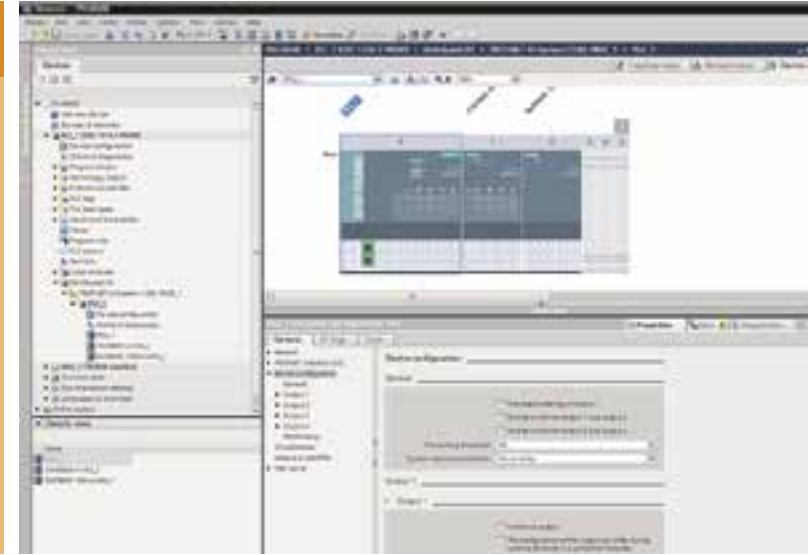


Top Integration

- 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 bridge brief power failures.
- Comprehensive diagnostics ease preventive maintenance.



Top efficiency

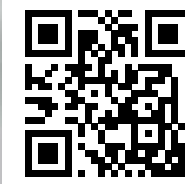
- Compact design saves space in the control cabinet.
- System Clip Link reduces the amount of wiring
- High system flexibility meets individual requirements.
- Comprehensive software support simplifies configuration and design.
- Can be configured manually for commissioning
- High functionality opens up new possibilities – including additional supply voltages
- PROFlenergy and power management support ensure efficient energy use.



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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SIEMENS



Discover new products, functions and possibilities

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.

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

The SITOP PSU8600 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 PROFlenergy through to direct integration into power management systems.

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



Innovation continues:

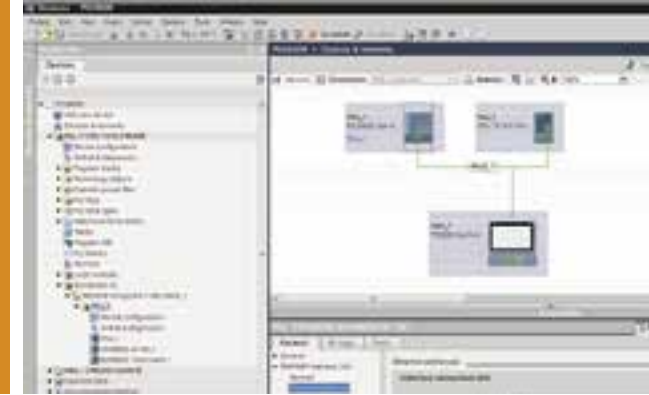
New products

- Two new base units with one output:
24 V/20 A, 80 mm wide
24 V/40 A, 125 mm wide
- New base unit with four outputs:
24 V/20 A, 4 x 5 A, 100 mm wide
- Two new buffer modules with ultracaps for 4 s/40 A and 10 s/40 A

New functions

- Output voltage adjustable from 5 to 28 V DC (previously 12 - 28 V DC)
- Web server enabled right on the base unit
- Up to 20 outputs can be added by connecting up to four expansion modules
- Bridges longer power outages of up to 20 s for 40 A; correspondingly longer with lower currents. Makes it possible to power down PCs

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. This function can be activated right on the base units, which simplifies commissioning and service.

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

Buffer modules with electrolytic capacitors cover short voltage dips. If these dips last longer, variants with double layer capacitors (ultracaps) buffer the power, and they even permit the targeted power down of industrial PCs.

SITOP PSU8600 – the modular system for all requirements

SITOP PSU8600 base units

Power supply units with one output

NEW! 24 V/20 A

Power supply units with four outputs

NEW! 24 V/40 A 4 x 10 A

PN Industrial Ethernet/PROFINET interface with two ports

Additional setting options in the TIA Portal or via Step 7:

- Individual outputs can be switched on and off for direct control of consumers or to save power, for example via the PROFInergy protocol
- Program-controlled adjustment of the voltage of each output to provide variable supply to consumers, such as DC motors (e.g., fans or belt drives)

Additional diagnostic options in the TIA Portal or via Step 7:

- 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

SITOP CNX8600 expansion modules (up to 4)

More outputs can be added

4 x 10 A, 4 x 5 A, 4 x 5 A

4 Settings and displays for each output (manual operation for commissioning and service)

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

2 Operating mode switch

- Control via IEPN (settings deactivated on device)
- Prioritized buffering for output 1 in the event 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
- Selectable overload behavior: electronic shutdown or constant current
- Power-on delay between outputs, including CNX8600 expansion modules: 0 ms, 25 ms, 100 ms, load-optimized
- PSU8600 with 4 outputs: outputs 1 + 2 or 3 + 4 operate in parallel
- PSU8600 with one output: switchable characteristic for symmetrical load distribution in parallel mode
- Enabling of the web server

3 Power input

- Rated voltage (range) 400 – 500 V 3AC (320 – 575 V 3AC)
- Rated frequency 50/60 Hz

SITOP BUF8600 buffer modules (up to 2)

Bridging power failures

300 ms/40 A, 100 ms/40 A, 10 s/40 A, 4 s/40 A

6 Base unit contacts

- Signaling contact (changeover contact)
- Remote reset

7 System Clip Link

- Connection plug for system data and power supply

8 Module status displays

- 3-color LED

9 Puffer module contacts

- Remote ON/OFF (for deactivating the buffering, e.g., when shutting down the system)
- Signaling contact (N/O contact) "charge status > x %" (adjustable in the TIA Portal)
- Signaling contact (N/O contact) "buffer mode"

10 Ground

- 0 V terminals

General data on the power supply system

- 3-phase AC infeed
- Rated output current 20 A and 40 A
- Overload capacity (extra power): 150% for 5 s per min
- Efficiency rating up to 94 %
- Up to 20 outputs
- Output buffering up to 20 s (for 40 A; correspondingly longer with lower currents)
- Metal enclosure with degree of protection IP 20
- DIN rail mounting
- Connections via plug-in terminals with screw connection
- Ambient temperature: –25 to + 60 °C
- Certifications: CE, cULus, IECEx, ATEX, CB, cCSAus Class 1 Div 2, SEMI F47, GL, in progress: ABS
- Start of delivery for the new PSU8600 and add-on functions: January 2016; start of delivery for the new BUF8600 buffer modules: February 2016

Top efficiency – from engineering through to operation



Compact design

The high efficiency rating of the base units (up to 94%) ensures minimum heat loss, which made it possible to keep the structure very compact. With widths of only 125 mm, 100 mm and even 80 mm, the base units take up little rail space – even with integrated overload monitoring of each output.

High functionality

Because every output can be flexibly set between 5 V and 28 V, there is no need for additional power supply units to run 5 V or 12 V consumers, for instance. In addition, the fact that the voltage can be dynamically adjusted even during operation means that applications are possible that previously could not have been implemented or else implemented only at great cost.

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

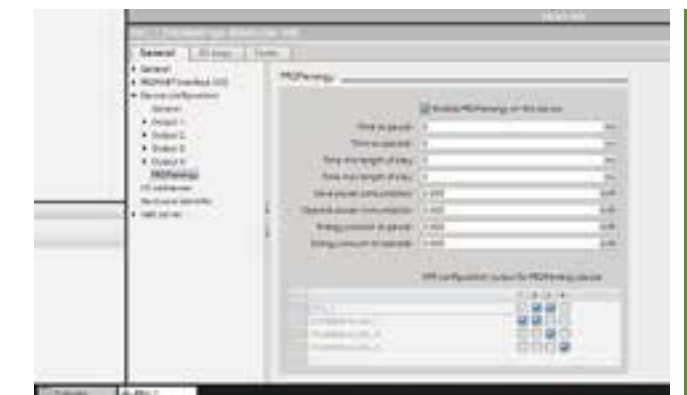
In addition to configuration in TIA Portal and preassembled software modules for simple integration into SIMATIC S7, SIMATIC WinCC and power management systems, 3D data, circuit diagram macros and configurable manuals also provide support for the entire planning process.

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.

Capturing consumption data and PROFInergy

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 PROFInergy 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 PROFInergy pause in TIA Portal. For the outputs to be switched off are simply marked.