | 6EP3134-0TA00-0AY0 |
| | 3,5 A | | | | | | | | | 6EP3233-0TA10-0AY0 |
| 48 V DC | 5 A | | | | | | | | | 6EP3233-0TA00-0AY0 |
| | 10 A | | | | | | | | | 6EP3234-0TA00-0AY0 |
| | 0.6 A | | | | | | 6EP3330-6SB00-0AY0 | | | |
| | 1.3 A | | | 6EP3331-7SB00-0AX0 | | | 6EP3331-6SB00-0AY0 | | | |
| | 2.5 A | | | 6EP3332-7SB00-0AX0 | | | 6EP3332-6SB00-0AY0 | | | |
| 110-300 V DC | 3.7 A | | | 6EP3333-7LB00-0AX0 | | | | 6EP1332-5BA20 | | |
| 120-240 V DC | 4 A | | | (FD2222 F | | | 6EP3333-6SB00-0AY0 | 6EP1332-5BA10 | | |
| | 5 A | | | 6EP3333-7SB00-0AX0 | | | | | | |
| | 10 A | | | 6EP3334-7SB00-3AX0 | | | | | | |
| | 20 A | | | 6EP3336-7SB00-3AX0 | | | | | | |
| 88350 (370) V DC | 20 A | | 6EP1336-3BA10 | | | 6EP1336-1LB00 | | | | |
| 600 V DC | 20 A | | | | | | | | | 6EP1536-3AA00 |
| 18 | | | | | | | 1) Conr | nection to two phases 230 | 0-500 V AC - sheet 24/25 | , SITOP PSU200M 1-/2-phase |

| Special designs |
|------------------------------|
| |
| |
| |
| |
| 6EP1331-1LD00 |
| CER4222 41 DOO |
| 6EP1332-1LD00 |
| |
| 6EP1332-1LD10 |
| 6EP1333-1AL12 |
| 6EP1333-7CA00 |
| |
| 6EP1333-1LD00 |
| 6EP1334-7CA00 |
| 6EP1334-1AL12 |
| 6EP3343-0SA00-0AY0 |
| 6EP1334-1LD00 |
| |
| 6EP1433-0AA00 |
| 6ES7148-4PC00-0HA0 |
| 0E37148-4PC00-0HA0 |
| 6EP3436-8UB00-0AY0 |
| 0EF3430-0UBUU-UATU |
| |
| |
| |
| 6EP3437-8UB00-0AY0 |
| 6EP3437-8UB00-0AY0 |
| |
| |
| |
| 6ED1722 0AAO (25 of 40 V DC) |
| 6EP1732-0AA0 (as of 48 V DC) |

| Input voltage | Output current | Advanced po | ower supplies | Standard po | wer supplies | Basic pow | er supplies | SITOP DC/DC converter | Special designs and applications |
|-----------------------------------|---|--------------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------------|----------------------------------|
| | | SITOP PSU8600 | SITOP PSU8200 | SITOP PSU6200 | SITOP smart | LOGO!Power | SITOP compact | | |
| Output voltage 5, 12, 15, 48, etc | ., V DC | | | | | | | | |
| 1-phase | 5 V/3 A | | | | | 6EP3310-6SB00-0AY0 | | | |
| 120 V, 230 V AC | 5 V/6.3 A | | | | | 6EP3311-6SB00-0AY0 | | | |
| | 12 V/0.9 A | | | | | 6EP3320-6SB00-0AY0 | | | |
| | 12 V/1.9 A | | | | | 6EP3321-6SB00-0AY0 | | | |
| | 12 V/2.0 A | | | 6EP3321-7SB00-0AX0 | | | 6EP1321-5BA00 | | |
| | 12 V/3.0 A | | | | | | | | 6EP1321-1LD00 |
| | 12 V/4.5 A | | | | | 6EP3322-6SB00-0AY0 | | | |
| | 12 V/6.5 A | | | | | | 6EP1322-5BA10 | | |
| | 12 V/7 A | | | 6EP3323-7SB00-0AX0 | 6EP1322-2BA00 | | | | |
| | 12 V/8.3 A | | | | | | | | 6EP1322-1LD00 |
| | 12 V/12 A | | | 6EP3324-7SB00-3AX0 | | | | | |
| | 12 V/14 A | | | | 6EP1323-2BA00 | | | | |
| | 15 V/1.9 A | | | | | 6EP3321-6SB10-0AY0 | | | |
| | 15 V/4 A | | | | | 6EP3322-6SB10-0AY0 | | | |
| | 48 V/5 A | | | | | | | | 6EP3344-0SB00-0AY0 |
| | 3-52 V/ | | | | | | | | CED2242 OCADO DAVO |
| | 2-10 A | | | | | | | | 6EP3343-0SA00-0AY0 |
| | 2 x 15 V/ | | | | | | | | CED12E2 04 400 |
| | 3.5 A | | | | | | | | 6EP1353-0AA00 |
| 24 V DC | 12 V/2.5 A | | | | | | | 6EP1621-2BA00 | |
| | 12 V/8 A | | | | | | | 6EP3123-0TA00-0AY0 | |
| | 12 V/15 A | | | | | | | 6EP3124-0TA00-0AY0 | |
| 3-phase | 4-28 V/20 A | 6EP3436-8SB00-2CY0 | | | | | | | |
| 400-500 V AC | 4-28 V/ | 6EP3436-8MB00-2CY0 | | | | | | | |
| | 4 x 5 A | | | | | | | | |
| | 4-28 V/ | 6EP3437-8SB00-2CY0 | | | | | | | |
| | 40 A | | | | | | | | |
| | 4-28 V/ | 6EP3437-8MB00-2CY0 | | | | | | | |
| | 4 x 10 A | | | | | | | | |
| | 12 V/20 A | | | | | | | | 6EP3424-8UB00-0AY0 |
| | 36 V/13 A | | 6EP3446-8SB10-0AY0 | | | | | | |
| | 48 V/10 A | | 6EP3446-8SB00-0AY0 | | | | | | |
| | 48 V/20 A | | 6EP3447-8SB00-0AY0 | | | | | | |
| | 4 x 10 A 12 V/20 A 36 V/13 A 48 V/10 A | 2012 | 6EP3446-8SB00-0AY0 | | | | | | 6EP342 |

SITOP PSU8600 advanced power supplies – the first power supply system with complete TIA integration and open communication up to the cloud





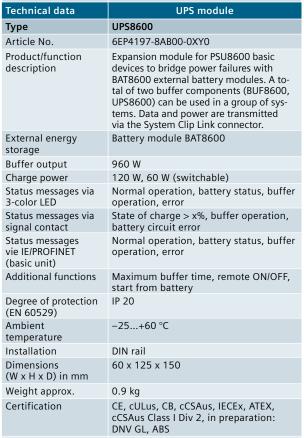
Specifications at rated input voltage and ambient temperature at +25 °C (unless otherwise specified)

SITOP PSU8600 advanced power supplies – the first power supply system with complete TIA integration and open communication up to the cloud

| Technical data | | But | fer module | |
|---|---|---------------------------------------|---|---|
| Buffer time, type | 100 ms/40 A, BUF8600 | 300 ms/40 A, BUF8600 | 4 s/40 A, BUF8600 | 10 s/40 A, BUF8600 |
| Article No. | 6EP4297-8HB00-0XY0 | 6EP4297-8HB10-0XY0 | 6EP4293-8HB00-0XY0 | 6EP4295-8HB00-0XY0 |
| Product/function description | Expansion module for PSU8600 basic de can be used in a group of systems. Data | | ower failures. A total of two buffer compo em Clip Link connector. | nents (BUF8600, UPS8600) |
| Internal energy storage | Electrolytic capacitors | | Double-layer capacitors (Ultracaps) | |
| Buffer time with 24 V DC and load current | | | | |
| 5 A | 800 ms | 2.4 s | 40 s | 80 s |
| 10 A | 400 ms | 1.2 s | 20 s | 40 s |
| 20 A | 200 ms | 600 ms | 10 s | 20 s |
| 40 A | 100 ms | 300 ms | 4 s | 10 s |
| Typical charging time | 19 s | 54 s | 5 min | 10 min |
| Max. power during buffer operation | 60 A for 5 s/min | 60 A for 5 s/min | 40 A | 60 A for 5 s/min |
| Status messages via 3-color LED | Normal operation, state of charge, buffe | er operation, error | Normal operation, state of charge, b | uffer operation, error |
| Status messages via signal contact | - | | State of charge > x %, buffer operation | on |
| Status messages via PROFINET (basic unit) | Normal operation, state of charge, buffe | er operation, error | Normal operation, state of charge, b | uffer operation, error |
| Additional functions | | | Remote on/off contact for deactivati plant to prevent unnecessary discha | ng buffering, e.g., when shutting down the rge |
| Degree of protection (EN 60529) | IP 20 | IP 20 | IP 20 | IP 20 |
| Ambient temperature | −25+60 °C | −25+60 °C | −25+60 °C | −25+60 °C |
| Dimensions (W x H x D) in mm | 60 x 125 x 150 | 125 x 125 x 150 | 60 x 125 x 150 | 125 x 125 x 150 |
| Weight approx. | 1.33 kg | 2.26 kg | 1.25 kg | 1.95 kg |
| Certification | CE, cULus, CB, cCSAus, IECEx, ATEX, cCSAu | s Class I Div 2 CEMIE 47 DNIV CL. ADC | | cCSAus Class I Div 2, SEMI F47, DNV GL, ABs |

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









| Technical data | Battery ı | module | | | |
|---|--|---|--|--|--|
| Туре | BAT8600 Pb | BAT8600 LiFePO4 | | | |
| Article No. | 6EP4145-8GB00-0XY0 | 6EP4143-8JB00-0XY0 | | | |
| Product/function description | External energy storage device for UPS module UPS8600. Connection to the UPS module via plus and minus lines for power transmission as well as via the "Energy Storage Link" for data transmission. The Energy Storage Link enables diagnosis and temperature-controlled charging for maximum battery service life. Up to five identical battery modules can be connected to one UPS module. | | | | |
| Battery/storage technology | Lead (Pb) | Lithium iron phosphate (LiFePO4) | | | |
| Energy content | 380 Wh | 264 Wh | | | |
| Rated voltage | 48 V DC | 48 V DC | | | |
| Voltage range | 42–58 V | 42–58 V | | | |
| Status messages via 3-color LED | State of charge, battery test/capacity test, battery replacement, overtemperature, error | | | | |
| Overload and short- circuit protection | Blade fuse 40 A/58 V | Blade fuse 40 A/58 V | | | |
| Parallel switching | yes, up to five (identical) units | yes, up to five (identical) units | | | |
| Degree of protection (EN 60529) | IP 20 | IP 20 | | | |
| Ambient temperature | −10+50 °C | −10+50 °C | | | |
| Installation | Wall mounting | Wall mounting | | | |
| Dimensions (W x H x D) in mm | 322 x 187 x 110 | 322 x 187 x 110 | | | |
| Weight approx. | 13 kg | 6.5 kg | | | |
| Certification | CE, cURus, CB, cCSAus, IECEx, ATEX, cCSAus Class I Div 2, in preparation: DNV GL, ABS | CE, CB, cCSAus, in preparation: DNV GL, ABS | | | |





| | BAT8600 Pb | BAT8600 LiFePO4 |
|------------------------|------------|---------------------|
| System output capacity | Buffer | times ¹⁾ |
| 120 W | 2 h 4 min | 1 h 56 min |
| 240 W | 57 min | 60 min |
| 480 W | 25 min | 29 min |
| 720 W | 19 min | 22 min |
| 960 W | 10 min | 14 min |
| Charging | Chargin | g times |

| 120 W/60 W (switchable) | 2 h 45 min (120 W) | 2 h 40 min (120 W) |
|----------------------------|-----------------------|-----------------------|
| Ambient temperature | Servio | ce life²) |
| + 20 °C | 4 years | 15 years |
| + 30 °C | 2 years | 10 years |
| + 40 °C | 1 year | 9 years |
| + 50 °C | 0.5 years | 2 years |
| + 40 °C | 1 year | 9 years |

capacity

 $^{^{1)}\}mbox{Typical buffer times for a new fully-charged battery module at 25° C$

²⁾ Typical end of service life according to EUROBAT: reduction to 80% of original capacity

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

SITOP PSU8200 advanced power supplies Technology power supply for demanding applications

| | SILOP PS/USON | pozensel arolls | STOR PSUBOOO | Manage of the second | 311 |
|---|---|--|--|---|---|
| Technical data | | SITOP PSU | 3200 1-phase | | SITOP PSU200M 1-phase/2-phase ²⁾ |
| Output voltage/current, type | 24 V/5 A, PSU8200 | 24 V/10 A, PSU8200 | 24 V/20 A, PSU8200 | 24 V/40 A, PSU8200 | 24 V/5 A, PSU200M |
| Article No. | 6EP3333-8SB00-0AY0 | 6EP3334-8SB00-0AY0 | 6EP1336-3BA10 | 6EP3337-8SB00-0AY0 | 6EP1333-3BA10 |
| Rated input voltage – Range | 120–230 V AC 85132/170264 V AC, automa | tic range switching | 120–230 V AC 85275 V AC or 88350 V DC | 120/230 V AC 85132/170264 V AC, automatic range switching | 120–230/230–500 V AC 85264/176550 V AC |
| Mains buffering | > 35 ms (at 120/230 V) | > 35 ms (at 120/230 V) | > 20 ms (at 120/230 V) | > 25 ms (at 230 V) | > 25 ms (at 120/230 V) |
| Rated line frequency | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz |
| Rated input current – Inrush current ¹⁾ – Recommended miniature circuit breaker | 2.1/1.2 A < 10 A 6 A charact. C or 3RV1021-1xA10 | 4.0/1.9 A < 10 A 10 A charact. C or 3RV1021-1xA10 | 4.6–2.5 A < 20 A 10 A charact. C or 3RV1021-1xA10 | 15.0/8.0 A < 35 A 20 A charact. C or 3RV2411-xxA10 | 2.2–1.2/1.2–0.61 A < 35 A 6 A charact. C or 3RV2011 -1xA10 |
| Rated output voltage – Tolerance – Setting range | 24 V DC ± 3 % 2428.8 V DC | 24 V DC ± 3 % 2428.8 V DC | 24 V DC ± 3 % 2428.8 V DC | 24 V DC ± 3 % 2428.8 V DC | 24 V DC ± 3 % 2428.8 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 | 15 A | 30 A | 60 A | No |
| - Derating | - | from +60 °C (2 %/K) | from +60 °C (3 %/K) | from +60 °C (2.5 %/K) | from +60 °C (2 %/K) |
| Efficiency at rated values, approx. | 93 % | 94% | 93% | 92% | 88% |
| Signaling contact "DC o. k." | Yes | Yes | Yes | Yes | Yes |
| Remote On/Off | Yes | Yes | No | No | No |
| Parallel switching | Yes, output characteristic can be | · · · · · · · · · · · · · · · · · · · | | | |
| Electronic short-circuit protection | | shutdown selectable; constant curre | | | |
| Radio interference suppression (EN 55022) | Class B | Class B | Class B | Class B | Class B |
| Supply harmonics limitation | yes (EN 61000-3-2) | yes (EN 61000-3-2) | yes (EN 61000-3-2) | yes (EN 61000-3-2) | yes (EN 61000-3-2) |
| Degree of protection (EN 60529) | IP20 | IP20 | IP20 | IP20 | IP20 |
| Ambient temperature | −25+70 °C | −25+70 °C | −25+70 °C | −25+70 °C | −25+70 °C |
| Dimensions (W x H x D) in mm | 45 x 125 x 125 | 55 x 125 x 125 | 90 x 125 x 125 | 145 x 145 x 150 | 70 x 125 x 121 |
| Weight approx. | 0.8 kg | 1 kg | 1.5 kg | 3.1 kg | 0.6 kg |
| Certification | CE, cULus, CB, ATEX, IECEx, cCSAI ABS | us Class I Div 2, SEMI F47³), DNV GL, | CE, cULus, ATEX, IECEx, UL Class I Div 2, DNV GL, ABS | CE, cULus, CB, ATEX, IECEx, cCSAus Class I Div 2, SEMI F47 ⁴), DNV GL, ABS | CE, cULus, CB, ATEX, IECEx, UL Class I Div 2, SEMI F47 ³⁾ , DNV GL, ABS |
| | | | | | |

¹⁾ Inrush current can be limited by using a SITOP inrush current limiter: 6EP4683-6LB00-0AY0 (max. 5 A, 100–240 V AC) or 6EP1967-2AA00 (max. 10 A, 100–480 V AC, 1 unit per phase required). 2) Connection to two phases of a three-phase supply network 3) At an input voltage of 208–230 V AC 4) In combination with two buffer modules. Technical data applies at rated input voltage and ambient temperature of +25°C (unless otherwise specified).













| SITOP PSU200M 1-phase/2-phase ²⁾ | SITOP PS | 5U8200 3-phase | SITOP PSU8200 3-phase, 36 V | SITOP PSU820 | 00 3-phase, 48 V |
|--|--|---|--|--|---|
| 24 V/10 A, PSU200M | 24 V/20 A, PSU8200 | 24 V/40 A, PSU8200 | 36 V/13 A, PSU8200 | 48 V/10 A, PSU8200 | 48 V/20 A, PSU8200 |
| 6EP1334-3BA10 | 6EP3436-8SB00-0AY0 | 6EP3437-8SB00-0AY0 | 6EP3446-8SB10-0AY0 | 6EP3446-8SB00-0AY0 | 6EP3447-8SB00-0AY0 ⁴⁾ |
| 120–230/230–500 V AC 85264/176550 V AC | 400–500 V 3 AC 320575 V 3 AC | 400–500 V 3 AC 320575 V 3 AC | 400–500 V 3 AC 320575 V 3 AC | 400–500 V 3 AC 320575 V 3 AC | 400–500 V 3 AC 320575 V 3 AC |
| > 25 ms (at 120/230 V) | > 15 ms (at 400 V) | > 10 ms (at 400 V) | > 15 ms (at 400 V) | > 15 ms (at 400 V) | > 10 ms (at 400 V) |
| 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz |
| 4.4–2.4/2.4–1.1 A < 35 A 6 A charact. C or 3RV2011-1xA10 | 1.2–1.0 A < 18 A 6–16 A charact. C 3-ph. coupled or 3RV2011-1DA10 or 3RV2711-1DD10 | 2.1–1.7 A < 13 A 10–16 A charact. C 3-ph. coupled or 3RV2011-1DA10 or 3RV2711-1DD10 | 1.2–1.0 A < 18 A 6–16 A charact. C 3-ph. coupled or 3RV2011-1DA10 or 3RV2711-1DD10 | 1.2–1.0 A < 18 A 6–16 A charact. C 3-ph. coupled or 3RV2011-1DA10 or 3RV2711-1DD10 | 2–1.7 A < 13 A 10–16 A charact. C 3-ph. coupled or 3RV2011-1DA10 or 3RV2711-1DD10 |
| 24 V DC ± 3 % 2428.8 V DC | 24 V DC ± 3 % 2428.8 V DC | 24 V DC ± 3 % 2428 V DC | 36 V DC ± 3 % 3240 V DC | 48 V DC ± 3 % 4256 V DC | 48 V DC ± 3 % 4656 V DC |
| 10 A | 20 A | 40 A | 13 A | 10 A | 20 A |
| 30 A | 60 A | 120 A | 39 A | 23 A | 60 A |
| No | 30 A | 60 A | 19.5 A | 15 A | 30 A |
| from +60 °C (2 %/K) | from +60 °C (3 %/K) | from +60 °C (4 %/K) | from +60 °C (3 %/K) | from +60 °C (3 %/K) | from +60 °C (4 %/K) |
| 91% | 94% | 94% | 94% | 93 % | 94% |
| Yes | Yes | Yes | Yes | Yes | Yes |
| No | Yes | Yes | Yes | Yes | Yes |
| Yes, output characteristic can be sv | vitched to parallel operation | | | | |
| Yes, constant current or latching sh | nutdown selectable; constant current | : approx. 1.15 x rated output current | | | |
| Class B | Class B | Class B | Class B | Class B | Class B |
| yes (EN 61000-3-2) | yes (EN 61000-3-2) | yes (EN 61000-3-2) | yes (EN 61000-3-2) | yes (EN 61000-3-2) | yes (EN 61000-3-2) |
| IP20 | IP20 | IP20 | IP20 | IP20 | IP20 |
| −25+70 °C | −25+70 °C | −25+70 °C | −10+70 °C | −25+70 °C | −25+70 °C |
| 70 x 125 x 121 | 70 x 125 x 125 | 135 x 145 x 150 | 70 x 125 x 125 | 70 x 125 x 125 | 135 x 145 x 150 |
| 1.4 kg | 1.2 kg | 3.3 kg | 1.2 kg | 1.2 kg | 3.3 kg |
| CE, cULus, CB, ATEX, IECEx, UL Class I Div 2, SEMI F47³), DNV GL, ABS | CE, cULus, CB, ATEX, IECEx, UL Class I Div 2, SEMI F47, DNV GL, ABS | CE, cULus, CB, ATEX, IECEx, cCSAus Class I Div 2, SEMI F47, in preparation: DNV GL, ABS | CE, cULus, CB, cCSAus Class I Div 2 | CE, cULus, CB, ATEX, IECEx, cC- SAus Class I Div 2, DNV GL, ABS | CE, cULus, CB, ATEX, IECEx, cCSAus Class I Div 2, SEMI F47 |

New: SITOP PSU6200 standard power supplies The all-around power supply for a wide range of applications

| | | n | new! | |
|---|--|--------------------|----------------------|---|
| | | | | |
| Technical data | | SITOP P | SU6200 1-phase | |
| Output voltage/current, type | 24 V/1.3 A, PSU6200 | 12 V/2 A, PSU6200 | 24 V/2.5 A, PSU6200 | 24 V/3,7 A, PSU6200 |
| Article No. | 6EP3331-7SB00-0AX0 | 6EP3321-7SB00-0AX0 | 6EP3332-7SB00-0AX0 | 6EP3333-7LB00-0AX0 |
| Rated input voltage | 120-230 V AC/120-240 V DC | | | 120-230 V AC/120-240 V DC |
| – Range | 85–264 V AC/110–275 V DC | | | 85–264 V AC/99–275 V DC |
| Mains buffering | 20 ms | 20 ms | 20 ms | 20 ms |
| Rated line frequency | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz |
| Rated input current | 0.6/0.3 A | 0.5/0.3 A | 1.1/0.6 A | 1.5/0.9 A |
| – Inrush current¹) | < 30 A | < 30 A | < 30 A | < 35 A |
| - Recom. miniature circuit breaker | from 6 A characteristic C | | | |
| Rated output voltage | 24 V | 12 V | 24 V | 24 V |
| - Tolerance | ± 3% | ± 3% | ± 3% | ± 3% |
| – Setting range | 22.2–26.4 V | 10.5–12.9 V | 22.2–26.4 V | 24–28 V |
| Rated output current | 1.3 A | 2 A | 2.5 A | 3.7 A |
| Permanently up to +45 °C | 1.3 A | 2 A | 2.5 A | 3.7 A |
| Overload behavior (extra power for 5 s/min) | - | - | - | - |
| - Derating | from +60 °C (2.5%/K) | - | from +60 °C (2.5%/K) | - |
| Efficiency at rated values, approx. | 86.3% | 83.3% | 89% | 89% |
| Signaling contact | No | No | No | DC o.k. |
| Parallel switching | No | No | No | No |
| Electronic short-circuit protection | Yes, restart | Yes, restart | Yes, restart | Yes, constant current (< 15 V hiccup) |
| Radio interfer. suppression (EN 55022) | Class B | Class B | Class B | Class B |
| Supply harmonics limitation (EN 61000-3-2) | Not applicable | Not applicable | Not applicable | Yes |
| Degree of protection (EN 60529) | IP 20 | IP 20 | IP 20 | IP 20 |
| Ambient temperature | −25+70 °C | −25+70 °C | −25+70 °C | −25+70 °C |
| Dimensions (W x H x D) in mm | 25 x 100 x 88 | 25 x 100 x 88 | 40 x 100 x 88 | 35 x 135 x 125 |
| Weight approx. | 0.2 kg | 0.2 kg | 0.3 kg | 0.7 kg |
| Certification | CE, cULus, CB, in preparation: cCSAus, DNV | 3 | _ | CE, cULus, CB, cCSAus, in preparation: DNV GL, ABS, SEMI F47, NEC Class 2 |

¹⁾ Inrush current can be limited by means of a SITOP inrush current limiter: Article no. 6EP4683-6LB00-0AY0 (max. 5 A, 100–240 V AC)

Technical data applies at rated input voltage and ambient temperature of +25°C (unless otherwise specified)

| | | | new! | | |
|---|--|--------------------------------------|---------------------------------------|--------------------------------------|--|
| | | | | | |
| Technical data | | | SITOP PSU6200 1-phase | | |
| Output voltage/current, type | 24 V/5 A, PSU6200 | 12 V/7 A, PSU6200 | 24 V/10 A, PSU6200 | 12 V/12 A, PSU6200 | 24 V/20 A, PSU6200 |
| Article No. | 6EP3333-7SB00-0AX0 | 6EP3323-7SB00-0AX0 | 6EP3334-7SB00-3AX0 | 6EP3324-7SB00-3AX0 | 6EP3336-7SB00-3AX0 |
| Rated input voltage | 120-230 V AC/120-240 V DC | | 120-230 V AC/110-240 V DC | | |
| - Range | 85-264 V AC/99-275 V DC | | 85-264 V AC/85-275 V DC | | |
| Mains buffering | 20 ms | 20 ms | 20 ms | 20 ms | 20 ms |
| Rated line frequency | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz |
| Rated input current | 1.9/1.2 A | 1.5/0.9 A | 2.2/1.2 A | 1.3/0.8 A | 4.4/2.3 A |
| - Inrush current ¹⁾ | < 35 A | < 35 A | < 10 A | < 10 A | < 10 A |
| - Recom. miniature circuit breaker | from 6 A characteristic C | | from 10 A characteristic C | from 6 A characteristic C | from 10 A characteristic C |
| Rated output voltage | 24 V | 12 V | 24 V | 12 V | 24 V |
| - Tolerance | ± 3% | ± 3% | ± 3% | ± 3% | ± 3% |
| – Setting range | 24–28 V | 12–15.5 V | 24–28 V | 12–15,5 V | 24–28 V |
| Rated output current | 5 A | 7 A | 10 A | 12 A | 20 A |
| Permanently up to +45 °C | 6 A | 8.4 A | 12 A | 14.4 A | 24 A |
| Overload behavior (extra power for 5 s/min) | 7.5 A | 10.5 A | 15 A | 18 A | 30 A |
| - Derating | from +60 °C (3 %/K) | from +60 °C (3%/K) | from +60 °C (3 %/K) | from +60 °C (3 %/K) | from +60 °C (3 %/K) |
| Efficiency at rated values, approx. | 90.2% | 87.1% | 93% | 89.9% | 95.5% |
| Signaling contact | DC o.k. | DC o.k. | DC o.k./Diagnose | DC o.k./Diagnose | DC o.k./Diagnose |
| Parallel switching | No | No | Yes | Yes | Yes |
| Electronic short-circuit protection | Yes, constant current (< 15 V hiccup) | Yes, constant current (< 9 V hiccup) | Yes, constant current (< 15 V hiccup) | Yes, constant current (< 9 V hiccup) | Yes, constant current (< 15 V hiccup) |
| Radio interfer. suppression (EN 55022) | Class B | Class B | Class B | Class B | Class B |
| Supply harmonics limitation (EN 61000-3-2) | Yes | Yes | Yes | Yes | Yes |
| Degree of protection (EN 60529) | IP 20 | IP 20 | IP 20 | IP 20 | IP 20 |
| Ambient temperature | −25+70 °C | −25+70 °C | −25+70 °C | −25+70 °C | −25+70 °C |
| Dimensions (W x H x D) in mm | 35 x 135 x 125 | 35 x 135 x 125 | 45 x 135 x 125 | 45 x 135 x 125 | 70 x 135 x 155 |
| Weight approx. | 0.7 kg | 0.7 kg | 0.9 kg | 0.9 kg | 1.5 kg |
| Certification | CE, cULus, CB, in preparation: cCSAu | s, DNV GL, ABS, SEMI F47 | | | |

SITOP smart standard power supplies The high-performance standard power supply

| | State of the state | moreth | | | | |
|---|--|--|--|---|---|---|
| Technical data | | | SITOI | P smart 1-phase | | |
| Output voltage/current, type | 24 V/2.5 A, PSU100S | 24 V/5 A, PSU100S | 12 V/7 A, PSU100S | 24 V/10 A, PSU100S | 12 V/14 A, PSU100S | 24 V/20 A, PSU100S |
| Article No. | 6EP1332-2BA20 | 6EP1333-2BA20 | 6EP1322-2BA00 | 6EP1334-2BA20 | 6EP1323-2BA00 | 6EP1336-2BA10 |
| Rated input voltage | 120/230 V AC | 120/230 V AC | 120/230 V AC | 120/230 V AC | 120/230 V AC | 120/230 V AC |
| – Range | 85132/170264 V AC, au | tomatic 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 ¹⁾ - Recommended miniature circuit breaker | 1.25 A/0.74 A < 33 A from 3 A characteristic C | 2.34 A/1.36 A < 40 A from 6 A characteristic C | 1.73 A/0.99 A < 45 A from 6 A characteristic C | 4.49 A/1.91 A < 60 A from 10 A characteristic C | 3.24 A/1.41 A < 60 A from 10 A characteristic C | 7.5/3.5 A < 11 A from 10 A characteristic C |
| Rated output current – Tolerance – Setting range | 24 V DC ± 3 % 22.828 V DC | 24 V DC ± 3 % 22.828 V DC | 12 V DC ± 3 % 11.515.5 V DC | 24 V DC ± 3 % 22.828 V DC | 12 V DC ± 3 % 11.515.5 V DC | 24 V DC ± 3 % 2428 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 |
| Elec. short-circuit protection | Yes, constant current | Yes, constant current | Yes, constant current | Yes, constant current | Yes, constant current | Yes, restart |
| Radio int. sup. (EN 55022) | Class B | Class B | Class B | Class B | Class B | Class B |
| Supply harmonics limitation (EN 61000-3-2) | Not applicable | Yes | Yes | Yes | Yes | Yes |
| Degree of protection (EN 60529) | IP20 | IP20 | IP20 | IP20 | IP20 | IP20 |
| Ambient temperature | −25+70 °C | −25+70 °C | −25+70 °C | −25+70 °C | −25+70 °C | −25+70 °C |
| Dimensions (W x H x D) in mm | 32.5 x 125 x 120 | 50 x 125 x 120 | 50 x 125 x 120 | 70 x 125 x 120 | 70 x 125 x 120 | 115 x 145 x 150 |
| Weight approx. | 0.32 kg | 0.5 kg | 0.5 kg | 0.8 kg | 0.8 kg | 2.4 kg |
| Certification | CE, cULus, CB, ATEX, IECEx, cCSAus Class I Div 2, DNV GL, BV | <u> </u> | • | • | | CE, cULus, CB, ATEX, IECEx, cCSAus Class I Div 2, DNV GL |









| | | P smart 3-phase | |
|--|---|---|--|
| 24 V/5 A, PSU300S | 24 V/10 A, PSU300S | 24 V/20 A, PSU300S | 24 V/40 A, PSU300S |
| 6EP1433-2BA20 | 6EP1434-2BA20 | 6EP1436-2BA10 | 6EP1437-2BA20 |
| 400–500 V 3 AC | 400–500 V 3 AC | 400–500 V 3 AC | 400–500 V 3 AC |
| 340550 V 3 AC | 340550 V 3 AC | 340550 V 3 AC | 340550 V 3 AC |
| > 6 ms (at 400 V) | > 6 ms (at 400 V) | > 6 ms (at 400 V) | > 6 ms (at 400 V) |
| 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz |
| 0.45–0.4 A < 40 A 6–16 A charact. C 3-ph. coupled or 3RV2011-1DA10 or 3RV2711-1DD10 | 0.7–0.6 A < 50 A 6–16 A charact. C 3-ph. coupled or 3RV2011-1DA10 or 3RV2711-1DD10 | 1.2–1.0 A < 36 A 6–16 A charact. C 3-ph. coupled or 3RV2011-1DA10 or 3RV2711-1DD10 | 2.0–1.5 A < 60 A 10–16 A charact. C 3-ph. coupled or 3RV2011-1DA10 or 3RV2711-1DD10 |
| 24 V DC ± 3 % 2428 V DC | 24 V DC ± 3 % 2428 V DC | 24 V DC ± 3 % 2428 V DC | 24 V DC ± 3 % 2428 V DC |
| 5 A 6 A 7.5 A | 10 A 12 A 15 A | 20 A 24 A 30 A | 40 A 48 A 60 A |
| from +60 °C (3 %/K) | from +60 °C (3 %/K) | from +60 °C (5 %/K) | from +60 °C (2.5 %/K) |
| 89 % | 91 % | 91% | 91.5% |
| res . | Yes | Yes | Yes |
| res . | Yes | Yes | Yes |
| es, constant current | Yes, constant current | Yes, restart | Yes, restart |
| Class B | Class B | Class B | Class B |
| ⁄es | Yes | Yes | Yes |
| P20 | IP20 | IP20 | IP20 |
| -25+70 °C | −25+70 °C | 0+70 °C | 0+70 °C |
| 50 x 125 x 120 | 70 x 125 x 120 | 90 x 145 x 150 | 150 x 145 x 150 |
| 0.43 kg | 0.67 kg | 1.6 kg | 3.7 kg |
| CE, cULus, CB, ATEX, UL Class I Div 2, IECEx, DNV GL, ABS | CE, cULus, CB, ATEX, UL Class I Div 2, IECEx, DNV GL, ABS | CE, cULus, CB, ATEX, UL Class I Div 2, IECEx, DNV GL, ABS | CE, cULus, CB, ATEX, cCSAus Class I Div 2, IECEx, DNV GL, ABS |

LOGO!Power basic power supplies Flat power supply for distribution boards

| Technical data | 18-mn | າ design | | | 36-mm design | |
|--|--|-----------------------------|---|---|---|--|
| Output voltage/current | 12 V/0.9 A | 24 V/0.6 A | 5 V/3 A | 12 V/1.9 A | 15 V/1.9 A | 24 V/1.3 A |
| NEC Class 2 | Yes | Yes | Yes | Yes | Yes | Yes |
| Article No. | 6EP3320-6SB00-0AY0 | 6EP3330-6SB00-0AY0 | 6EP3310-6SB00-0AY0 | 6EP3321-6SB00-0AY0 | 6EP3321-6SB10-0AY0 | 6EP3331-6SB00-0AY0 |
| Rated input voltage – Range | 100–240 V AC 85264 V AC/110300 V DC | | 100–240 V AC 85264 V AC/11030 | 0 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 | 0.3-0.2 A | 0.3-0.2 A | 0.36-0.22 A | 0.53-0.30 A | 0.63-0.33 A | 0.70-0.35 A |
| Inrush current¹⁾ Recommended miniature circuit | < 20 A from 6 A characteristic B or from | < 20 A | < 26 A | < 25 A B or from 2 A characteris | < 25 A | < 25 A |
| breaker | Hom o A characteristic B of the | JIII 2 A CHAIACIEIISIIC C | Hom o A characteristic | b of from 2 A characteris | tic C | |
| Rated output voltage – Tolerance | 12 V DC ± 3 % | 24 V DC | 5 V DC ± 3 % | 12 V DC | 15 V DC | 24 V DC |
| Setting range | None | | 4.65.4 V DC | 10.516.1 V DC | 10.516.1 V DC | 22.226.4 V DC |
| Rated output current - Overload behavior on startup - Derating | 0.9 A 1.35 A (for 200 ms) | 0.6 A 0.9 A (for 200 ms) | 3.0 A 4.5 A (for 200 ms) from +55 °C (2 %/K) | 1.9 A 2.85 A (for 200 ms) from +55 °C (2 %/K) | 1.9 A 2.85 A (for 200 ms) from +55 °C (2 %/K) | 1.3 A 1.95 A (for 200 ms) from +55 °C (2 %/K) |
| Efficiency at rated values, approx. | 78% | 81% | 76% | 81% | 83 % | 86% |
| Signaling contact "DC o. k." | No | | No | No | No | No |
| Parallel switching | No | No | Yes | Yes | Yes | Yes |
| No-load loss | < 0.3 W | | < 0.3 W | | | |
| Electronic short-circuit protection | Yes, constant current | | Yes, constant current | | | |
| Radio interference suppression (EN 55022) | Class B | | Class B | | | |
| Supply harmonics limitation (EN 61000-3-2) | Not applicable | | Not applicable | | | |
| Degree of protection (EN 60529) | IP20 | | IP20 | | | |
| Ambient temperature | −25 +70 °C | | −25 +70 °C | | | |
| Dimensions (W x H x D) in mm | 18 x 90 x 53 | | 36 x 90 x 53 | | | |
| Weight approx. | 0.07 kg | 0.07 kg | 0.12 kg | | | |
| Certification | CE, CB Scheme, cULus, cURus, Class 1 Div 2, FM, SEMI F47, D | | CE, CB Scheme, cULus, ATEX, IECEx, Class 1 Div DNV GL, ABS, EAC | | NEC Class 2, ATEX, IECEx, Class | CE, CB Scheme, cULus, cURus, NEC Class 2, ATEX, IECEx, Class 1 Div 2, FM, SEMI F47, DNV GL, ABS, BV, LRS, EAC |
| | | | | | | |





| Technical data | | 72-m | m design | | 72-mm design |
|--|---|---|---|--|--|
| Output voltage/current | 5 V/6.3 A | 12 V/4.5 A | 15 V/4 A | 24 V/2.5 A | 24 V/4 A |
| NEC Class 2 | no | no | yes | yes | no |
| Article No. | 6EP3311-6SB00-0AY0 | 6EP3322-6SB00-0AY0 | 6EP3322-6SB10-0AY0 | 6EP3332-6SB00-0AY0 | 6EP3333-6SB00-0AY0 |
| Rated input voltage – Range | 100–240 V AC 85264 V AC/110300 V DC | | | | 100–240 V AC 85264 V AC/110300 V DC |
| Mains buffering | > 40 ms (at 187 V) | | | | > 40 ms (at 187 V) |
| Rated line frequency | 50/60 Hz | | | | 50/60 Hz |
| Rated input current - Inrush current 1) | 0.71–0.37 A < 50 A | 1.13–0.61 A < 50 A | 1.24–0.68 A < 55 A | 1.22-0.66 A < 52 A | 1.95–0.97 A < 31 A |
| Recommended miniature circuit breaker | from 10 A characteristic B or fro | om 6 A characteristic C | | | from 10 A characteristic B or from 6 A characteristic C |
| Rated output voltage – Tolerance | 5 V DC ± 3 % | 12 V DC | 15 V DC | 24 V DC | 24 V DC ± 3 % |
| Setting range | 4.65.4 V DC | 10.516.1 V DC | 10.516.1 V DC | 22.226.4 V DC | 22.226.4 V DC |
| Rated output current - Overload behavior on startup - Derating | 6.3 A 9.45 A (for 200 ms) from +55 °C (2 %/K) | 4.5 A 6.75 A (for 200 ms) from +55 °C (2 %/K) | 4.0 A 6.0 A (for 200 ms) from +55 °C (2 %/K) | 2.5 A 3.75 A (for 200 ms) from +55 °C (2 %/K) | 4.0 A 6.0 A (for 200 ms) from +55 °C (2%/K) |
| Efficiency at rated values, approx. | 80% | 87% | 88% | 90% | 89 % |
| Signaling contact "DC o. k." | No | No | No | No | No |
| Parallel switching | Yes | Yes | Yes | Yes | Yes |
| No-load loss | < 0.3 W | | | | < 0.3 W |
| Electronic short-circuit protection | Yes, constant current | | | | Yes, constant current |
| Radio interference suppression (EN 55022) | Class B | | | | Class B |
| Supply harmonics limitation (EN 61000-3-2) | Not applicable | | | | Yes |
| Degree of protection (EN 60529) | IP20 | | | | IP20 |
| Ambient temperature | −25 +70 °C | | | | −25 +70 °C |
| Dimensions (W x H x D) in mm | 54 x 90 x 53 | | | | 72 x 90 x 53 |
| Weight approx. | 0.2 kg | | | | 0.29 kg |
| Certification | CE, CB Scheme, cULus, cURus, ATEX, IECEx, Class 1 Div 2, FM, SEMI F47, DNV GL, ABS, EAC | | CE, CB Scheme, cULus, cURus, NEC Class 2, ATEX, IECEx, Class 1 Div 2, FM, SEMI F47, DNV GL, ABS, EAC | CE, CB Scheme, cULus, cURus, NEC Class 2, ATEX, IECEx, Class 1 Div 2, FM, SEMI F47, DNV GL, ABS, BV, LRS, EAC | CE, CB Scheme, cULus, cURus, ATEX, IECEx, Class 1 Div 2, FM, DNV GL, ABS, SEMI F47, BV, LRS, EAC |
| | | | | | |

SITOP lite basic power supplies The cost-effective basic power supply

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|---|---|-----------------------------------|-----------------------------------|---------------------------------------|
| Technical data | | | SITOP lite | |
| Output voltage / current, type | 24 V/2.5 A, PSU100L | 24 V/5 A, PSU100L | 24 V/10 A, PSU100L | 24 V/20 A, PSU100L |
| Article No. | 6EP1332-1LB00 | 6EP1333-1LB00 | 6EP1334-1LB00 | 6EP1336-1LB00 |
| Rated input voltage – Range | 120/230 V AC 93132/187264 V AC | 120/230 V AC 93132/187264 V AC | 120/230 V AC 93132/187264 V AC | 100–240 V AC 85264 V AC/88370 V DC |
| Mains buffering | > 20 ms (at 93/187 V) | > 20 ms (at 93/187 V) | > 20 ms (at 93/187 V) | > 20 ms (at 93/187 V) |
| Rated line frequency | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz |
| Rated input current – Inrush current ¹⁾ | 1.0/0.65 A < 27 A | 2.1/1.15 A < 32 A | 4.3/2.0 A < 65 A | 5.55/2.35 A < 45 A |
| Recommended miniature circuit breaker | 3 A characteristic C | 6 A characteristic C | 10 A characteristic C | 10 A characteristic C |
| Rated output voltage – Tolerance – Setting range | 24 V DC ± 3 % 22.826.4 V DC | 24 V DC ± 3 % 22.826.4 V DC | 24 V DC ± 3 % 22.826.4 V DC | 24 V DC ± 3 % 22.828 V DC |
| Rated output current – Derating | 2.5 A from +45 °C (1.5 %/K) | 5 A from +45 °C (1.5 %/K) | 10 A from +45 °C (2 %/K) | 20 A from +45 °C (2.5 %/K) |
| Efficiency at rated values, approx. | 85% | 86% | 89 % | 92% |
| Signaling contact "DC o. k." | No | No | No | No |
| Parallel switching | Yes | Yes | Yes | Yes |
| Electronic short-circuit protection | Yes, constant current | Yes, constant current | Yes, constant current | Yes, constant current |
| Radio int. sup. (EN 55022) | Class A | Class A | Class A | Class B |
| Supply harmonics limitation (EN 61000-3-2) | Not applicable | No | No | Yes |
| Degree of protection (EN 60529) | IP20 | IP20 | IP20 | IP20 |
| Ambient temperature | 0 +60 °C | 0 +60 °C | 0 +60 °C | −25 +70 °C |
| Dimensions (W x H x D) in mm | 32.5 x 125 x 120 | 50 x 125 x 120 | 70 x 125 x 120 | 110 x 125 x 125 |
| Weight approx. | 0.4 kg | 0.5 kg | 0.75 kg | 1.8 kg |
| Certification | CE, cULus, CB-Scheme | CE, cULus, CB-Scheme | CE, cULus, CB-Scheme | CE, cULus, CB-Scheme |

¹⁾ Inrush current can be limited by a SITOP inrush current limiter: 6EP4683-6LB00-0AY0 (max. 5 A, 100–240 V AC) or 6EP1967-2AA00 (max. 10 A, 100–480 V AC)

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

SITOP compact basic power supplies Slim power supply for control boxes

| Technical data | Overall width 22.5 mm | Overall w | ridth 30 mm | Overall width 45 mm | | Overall width 52.5 m | m |
|---|--|--|--|--|--|--|---|
| Output voltage/current, type | 24 V/0.6 A, PSU100C | 24 V/1.3 A, PSU100C | 12 V/2 A, PSU100C | 24 V/2.5 A, PSU100C | 24 V/4 A, PSU100C | 24 V/3.7 A, PSU100C NEC Class 2 | 12 V/6.5 A, PSU100C |
| NEC Class 2 | yes | yes | no | yes | no | yes | no |
| Article No. | 6EP1331-5BA00 | 6EP1331-5BA10 | 6EP1321-5BA00 | 6EP1332-5BA00 | 6EP1332-5BA10 | 6EP1332-5BA20 | 6EP1322-5BA10 |
| Rated input voltage – Range | AC 100–230 V AC 85264 V/ DC 110 | .300 V | | | | | |
| Mains buffering | > 20 ms (at 120/230 V A | 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 - Inrush current ¹⁾ - Recommended miniature circuit breaker | 0.28–0.18 A < 28 A 10 A characteristic C, 16 A characteristic B | 0.63–0.31 A < 34 A 10 A characteristic C, 16 A characteristic B | 0.63–0.31 A < 33 A 10 A characteristic C, 16 A characteristic B | 1.33–0.67A < 31 A 10 A characteristic C, 16 A characteristic B | 2.25–1.15 A < 34 A 10 A characteristic C, 16 A characteristic B | 1.21–0.67 A < 30 A 10 A characteristic C, 16 A characteristic B | 1.6–0.75 A < 31 A 10 A characteristic C, 16 A characteristic B |
| Rated output voltage – Tolerance – Setting range | 24 V DC ± 3 % - | 24 V DC ± 3 % 22.226.4 V DC | 24 V DC ± 3 % 10.512.9 V DC | 24 V DC ± 3 % 22.226.4 V DC | 24 V DC ± 3 % 22.226.4 V DC | 24 V DC ± 3 % - | 12 V DC ± 3 % 10.512.9 V |
| 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 |
| Electronic short-circuit protection | Yes, restart | Yes, restart | Yes, restart | Yes, restart | Yes, restart | Yes, restart | Yes, restart |
| Radio int. sup. (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 (W x H x D) in mm | 22.5 x 80 x 100 | 30 x 80 x 100 | 30 x 80 x 100 | 45 x 80 x 100 | 52.5 x 80 x 100 | 52.5 x 80 x 100 | 52.5 x 80 x 100 |
| Weight approx. | 0.12 kg | 0.17 kg | 0.12 kg | 0.22 kg | 0.32 kg | 0.32 kg | 0.32 kg |
| Connections ²⁾ | Removable screw termin | nal | | | | | |
| Certification | CE, cULus, cCSAus, CB, NEC Class 2, ATEX, cCSAus Class I Div 2, DNV GL, ABS | CE, cULus, cCSAus, CB, NEC Class 2, ATEX, cCSAus Class I Div 2, DNV GL, ABS | CE, cULus, cCSAus, CB, ATEX, cCSAus Class I Div 2, DNV GL, ABS | CE, cULus, cCSAus, CB, NEC Class 2, ATEX, cCSAus Class I Div 2, DNV GL, ABS | CE, cULus, cCSAus, CB, ATEX, cCSAus Class I Div 2, DNV GL, ABS | CE, cULus, CB, NEC Class 2, cCSAus Class I Div 2, DNV GL, ABS | CE, cULus, cCSAus, CB, ATEX, cCSAus Class I Div 2, DNV GL, ABS |

¹⁾ Inrush current can be limited by a SITOP inrush current limiter: 6EP4683-6LB00-0AY0 (max. 5 A, 100–240 V AC).

²⁾ Accessories: removable spring terminals, Order No. 6EP1971-5BA00, packing unit 100 pieces, for 50 SITOP PSU100C power supplies Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

SITOP in SIMATIC design

| | | | | | | | | | 5 |
|---|--|----------------------|----------------------------|--------------------|---------------------------|---------------------------|--------------------|--------------------|---|
| Technical data | SIMATIC S7-1200 design | | SIMATIC S7-300 design | | SIMATIC S7 | -1500 design | SIMATIC E | T 200SP PS | SIMATIC ET 200pro design |
| Output voltage/current, type | | 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/5 A, PS | 24 V/10 A, PS | 24 V/8 A, ET 200pro PS |
| Article No. | 6EP1332-1SH71 | | 6ES7307-1EA01-0AA0 | 6ES7307-1KA02-0AA0 | 6EP1332-4BA00 | 6EP1333-4BA00 | | | 6ES7148-4PC00-0HA0 |
| Rated input voltage | 120/230 V AC, automatic | c range selection | | | | | | | 380-480 V 3 AC |
| - Range | | 85132/170264 V AC | | | 85132/176264 V A | С | 85132/17026 | 4 V AC | 340550 V 3 AC |
| Mains buffering | > 20 ms (at 93/187 V) | | | | | | | | 3 ms (at 400 V) |
| Rated line frequency | 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 | 2.3/ 1.4 A | 4.5/1.9 A | 1 A |
| – Inrush current ¹⁾ | < 13 A | < 22 A | < 20 A | < 55 A | < 23 A | < 67 A | < 40 A | < 60 A | < 40 A |
| Recommended miniature | 16 A charact. B, | 3 A charact. C | 6 A charact. C | 10 A charact. C | from 6 A charact. C, | from 10 A charact. C, | 6 A charact. C | 10 A charact. C | 3RV2021-4NA10 |
| circuit breaker | 10 A charact. C | | o / Charact. C | | from 10 A charact. B | from 16 A charact. B | o / Charact. C | | |
| Rated output voltage | 24 V DC | 24 V DC | 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 % | ± 3% | ± 3% | - 5 %/+3 % |
| – Setting range | - | - | _ | _ | _ | - | 22.828 V DC | 22.828 V DC | _ |
| – On/off switch | No | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No |
| Rated output current | 2.5 A | 2 A | 5 A | 10 A | 3 A | 8 A | 5 A | 10 A | 8 A |
| Overload behavior (Extra Power for 5 s/min) | - | - | - | - | 4.5 A | 12 A | 7.5 A | 15 A | - |
| Efficiency at rated values, approx. | 83 % | 84% | 87% | 90% | 87 % | 90% | 88% | 90% | 88% |
| Signaling contact "DC o. k." | No | No | No | No | No | No | Yes | Yes | Yes, and for overtemperature |
| Parallel switching | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No |
| Electronic short-circuit | Yes, constant current characteristic | Yes, restart | Yes, restart | Yes, restart | Yes, restart | Yes, restart | Yes, constant curr | ent characteristic | Yes, restart |
| Radio interference suppression (EN 55022) | Class B | Class B | 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 | Yes | Yes | No |
| Degree of protection (EN 60529) | IP20 | IP20 | 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 | −30+70 °C | −30+70 °C | −25+55 °C |
| Installation | DIN rail or wall mounting | | rail; mounting adapter for | | on S7-1500 system carrier | on S7-1500 system carrier | DIN rail | | Screw mounting, e.g., on ET 200pro system rail |
| Dimensions (W xH 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 | 160 x 117 x 75 | | 310×135.5 ×90 |
| Weight approx. | 0.3 kg | 0.4 kg | 0.6 kg | 0.8 kg | 0.45 kg | 0.74 kg | 0.5 kg | 0.8 kg | 2.8 kg |
| Certification | CE, cULus, CB, FM, | | Class I Div 2, DNV GL, ABS | | 9 | CEx, cULus Class I Div 2, | | , ABS, DNV GL, FM | |
| | ATEX, cCSAus Class I Div 2, DNV GL, ABS | , 10243, 1127, 20243 | | | FM, DNV GL, ABS, BV | | , cozas, cs, voi | ., | |

DC/DC converter



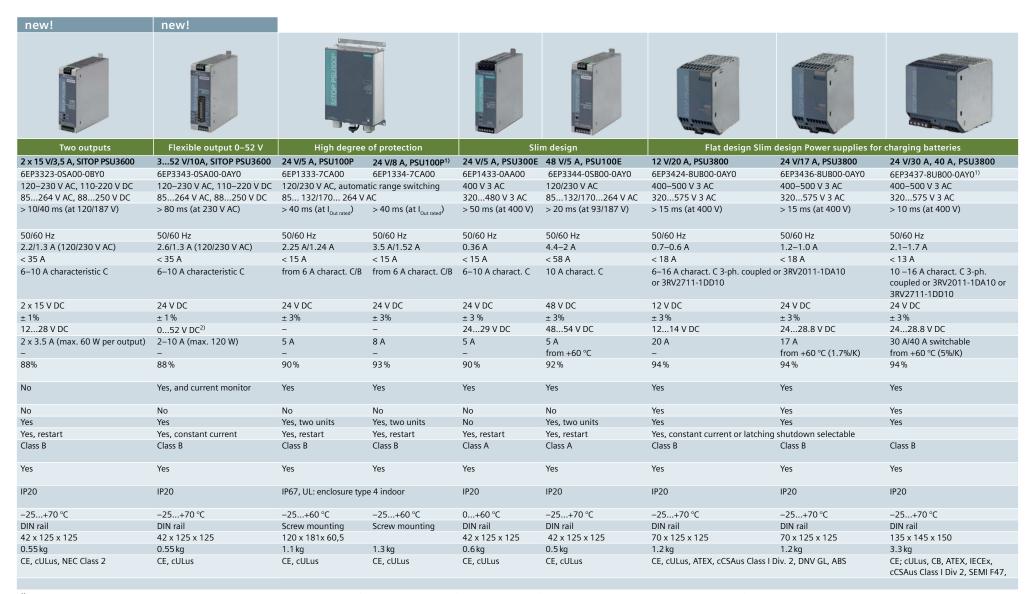
Technical data applies at rated input voltage and ambient temperature of +25°C (unless otherwise specified).

SITOP in special designs and applications



¹⁾ Inrush current can be limited by a SITOP inrush current limiter: 6EP4683-6LB00-0AY0 (max. 5 A, 100–240 V AC).

Technical data applies at rated input voltage and ambient temperature of +25°C (unless otherwise specified).



¹⁾ Inrush current can be limited by a SITOP inrush current limiter: 6EP4683-6LB00-0AY0 (max. 5 A, 100–240 V AC) or 6EP1967-2AA00 (max. 10 A, 100–480 V AC, 1 unit per phase required).

²⁾ Via analog voltage signal 0....2.5 V

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

SITOP expansion modules to increase system availability

| | new! | new! | | | | |
|---|--|--|---|---|---|--|
| | | | | | ncoassa dous | |
| Technical data | | | Redundancy | | | |
| SITOP | SITOP RED1200 re | edundancy module | | SITOP PSE202U redundancy modu | le | |
| Article No. | 6EP4346-7RB00-0AX0 | 6EP4347-7RB00-0AX0 | 6EP1964-2BA00 | 6EP1962-2BA00 | 6EP1961-3BA21 | |
| Rated input voltage – Range | 12 V, 24 V, 48 V DC 3100 V DC | 12 V, 24 V, 48 V DC 3100 V DC | 24 V DC 1929 V DC | 24 V DC 1929 V DC | 24 V DC 2428.8 V DC | |
| Brief description of product/function | Module for redundancy mode and output voltages from 12 to 48 V, e. voltage to up to 96 V or parallel cosupplies to enhance performance. | g. for series connection to increase | h Module for redundancy mode; floating relay contact and green LED for signaling "Infeed 1 and 2 o.k.", switching threshold adjustable between 20 and 25 V DC | | | |
| Possible combinations | Decoupling of two 12 V to 48 V power supplies with output currents up to 10 A or one 20-A power supply per redundancy module | Decoupling of two 12 V to 48 V power supplies with output currents up to 20 A or one 40-A power supply per redundancy module | 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 VA) 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 | 20 A (total output current) | 40 A (total output current) | 10 A (total output current) | 3.5 A ¹⁾ | 40 A (total output current) | |
| Reverse voltage protection | 200 V DC | 200 V DC | 52 V DC | 52 V DC | 52 V DC | |
| Efficiency at rated values, approx. | 97.5 % | 97.5 % | 97 % | 95 % | 97 % | |
| Radio interference suppression (EN 55022) | Class B | Class B | Class B | Class B | Class B | |
| Degree of protection (EN 60529) | IP20 | IP20 | IP20 | IP20 | IP20 | |
| Terminals | Push-in | Push-in | Screw terminals | Screw terminals | Screw terminals | |
| Ambient temperature | −25+70 °C | −25+70 °C | −20+70 °C | −20+70 °C | −25+60 °C | |
| Dimensions (W x H x D) in mm | 35 x 135 x 125 | 45 x 135 x 125 | 30 x 80 x 100 | 30 x 80 x 100 | 70 x 125 x 125 | |
| Weight approx. | 0.35 kg | 0.35 kg | 0.125 kg | 0.125 kg | 0.5 kg | |
| Certification | CE, cULus, DNV GL, ABS | CE, cULus, DNV GL, ABS | CE, cULus | CE, cULus, NEC Class 2 | CE, cULus, cCSAus Class I Div 2, ATEX, IECEx, DNV GL, ABS | |

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

| | new! | new! | | | | | | |
|---|--|---|---|---|--|---|--|--|
| | | | 00 00 | CID | 0 0 | | N N N N | THEORY WITH THE PROPERTY OF TH |
| Technical data | | | | Monitoring | | | | Mains buffering |
| SITOP | SITOP SEL1200 selectivity module with switching characteristic | SITOP SEL1400 selectivity module with current limit- ing characteristic | SITOP PSE200U seld with current limiting common signaling | ng characteristic and | SITOP PSE200U se with current limiti and single-channe | ng characteristic | SITOP select diagnostics module with current limiting characteristic | Buffer module ¹⁾ SITOP PSE201U |
| Article No. | 6EP4438-7FB00-3DX0 | 6EP4438-7EB00-3DX0 | 6EP1961-2BA11 | 6EP1961-2BA21 | 6EP1961-2BA31 | 6EP1961-2BA41 | 6EP1961-2BA00 | 6EP1961-3BA01 |
| Article No. with NEC Class 2 | | | 6EP1961-2BA51 | | 6EP1961-2BA61 | | | |
| Rated input voltage/range | 24 V DC/2230 V DC | 24 V DC/2230 V DC | 24 V DC/2230 V D | С | 24 V DC /2230 V | DC | 24 V DC/2230 V DC | 24 V DC/2428.8 V DC |
| Brief product description | Module for distributing the adjustable; universal use for | 24-V supply over up to four or eig all power supplies | ght load circuits and th | eir monitoring for over | load; selective shutdo | wn of faulty load circu | uits, rated current individually | Module for buffering during short power failures; parallel |
| Switch-off characteristic | Switching – for standard protection. Release time depending on overcurrent | elease time Voltage dip below 20 V not possible, i.e. also suitable for consumers that don't comply with PLC standard. | | | | | | connection at output of 24-V power supplies ¹⁾ . Buffering time 200 ms at 40 A up to 1.6 s at 5 |
| Status indication per output | 3-color LED: green – connec | ted, yellow – manually disconne | cted, red – disconnect | ed due to overcurrent | | | 2-color LED: connected, disconnected due to overcurrent | A load current; multiplication possible through parallel con- nection; maximum buffering time 10 s |
| Signal outputs | diagnostics. Analysis of single | mon signaling or single-channel e-channel diagnostics via SIMATIC et current threshold value, status ction (if applicable) | | | | SIMATIC S7-function uring points for cur- | Common signaling contact | |
| Reset, outputs switched on/off | Remote reset with 24-V sign | al. Reset and each output switche | ed on/off via push butt | on | | | Common reset via push button. Plug-in fuses | |
| Individual load circuits switched on sequentially | Load-optimized (previous o + 25 ms, + 200 ms, or + 50 | utput less than set rated value) O ms | 0 ms (simultaneous set rated value) | ly), 25 ms,100 ms or lo | ad-optimized (previo | us output less that | 0 ms (simultaneously), 24 ms or 100 ms | |
| Rated output current | 8 x 10 A | 8 x 10 A | 4 x 3 A | 4 x 10 A | 4 x 3 A | 4 x 10 A | 4 x 10 A | 40 A |
| – Setting range | 210 A | 210 A | 0.53 A | 310 A | 0.53 A | 310 A | 210 A | |
| Efficiency at rated values, approx. | 97% | 97% | 97% | 99% | 97% | 99% | 97% | Not applicable |
| Parallel switching of 2 outputs | Yes (max. 15 A) | Yes (max. 15 A) | No | No | No | No | No | Yes |
| Electronic short-circuit protection | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Radio interference suppression (EN 55022) | Class B | Class B | Class B | Class B | Class B | Class B | Class B | Class B |
| Degree of protection (EN 60529) | IP20 | IP20 | IP20 | IP20 | IP20 | IP20 | IP20 | IP20 |
| Terminals | Push-in | Push-in | Screw terminals | Screw terminals | Screw terminals | Screw terminals | Screw terminals | Screw terminals |
| Ambient temperature | −25+60 °C | −25+60 °C | −25+60 °C | −25+60 °C | −25+60 °C | −25+60 °C | 0+60 °C | −25+70 °C |
| Dimensions (W x H x D) in mm | 45 x 135 x 125 | 45 x 135 x 125 | 72 x 80 x 72 | 72 x 80 x 72 | 72 x 80 x 72 | 72 x 80 x 72 | 72 x 90 x 90 | 70 x 125 x 125 |
| Weight approx. | 0.3 kg | 0.4 kg | 0.2 kg | 0.2 kg | 0.2 kg | 0.2 kg | 0.4 kg | 1.2 kg |
| Certification | CE, UL, cURus, CB, cCSAus C | Class I Div 2, IECEx, GL, ABS | | CSAus Class I Div 2, ATI 21961-2BA61: NEC Clas | | 35, | CE, cULus, UR, cCSAus Class I Div 2, ATEX | CE, cULus, ATEX, IECEx, cCSAus Class I Div 2, DNV GL, ABS |

¹⁾ Can be combined with SITOP PSU8200, PSU6200, and SITOP smart 24-V power supplies (except 6EP1 336-2BA10) Technical data applies at rated input voltage and ambient temperature of +25°C (unless otherwise specified)

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



¹⁾ The inrush current can be limited to 10 A using the "SITOP inrush current limiter" expansion module, Article No. 6EP1967-2AA00.

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

Buffering times and charging times SITOP UPS500



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

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



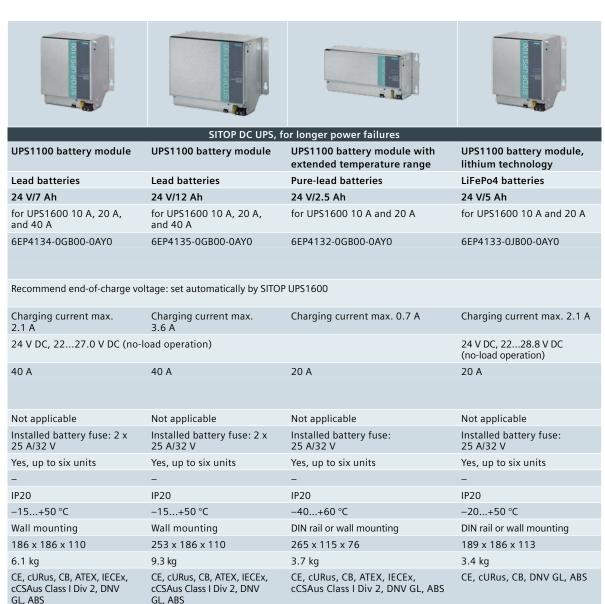






| Technical data | | | SITOP DC UPS for longer power | failures | | |
|---|--|--|---|---|--|--|
| SITOP | UPS1600 | UPS1600 | UPS1600 | Battery module UPS1100 | Battery module UPS1100 | |
| Energy storage | | | | Lead storage batteries | Lead storage batteries | |
| Output voltage/current or charge | 24 V/10 A | 24 V/20 A | 24 V/40 A | 24 V/1.2 Ah | 24 V/3.2 Ah | |
| | | | | for UPS1600 10 A | for UPS1600 10 A and 20 A | |
| Article No. | 6EP4134-3AB00-0AY0 | 6EP4136-3AB00-0AY0 | 6EP4137-3AB00-0AY0 | 6EP4131-0GB00-0AY0 | 6EP4133-0GB00-0AY0 | |
| – with USB interface | 6EP4134-3AB00-1AY0 | 6EP4136-3AB00-1AY0 | 6EP4137-3AB00-1AY0 | | | |
| with Ethernet/PROFINET interface | 6EP4134-3AB00-2AY0 | 6EP4136-3AB00-2AY0 | 6EP4137-3AB00-2AY0 | | | |
| Input voltage | 24 V DC, 2229 V, infee | ed from 24-V SITOP power su | pply | Recommended end-of-charge volta (set automatically by SITOP UPS160 | age 00) | |
| 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. 0.3 A | Charging current max. 0.9 A | |
| Rated output voltage | 24 V DC (upstream SITO) | P device or battery), charging | g voltage: 27.0 V | 24 V DC, 2227.0 V DC (no-load operation) | | |
| Rated output current | 10 A, charging current | 20 A, charging current | 40 A, charging current max. 5 A | 10 A | 20 A | |
| Overload behavior (power boost for 30 ms) | 30 A | 60 A | 120 A | | | |
| – Overload behavior (extra power for 5 s/min) | 15 A | 30 A | 60 A | | | |
| Efficiency at rated values, approx. | > 97.7 % | > 98.2 % | > 98.8 % | Not applicable | Not applicable | |
| Overload and shortcircuit protection | Yes, restart in normal me | ode | | Installed battery fuse: 15 A/32 V | Installed battery fuse: 25 A/32 V | |
| Parallel switching | No | No | No | Yes, up to six units | Yes, up to six units | |
| Radio interference suppression | Class B (EN 55022) | Class B (EN 55022) | Class B (EN 55022) | - | - | |
| Degree of protection (EN 60529) | IP20 | IP20 | IP20 | IP20 | IP20 | |
| Ambient temperature (derating from +60 °C) | −25+70 °C | −25+70 °C | −25+70 °C | −15+50 °C | −15+50 °C | |
| Installation | DIN rail | DIN rail | DIN rail | DIN rail or wall mounting | | |
| Dimensions (W x H x D) in mm | 50 x 125 x 125 | 50 x 125 x 125 | 70 x 125 x 150 | 89 x 130 x 107 | 190 x 169 x 79 | |
| Weight approx. | 0.38/0.4/0.44 kg | 0.39/0.41/0.45 kg | 0.65/0.65/0.7 kg | 1.9 kg | 3.8 kg | |
| Certification | CE, cULus, CB, ATEX, IECI GL, ABS | Ex, cCSAus Class I Div 2, DNV | CE, cULus, CB, ATEX, IECEx, DNV GL, ABS, cCSAus Class I Div 2 | CE, cURus, CB, ATEX, IECEx, cCSAus Class I Div 2, DNV GL, ABS | CE, cURus, CB, ATEX, IECEx, cCSAus Class I Div 2, DNV GL, ABS | |
| | | | | | | |

Battery module selection table: buffer times and service life



| UPS1100 battery module | 1.2 Ah | 3.2 Ah | 7 Ah | 12 Ah | 2.5 Ah | 5 Ah |
|---------------------------|---|---------------|---------------|---------------|---------------------------------|-----------------------------|
| Load current | Buffering times ¹⁾ | | | | | |
| 1 A | 27 min | 2 h | 5 h | 8 h 30 min | 1 h 30 min | 4 h |
| 2 A | 14 min | 1 h | 2 h 40 min | 4 h 30 min | 50 min | 2 h 10 min |
| 3 A | 10 min | 45 min | 1 h 50 min | 3 h 10 min | 36 min | 1 h 30 min |
| 4 A | 7 min 50 s | 34 min | 1 h 20 min | 2 h 30 min | 26 min | 1 h 10 min |
| 6 A | 4 min 40 s | 21 min | 48 min | 1 h 30 min | 15 min | 48 min |
| 8 A | 3 min | 15 min | 34 min | 1 h | 11 min | 37 min |
| 10 A | 1 min 30 s | 9 min 30 s | 21 min | 42 min | 6 min 40 s | 26 min |
| 12 A | - | 8 min 10 s | 19 min | 37 min | 5 min 40 s | 23 min |
| 14 A | - | 6 min 50 s | 16 min | 32 min | 4 min 40 s | 21 min |
| 16 A | - | 5 min 30 s | 13 min | 27 min | 3 min 40 s | 18 min |
| 20 A | - | 2 min 50 s | 7 min 50 s | 17 min | 1 min 40 s | 13 min |
| 30 A | - | - | 3 min 50 s | 10 min | 3 min 20 s, 2x ²⁾ | 17 min, 2x ²⁾ |
| 40 A | - | - | 1 min 40 s | 5 min 30 s | 1 min 40 s, 2x ²⁾ | 13 min, 2x ²⁾ |
| Ambient temperature | Approximate service life (drop to 80% of the original capacity), depending on battery temperature | | | | | |
| +20 °C | 4 years | 4 years | 4 years | 4 years | 10 years | 15 years |
| +30 °C | 2 years | 2 years | 2 years | 2 years | 7 years | 10 years |
| +40 °C | 1 year | 1 year | 1 year | 1 year | 3 years | 9 years |
| +50 °C | 0.5 years | 0.5 years | 0.5 years | 0.5 years | 1.5 years | 2 years |
| +60 °C | | | | | 1 year | |

¹⁾ Buffer time determination is based on the discharging time of new and completely charged battery modules with a minimum battery temperature of +25 °C until DC UPS (19 V) turns off.

The SITOP Selection Tool can be used to determine buffer times for additional temperatures and buffer voltages: siemens.com/sitop-selection-tool ²⁾ With two parallel connected UPS1100 battery modules and UPS1600 40 A

Find out more:

siemens.com/sitop

Additional information on SITOP:

- > TIA Selection Tool: siemens.de/tia-selection-tool
- Operating instructions as download: siemens.com/sitop/manuals
- Request CAx data via the CAx download manager: siemens.com/cax

More about SITOP on YouTube





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