# SIEMENS
## Ingenuity for life

# SITOP PSU8600 and SITOP UPS1600 with OPC UA

## Easy integration in open automation applications

## OPC UA – an important standard on the path to digitalization

OPC UA is platform-independent and offers maximum performance, proven security mechanisms and facilitates seamless communication with third-party applications. That's why Siemens relies on OPC UA as "the" open interface, including for SITOP. In addition to the PROFINET interface, the SITOP PSU8600 power supply system and the SITOP UPS1600 uninterruptible power supply from now on contain the OPC UA server functionality for parameterization and data communication.

**Benefits**

- Vertical and horizontal communication
- Open interface
- Interoperability across all levels
- Third-party connectivity

**Features**

**+** **Vendor- and platform-independent**
Implemented directly in sensors, controllers, HMIs and ERP systems under all operating systems

**+** **Security concept**
Combined processes for authentication, signatures for messages and encryption

**+** **Consistent and scalable**
Devices can be connected directly on all communication levels

**+** **Unambiguous data interpretation**
Thanks to integrated semantic data description

**Conclusion**

## OPC UA

Open standards for communication concepts for Industrie 4.0

SITOP PSU8600 power supply system and SITOP UPS1600 uninterruptible power supply, including UPS1100 battery module
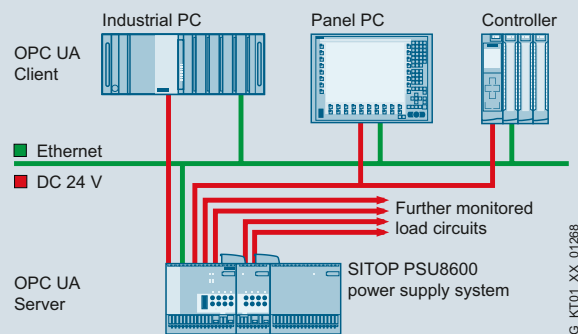
PSU8600

UPS1600

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**OPC UA**
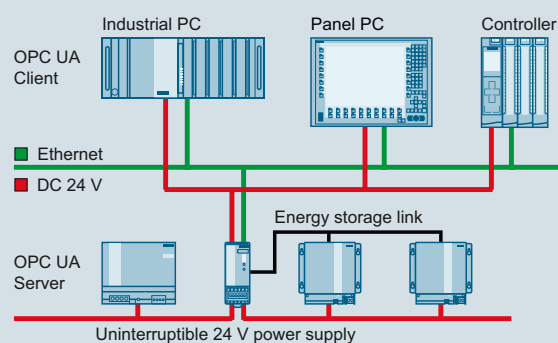
## SITOP PSU8600 power supply system

It can be used as a central DC power supply with selective load monitoring (up to 20 outputs) as well as power failure bridging (up to several minutes) in large plants or machines with networked automation systems from different manufacturers.



Industrial PC     Panel PC     Controller

OPC UA Client

■ Ethernet
■ DC 24 V

Further monitored load circuits

OPC UA Server     SITOP PSU8600 power supply system

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## SITOP UPS1600 uninterruptible power supply

Used for PLC- and PC-based automation solutions of other manufacturers whose 24 volt power supply needs to be protected against a power failure (buffered for periods of hours).



Industrial PC     Panel PC     Controller

OPC UA Client

■ Ethernet
■ DC 24 V

Energy storage link

OPC UA Server

Uninterruptible 24 V power supply

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### You can put a lot into a power supply. And get a lot out of it.

An efficient supply of power is the basis for successful operation of any plant, no matter what the industry or requirements are. After all, demanding production processes cannot be maintained unless the supply voltage for automation is available continuously in the necessary quality. Timely messages in the event of critical states increase plant availability. Advance warnings are sent to the automation systems of different manufacturers via the OPC UA open communication standard, which is supported by the communication-enabled power supply units SITOP PSU8600 and SITOP UPS1600. As a result, power supply units can be integrated in a network for the first time via a manufacturer-independent communication process and – thanks to messages about critical states – help to ensure higher plant availability.

**More on SITOP with OPC UA**

**siemens.com/ sitop-opcua**



**Setting options:**
- Program-controlled adjustment of the voltage of each output to provide variable supply to loads, such as DC motors
- Outputs can be freely parameterized for preventive maintenance messages



**Diagnostic options:**
- Early detection of dynamic, continuous or accumulating overload states with the aid of up-to-date current values
- Status message for outputs (on, off, overload)
- Detection and logging of short-term power failure to analyze power quality
- Recording of energy data (current, voltage) for each output to determine possible energy savings
- Advance warning of an overload at individual outputs and in the overall system
- Monitoring of input voltage



**Setting options:**
- Program-controlled setting
  - of the voltage threshold at which buffering is to begin
  - of the buffer time and reactions to status and alarm messages from the UPS



**Diagnostic options:**
- Information on device data and parameters
- Information on power supply status:
  - Pending alarms
  - Course of alarm
  - Load current
  - Input voltage
  - Buffer time remaining
  - Battery temperature
  - Battery charge/battery capacity
  - Charging current