

SIEMENS



Top integration. Top efficiency. Top reliability. SITOP

An integrated power supply
is the future. Or already a reality.

SITOP PSU8600 – The new SITOP system



Intuitive, efficient,
proven – the TIA Portal
redefines engineering.

[siemens.com/sitop-psu8600](https://www.siemens.com/sitop-psu8600)

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

The SITOP PSU 8600 is the first power supply system which offers complete system integration in Totally Integrated Automation (TIA). This pays off during the engineering in TIA Portal as well as in actual operation. Thus, for example, voltage and current threshold can be individually adjusted for each output of the power supply system, and the integrated overload protection enables the monitoring of the outputs. Other modules from the system can be added to meet individual requirements without any wiring effort, e.g. for buffering short power failures.

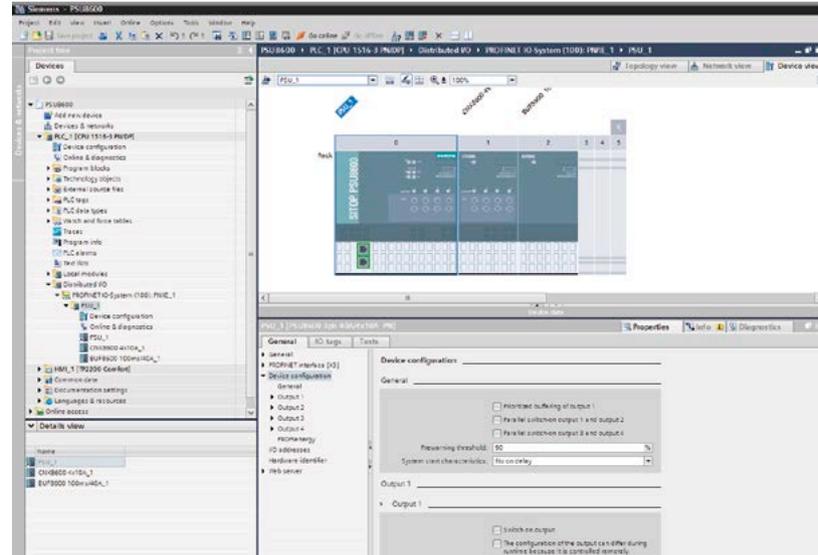
Comprehensive diagnostic and maintenance information are available via PROFINET and can be evaluated by SIMATIC S7 and visualized using SIMATIC WinCC. SITOP provides the best possible support for power management for plant or machines, from capturing power data from the outputs and individually switching outputs on and off via PROFIenergy through to direct integration into power management systems.

To sum up: SITOP sets new standards in plant reliability and efficiency.



Top integration

- Integrated PROFINET communication permits comprehensive data exchanges.
- Complete integration into TIA enables simple engineering in TIA Portal, comprehensive evaluations of operational data and diagnostic information as well as power management functions.
- Integrated web server allows easy remote diagnosis via the Internet.



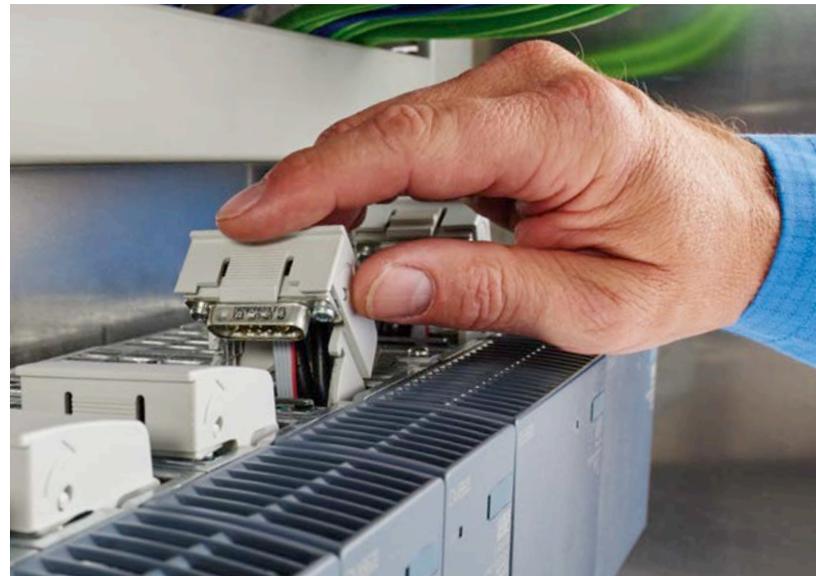
Top reliability

- Outputs can be individually monitored which leads to reduced downtimes.
- System-specific buffer modules can bridge short power failures.
- Comprehensive diagnostics ease preventive maintenance.

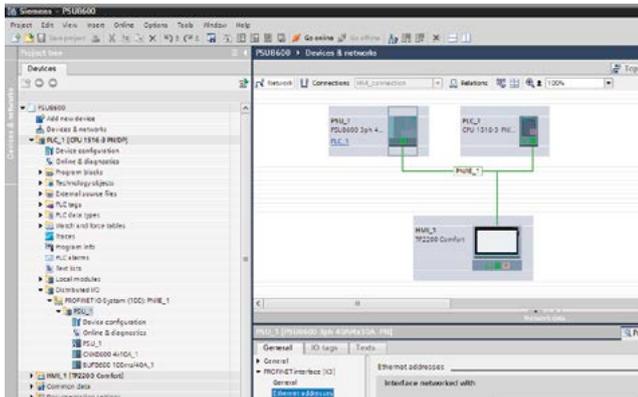


Top efficiency

- Compact design saves space in the control cabinet.
- High system flexibility meets individual requirements.
- Comprehensive software support simplifies configuration and design.
- Extensive manual settings provide support for commissioning.
- High functionality offers new opportunities – such as making additional supply voltages available.
- PROFenergy and power management support ensure efficient energy use.



Top integration – with complete system integration



In addition, free WinCC faceplates are available for operating and monitoring purposes.

Integrated PROFINET communication

The industrial Ethernet/PROFINET interface ensures a comprehensive data exchange. The switch functionality with two ports enables the power supply system to be easily integrated into existing automation networks – in both line and ring structures. Meanwhile, the SINEMA Server network management software makes it easy to monitor device status and the network connection.

Integrated web server

The integrated web server also allows power supply monitoring or diagnosis to be performed remotely.

Full integration in TIA

SITOP PSU8600 makes it possible for the first time to fully integrate a power supply into networked automation applications and in TIA Portal. Engineering in TIA Portal is very convenient, and evaluation of operational and diagnostic data is supported by preassembled function modules for SIMATIC S7 user programs.

Top reliability – thanks to selectivity and monitoring

Monitoring and selectively switching of the outputs

To prevent a short circuit or overload on a single consumer from causing an outage in the entire plant, all outputs are monitored and selectively switched off in case of a failure. Voltage and current threshold can be set individually for each output.

Comprehensive diagnostics

The basis for preventive maintenance: because the voltage and current for each output can be continuously captured and transmitted via PROFINET, dynamic, continuous or more frequent overload situations can be identified and plant downtimes prevented at an early stage. The time of a power failure is also recorded, which can subsequently serve as an indicator for the quality of the grid feed-in.



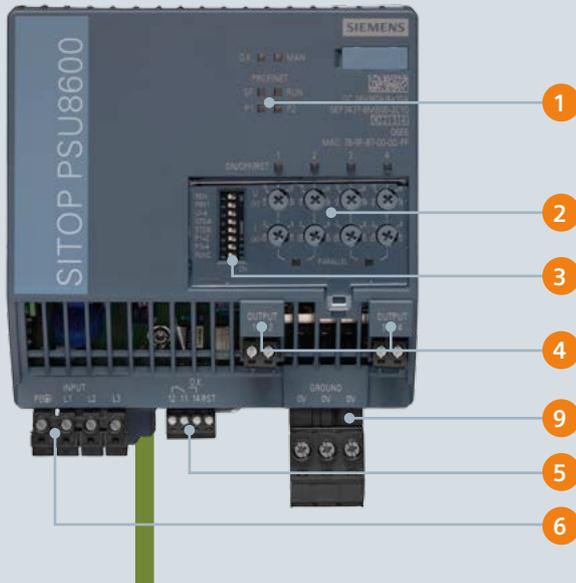
Bridge power failures easily

System-specific buffer modules turn to benefit during brief voltage dips at the grid end (brownouts) – offering ideal protection specifically for sensitive production areas.

SITOP PSU8600 – the modular system for all requirements

SITOP PSU8600 basic unit

Power supply 24 V/40 A, 4 x 10 A outputs



Industrial Ethernet/PROFINET interface with two ports

Additional setting options in the TIA Portal:

- On/off switching of the outputs to save power, e.g. via a PROFINET protocol
- Program-controlled adjustment of output voltage for each output to provide variable supply to loads, e.g. fans

Additional diagnostic options in the TIA Portal:

- Early recognition of dynamic, continuous or more frequent overload situations based on the current values
- Status messages from the outputs (on, off, overload)
- Outputs can be freely parameterized for preventive maintenance alarms
- Recognition and logging of short power and phase failures for grid quality analysis
- Capturing of power data (current, voltage) for each output to assess potential power savings
- Advance warning of system overload and overheating

- › Rated output current: 40 A
- › Overload capacity (extra power): 60 A for 5 s per min
- › Efficiency 94%
- › W x H x D in mm: 125 x 125 x 150
- › Article no. 6EP3437-8MB00-2CY0

SITOP CNX8600 expansion module

Expansion using 4 x 5 A outputs



1 Device status displays

- 3-color LED for power supply status
- Manual or remote operation display
- 4 LEDs for PROFINET status

2 Settings and display for each output (manual operation for commissioning and service)

- LED On/Off/Reset button with status display
- Output voltage setting: 12 – 28 V DC
- Response threshold setting: 0.5 – 10 A (0.2 – 5 A for CNX8600 4 x 5 A)
- Overload characteristics
 - 100 to 150% of set value: switches off after 5 s
 - More than 150% of set value: current is limited and switches off after 200 ms
- PSU8600: LED displays when outputs 1 + 2, 3 + 4 operate in parallel

- › W x H x D in mm: 60 x 125 x 150
- › Article no. 6EP4436-8XB00-0CY0

General data on the power supply system

- Up to 16 outputs
- Output buffering up to 600 ms (at 40 A; correspondingly longer for lower currents)
- Metal housing protection degree IP 20
- Rail mounting



- 3 Operating mode switch**
 - Control via IE/PN (settings deactivated on device)
 - Prioritized buffering for output 1 in case of a power failure: i.e. buffering of first output for as long as possible, and the remaining outputs are switched off after about half of the buffer period
 - Constant current characteristics for output 4 in case of an overload
 - Power-on delay between outputs, including CNX8600 expansion modules: 0 ms, 25 ms, 100 ms, load-optimized
 - Parallel operation of outputs 1 + 2 or 3 + 4
- 4 DC outputs**
 - Rated voltage: 24 V DC
 - 4 x 10 A outputs (5 A for CNX8600 4 x 5 A)
 - Adjustable electronic overload shutdown for each output, 0.5 – 10 A (0.2 – 5 A for CNX8600 4 x 5 A)
- 5 Contacts**
 - Signaling contact
 - Remote reset

- 6 Power input**
 - Rated voltage (range) 400 – 500 V 3 AC (320 – 575 V 3 AC)
 - Rated frequency 50/60 Hz
- 7 System Clip Link**
 - Connection plug for system data and power supply
- 8 Module status displays**
 - 3-color LED
- 9 Grounding**
 - 0 V terminals

› W x H x D in mm: 60 x 125 x 150
› Article no. 6EP4437-8XB00-0CY0

› W x H x D in mm: 60 x 125 x 150
› Article no. 6EP4297-8HB00-0XY0

› W x H x D in mm: 125 x 125 x 150
› Article no. 6EP4297-8HB10-0XY0

- Connections via plug-in terminals with screw connection
- Ambient temperature: –25 ...+60°C
- Certification: CE, cULus, CB, IECEx, ATEX; in preparation: cCSAus Class I Div 2, SEMI F47, GL, ABS

Top efficiency – from engineering through to operation



Compact design

The high efficiency of the base unit (94%) ensures minimum heat loss, which made it possible to keep the housing very compact. With a width of only 125 mm, the base unit needs only little rail space, even with integrated overload monitoring for each output.

High system flexibility

The modular system with the innovative System Clip Link connection enables the power supply system to be individually assembled with no additional wiring effort. The sequence of expansion and buffer modules makes no difference in this regard.

Comprehensive software support

In addition to configuration in TIA Portal and preassembled software modules for simple integration into SIMATIC S7, SIMATIC WinCC and power management systems, 3D data, circuit diagram macros and configurable manuals also provide support for the entire planning process.

Comprehensive manual settings

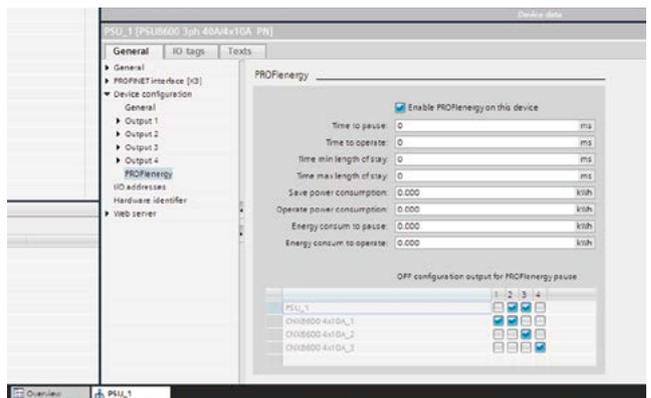
All relevant settings can be done manually, directly on the unit, to ensure ease of commissioning. The values can then be imported into the software.

High functionality

Because every output can be flexibly set between 12 and 28 V, there is no need for additional power supply units to run 12 or 15 V loads, for instance. In addition, the fact that the voltage can be dynamically adjusted even during operation means that applications are possible that would previously have been out of the question, or hardly achievable.

Capturing consumption data and PROFlenergy

Power data from all outputs is captured during operation. This data provides transparency regarding load characteristics and can also be further processed within power management systems. And more besides: support of PROFlenergy also enables the power supply outputs to be selectively switched off, which saves power during break times and keeps costs down respectively.

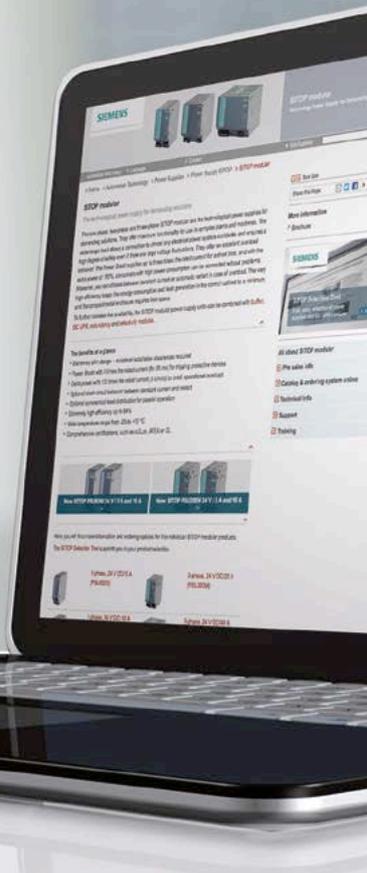


Easy configuration of SITOP PSU8600 for the PROFlenergy pause in TIA Portal. For The outputs to be switched off are simply marked.

There's much more to it:
siemens.com/sitop-psu8600

Experience the many highlights and benefits of the SITOP PSU8600 power supply system and its many different uses

Scan the QR code using the QR reader on your mobile phone



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