

SIEMENS

Ingenuity for life

High performance.
Focused diagnostics.

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

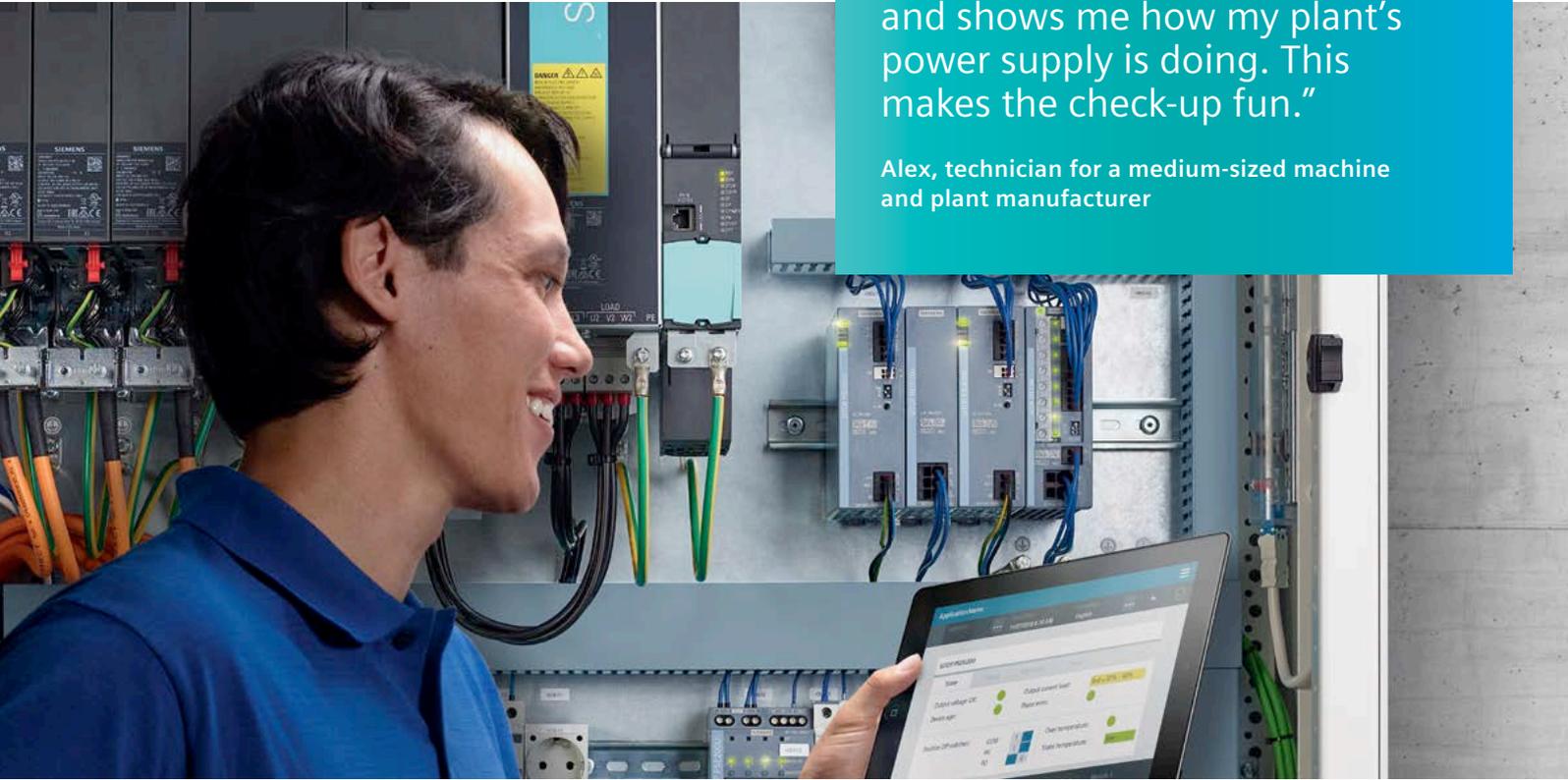
Now
also
3-phase

[siemens.com/sitop-psu6200](https://www.siemens.com/sitop-psu6200)

Focused diagnostics. Top Integration.

"My power supply is able to think and shows me how my plant's power supply is doing. This makes the check-up fun."

Alex, technician for a medium-sized machine and plant manufacturer



Thanks to a diagnostics monitor and interface, Alex has an instantaneous overview.

Important status messages ...

... from SITOP PSU6200 never go unnoticed by Alex the technician. The unit's LEDs tell him whether all the parameters are in the green zone, or if there's something he needs to do to ensure that his plant continues to operate smoothly.

Integrated in the automation ...

... Alex benefits from detailed status messages with SITOP PSU6200 power supply units as of 10 A. He can view the status and all relevant operational data via a single digital input on the PLC and use a free function block to evaluate the serial code. Alex immediately detects whether a value is critical on a ready-to-use faceplate. This allows him to find a remedy before the machine is affected.

Top Integration

- LED and signaling contact for "DC o.k." on all versions, diagnostics monitor and interface as of 10 A
- Diagnostics monitor with utilization and end-of-service-life indication via LEDs for "DC o.k.," utilization, and remaining service life
- Diagnostics interface for connecting to the automation via just one digital PLC input
 - Display of operating parameters and status: power, voltage, overload, operating hours, temperature status, manufacturing date and type
 - Evaluation by means of preassembled function block as ready-to-run code for SIMATIC S7-1200 and 1500 as well as display on WinCC faceplate

Fast installation. Top efficiency.

Labeling on front panel, push-in terminals, reduced space requirement – Luke prefers easy handling in his work as an electrician.

Reliable wiring every minute ...

... is child's play for Luke with the SITOP PSU6200: The unique terminal labeling prevents errors during wiring because it precisely corresponds to the label on the circuit diagram. Push-in terminals also make wiring faster, ensuring a secure connection with or without end sleeves – whether you're using single- or multiple-stranded.

More room in the control cabinet ...

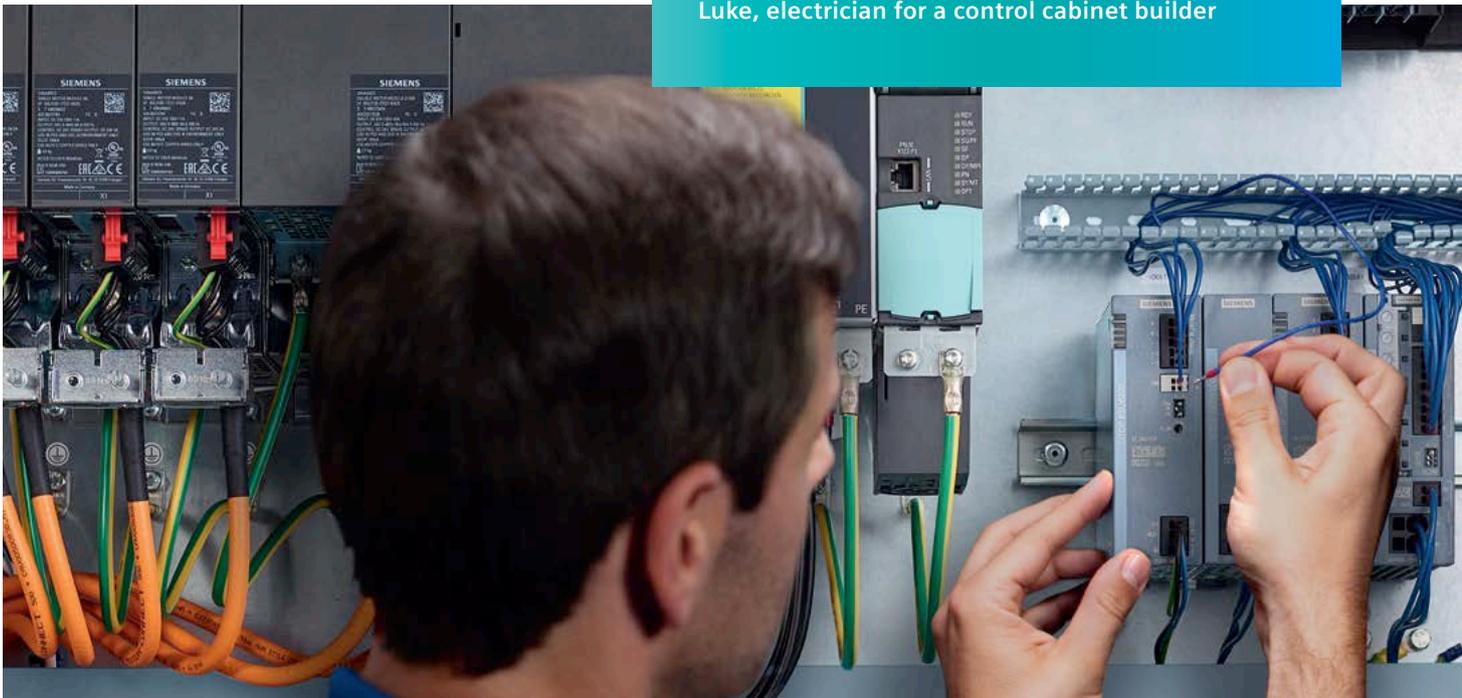
... is a valuable commodity for Luke, given today's packing density. With SITOP PSU6200, he benefits from a narrow overall width. In addition, the power supply units require no lateral installation clearances between components on the DIN rail. All these features combine to deliver a high degree of efficiency of up to 96%.

Top efficiency

- Push-in terminals
- Unique terminal labeling on the front of the unit
- Additional minus terminal (grounding) for potential equalization/PELV according to the Machinery Directive
- Line fed in from the front
- Slim design
- No lateral installation clearances required
- High degree of efficiency of up to 96%
- As of 10 A: active PFC (power factor correction) for low inrush currents and high power factor/reduction of reactive current component

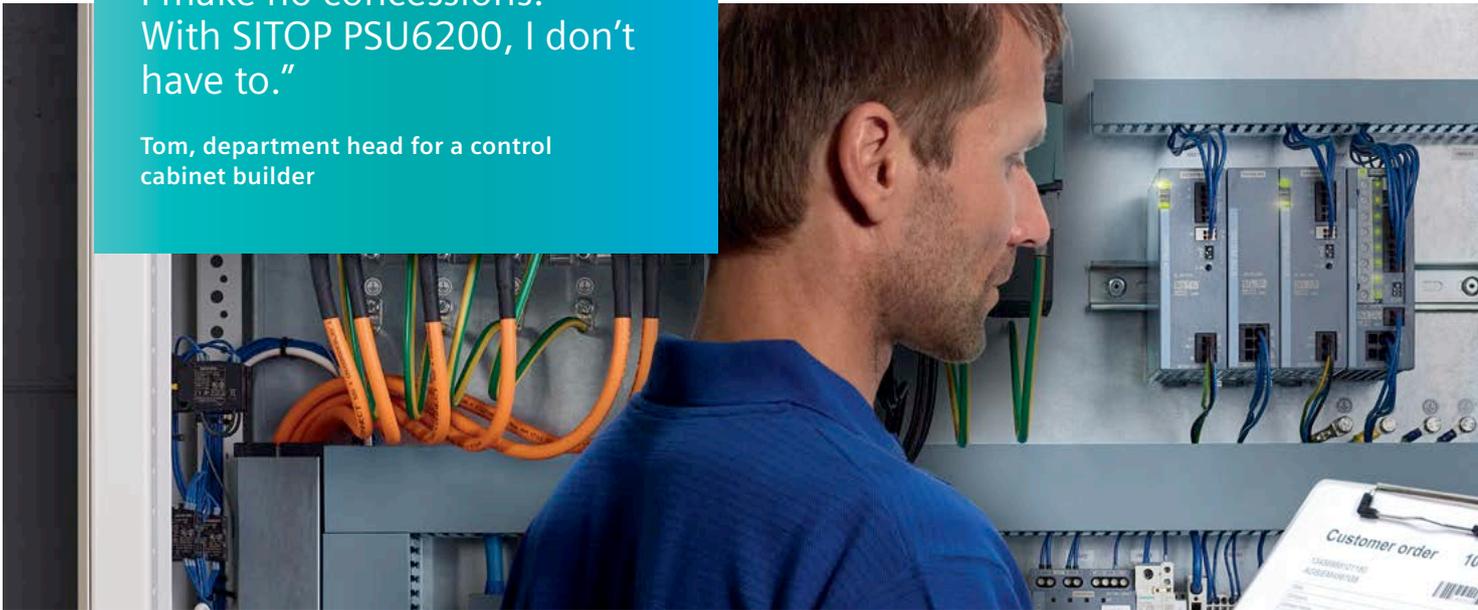
“Installation and wiring now go like clockwork, and I also save valuable space.”

Luke, electrician for a control cabinet builder



"When it comes to reliability, I make no concessions. With SITOP PSU6200, I don't have to."

Tom, department head for a control cabinet builder



Dependable operation. Top reliability.

As head of control cabinet building, Tom relies on a high overload capacity, a robust, wide-range input, and a strong metal enclosure when powering plants.

Constant current ...

... even under difficult conditions – for Tom, that starts with the right power supply. With SITOP PSU6200, he's on the safe side. With its extra power, it provides a 50 percent higher rated current for up to five seconds in the event of an overload. In the case of an extremely high overload, it keeps the current constant and changes to hiccup mode for self-protection only when the output voltage drops to 15 volts. Once the overload has been corrected, it continues in normal operation.

Extreme ruggedness ...

... is required in industries with harsh environmental conditions. That's why SITOP PSU6200 is just right for Tom. The power supply unit is tough, both electrically and mechanically. The wide-range input can handle a lot of undervoltage and overvoltage, where the 1-phase devices are suitable

for AC and DC voltage and the brand-new 3-phase can be operated with only 2 phases in the event of a phase failure. And the metal enclosure isn't just rugged, it also optimally dissipates heat losses – which are already low, thanks to a high degree of efficiency. These are all ideal conditions for a long service life..

Top reliability

- High overload capacity, thanks to 150% extra power for 5 s/min and constant current behavior
- Rugged input: 1-phase with wide range and DC capability, 3-phase suitable for continuous operation when one phase fails
- Rugged metal enclosure
- Designed for optimal heat dissipation

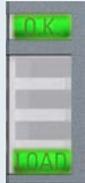
Many features. Top device.

SITOP PSU6200 – product highlights at a glance

Diagnostics monitor

SITOP PSU6200 power supply units as of 24 V/10 A and 12 V/12 A indicate their operating status, current utilization, and end of service life via LEDs

Output voltage o.k.



Utilization

< 30%

> 30%

> 60%

> 90%

< 10%

Service life

Award-winning Industry Design



Identification label: Article No.
6ES7193-6LF30-0AW0 (150 units)

Rugged metal enclosure

Push-in terminals permit secure assembly without need for tools

Diagnostics monitor (5 LEDs)

Unique terminal labeling for error-free wiring

Data Matrix Code (product information via Service and Support app)

1-phase wide-range input, DC-capable
85–275 V AC or 85–275 V DC
3-phase: continuous 2-phase operation possible
323...576 V 3 AC

Robust input protects against undervoltage and overvoltage

Additional minus terminal for grounding PELV circuits according to the Machinery Directive

Diagnostics interface

Setting options

- COM (signaling relay/diagnostics interface)
- HV (response value for signaling contact DC o.k. -> 20 V/23 V)
- PO (parallel operation)

Output voltage setting
12–15.5 V DC or 24–28 V DC

Direct side-by-side mounting without clearances saves space

Active PFC as of 10 A

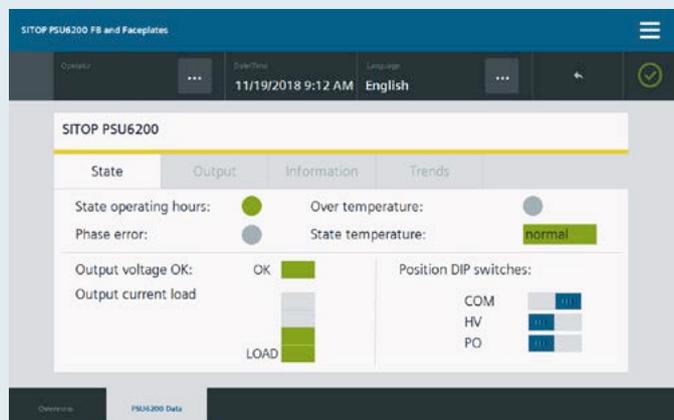
Active power factor correction means a high power factor and the wide-range input

Diagnostics interface

SITOP PSU6200 power supply units as of 24 V/10 A and 12 V/12 A output a serial code via the diagnostics interface. The signal can be read in via a digital input on a PLC and evaluated by a function block. Function blocks are available for SIMATIC S7-1200 and 1500. For easy visualization in WinCC, a faceplate is also available for download (see right).

The following status and operating parameters are displayed:

- DC o.k., Utilization < 30%, > 30%, > 60%, > 90%
- Remaining service life < 10%
- Output current (resolution 1 A)
- Output voltage (resolution 0.1 V)
- Device temperature < 40°C, < 60°C, < 70°C, overtemperature
- Meter for overvoltages and undervoltages at the DC terminal
- Manufacturing date, article number
- Device settings (COM, HV, PO)



SITOP PSU6200 portfolio

Technical specifications

Technical specifications	SITOP PSU6200 1-phase					
Output voltage/current	24 V/1.3 A	12 V/2 A	24 V/2.5 A	24 V/3.7 A	24 V/5 A	12 V/7 A
Article No.	6EP3331-7SB00-0AX0	6EP3321-7SB00-0AX0	6EP3332-7SB00-0AX0	6EP3333-7LB00-0AX0	6EP3333-7SB00-0AX0	6EP3323-7SB00-0AX0
Rated input voltage value	120–230 V AC/120–240 V DC					
– Range	85–264 V AC/110–275 V DC			85–275 V AC/99–275 V DC		
Mains buffering	150 ms at U _{in} = 230 V	150 ms at U _{in} = 230 V	150 ms at U _{in} = 230 V	90 ms at U _{in} = 230 V	80 ms at U _{in} = 230 V	90 ms at U _{in} = 230 V
Line frequency, rated value	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Rated input current value	0.6/0.3 A	0.5/0.3 A	1.1/0.6 A	1.5/0.9 A	1.9/1.1 A	1.4/0.8 A
– Inrush current ¹⁾	< 32 A	< 32 A	< 32 A	< 29 A	< 29 A	< 29 A
– Recom. miniature circuit breaker	From 6 A characteristic C	From 6 A characteristic C	From 6 A characteristic C	From 6 A characteristic C	From 6 A characteristic C	From 6 A characteristic C
Rated output voltage	24 V	12 V	24 V	24 V	24 V	12 V
– Tolerance	± 3%	± 3%	± 3%	± 3%	± 3%	± 3%
– Setting range	22.2–26.4 V	10.5–12.9 V	22.2–26.4 V	24–28 V	24–28 V	12–15.5 V
Rated output current	1.3 A	2 A	2.5 A	3.7 A	5 A	7 A
– Continuously up to +45°C	1.3 A	2 A	2.5 A	3.7 A	6 A	8.4 A
– Overload behavior (extra power for 5 s/min)	–	–	–	–	150%	150%
– Derating	As of +60°C (3%/K)	–	As of +60°C (1.5%/K)	–	As of +60°C (2%/K)	As of +60°C (2%/K)
Efficiency at rated values, approx.	86.3%	83.3%	89%	89,3%	90.2%	87.1%
Signaling interface	No	No	No	DC o.k.	DC o.k.	DC o.k.
Parallel switching	No	No	No	No	No	No
Electronic short-circuit protection	Yes, restart	Yes, restart	Yes, restart	Yes, constant current (< 15 V hiccup)	Yes, constant current (< 15 V hiccup)	Yes, constant current (< 9 V hiccup)
Radio interference level (EN 55022)	Class B	Class B	Class B	Class B	Class B	Class B
Radio interference suppression (EN 61000-3-2)	Not applicable	Not applicable	Not applicable	Yes	Yes	Yes
Degree of protection (EN 60529)	IP 20	IP 20	IP 20	IP 20	IP 20	IP 20
Ambient temperature	Operation –25...+70 °C, startup as of –40 °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	35 x 135 x 125	35 x 135 x 125
Weight, approx.	0.2 kg	0.2 kg	0.25 kg	0.7 kg	0.7 kg	0.7 kg
Certificates	CE, cULus, cCSAus, CB, SEMI F47, 24 V/3,7 A: NEC Class 2; in preparation: DNV GL, ABS					

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) or 6EP1967-2AA00 (max. 10 A, 100–480 V AC) 1 unit

²⁾ Planned delivery start date: 1st quarter, 2020 ³⁾ or 3RV2011-1EA10 or 3RV2711-1ED10

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

To protect against network outages, the SITOP PSU6200 power supplies can be expanded to an uninterruptible DC power supply. Modules are also available in the same attractive design as the PSU6200 to provide redundant operation and to selectively protect 24V load circuits.

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



The sturdy SITOP RED1200 redundancy modules with 20 A and 40 A net current decouple power supplies with output voltages of 12 to 48 V.



Ready for the future!

SITOP PSU6200 1-phase			SITOP PSU6200 3-phase		
24 V/10 A	12 V/12 A	24 V/20 A	24 V/5 A	24 V/10 A	24 V/20 A
6EP3334-7SB00-3AX0	6EP3324-7SB00-3AX0	6EP3336-7SB00-3AX0	6EP3433-7SB00-0AX0 ²⁾	6EP3434-7SB00-3AX0 ²⁾	6EP3436-7SB00-3AX0 ²⁾
120–230 V AC/110–240 V DC			400–500 V 3AC		
85–264 V AC /85–275 V DC			323–576 V 3AC		
45 ms at U _{in} = 230 V	70 ms at U _{in} = 230 V	25 ms at U _{in} = 230 V	20 ms at U _{in} = 400 V	30 ms at U _{in} = 400 V	25 ms at U _{in} = 400 V
50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
2.2/1.2 A	1.4/0.8 A	4.3/2.3 A	0.33/0.28 A	0.39/0.32 A	0.77/0.62 A
< 6 A	< 6 A	< 12 A	< 22 A	< 13 A	< 17 A
From 10 A characteristic C	From 6 A characteristic C	From 10 A characteristic C	4...10 A char. C 3-ph. coupled ³⁾	4...16 A char. C 3-ph. coupled ³⁾	
24 V ± 3%	12 V ± 3%	24 V ± 3%	24 V ± 3%	24 V ± 3%	24 V ± 3%
24–28 V	12–15.5 V	24–28 V	24–28 V	24–28 V	24–28 V
10 A	12 A	20 A	5 A	10 A	20 A
12 A	14.4 A	24 A	6 A	12 A	24 A
150%	150%	150%	150%	150%	150%
As of +60°C (2%/K)	As of +60°C (2%/K)	As of +60°C (1%/K)	As of +60°C (3%/K)	As of +60°C (3%/K)	As of +60°C (3%/K)
92.8%	89.3%	95.5%	91.2%	95.4%	95.9%
DC o.k./Diagnose	DC o.k./Diagnose	DC o.k./Diagnose	DC o.k./Diagnose	DC o.k./Diagnose	DC o.k./Diagnose
Yes, 2 units	Yes, 2 units	Yes, 2 units	No	Yes, 2 units	Yes, 2 units
Yes, constant current (< 15 V hiccup)	Yes, constant current (< 9 V hiccup)	Yes, constant current (< 15 V hiccup)	Yes, constant current (< 15 V hiccup)	Yes, constant current (< 15 V hiccup)	Yes, constant current (< 15 V hiccup)
Class B	Class B	Class B	Class B	Class B	Class B
Yes	Yes	Yes	Yes	Yes	Yes
IP 20	IP 20	IP 20	IP 20	IP 20	IP 20
Operation –25...+70 °C, startup as of –40 °C					
45 x 135 x 125	45 x 135 x 125	70 x 135 x 155	35 x 135 x 125	45 x 135 x 155	70 x 135 x 155
0.9 kg	0.9 kg	1.5 kg	0.7 kg	0.9 kg	1.5 kg
CE, cULus, in preparation: cCSAus, DNV GL, ABS, SEMI F47					

per phase required)



Compact SITOP SEL1200 and 1400 selectivity modules for enhanced overload protection. The diagnostics interface enables extensive analyses of the eight outputs.

Designed for reduced TCO

The high quality and long service life of the new standard power supply keeps the total cost of ownership at a minimum. And before a failure can have serious consequences, the power supply indicates the end of its service life with plenty of time to respond. To easily identify the device, simply scan the Data Matrix Code using the Siemens Industry Online Support app. You can also use the app to obtain complete product documentation.

Efficient product selection

The TIA Selection Tool calculates the optimal power supply for your needs. Simply enter the automated products being supplied with power in the 24-V consumer view. For multiple solutions, it offers a table comparing multiple devices. Once you've selected your solution, you can export the resulting product list to Excel or Adobe or transfer it to the shopping cart at the Siemens Industry Mall for ordering.

Everything you need for project planning

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

Siemens quality – made in Europe

SITOP has stood for high-quality power supplies for over 25 years. The high quality and availability are primarily due to our development and production sites in Vienna, Austria, and Sibiu, Romania.

Certified and standards-compliant

SITOP power supplies are being used in a wide variety of applications worldwide, which has enabled their comprehensive certification. SITOP PSU6200 power supplies already meet the EMC standard requirements for DC output that will be mandatory starting in 2020.

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