

Overview



Particularly harsh industrial environments demand products with special characteristics - products that are more rugged than standard products.

Siemens offers the perfect answer to these requirements with SIPLUS extreme. SIPLUS product variants are based on the SITOP, LOGO!Power standard power supplies and the power supplies for SIMATIC S7 and expansion modules, and feature the following characteristics:

- Extended ambient temperature range (e.g. -40 ... +70 °C) and conformal coating as protection against extreme and difficult conditions and contact with substances
- DIN EN 50155:  
Conforms with standard for electronic equipment used on rolling stock (EN 50155, temperature T1 or TX, category)

| Ambient conditions                                                              |                                                                                                                                                                              |
|---------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Conformal coating                                                               | Coating of the printed circuit boards and the electronic components                                                                                                          |
| Technical specifications                                                        | The technical data of the standard product applies except for the ambient conditions.                                                                                        |
| Relative humidity <sup>1)</sup>                                                 | 100%, condensation/frost permissible. No commissioning in bedewed state.                                                                                                     |
| Biologically active substances, compliance with EN 60721-3-3 6AG2333-0SB00-4AY0 | Class 3B2 mold and fungal spores (excluding fauna). The supplied plug covers must remain in place over the unused interfaces during operation!                               |
| Chemically active substances, compliance with EN 60721-3-3 6AG2333-0SB00-4AY0   | Class 3C4 incl. salt mist in accordance with EN60068-2-52 (degree of severity 3). The supplied plug covers must remain in place over the unused interfaces during operation! |
| Mechanically active substances, compliance with EN 60721-3-3 6AG2333-0SB00-4AY0 | Class 3S4 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation!                                                       |
| Air pressure (depending on the highest positive temperature range specified)    | 1080...795 hPa (-1000 ... +2000 m) see ambient temperature range<br>795 ... 658 hPa (+2000 ... +3500 m) derating 10 K<br>658 ... 540 hPa (+3500 ... +5000 m) derating 20 K   |

<sup>1)</sup> Not for 6AG2333-0SB00-4AY0

For further technical specifications, see the standard products, or visit <http://www.siemens.com/siplus-extreme>

## Special designs and applications

### SIPLUS power supplies

#### Ordering data

##### Ordering data

##### Article No.

##### SIPLUS LOGO!Power

##### SIPLUS LOGO!Power 24 V 1.3 A

Input 100 ... 240 V AC  
Output 24 V DC, 1.3 A

Extended temperature range  
and exposure to environmental  
substances

6AG1331-6SB00-7AY0

##### SIPLUS LOGO!Power 24 V 2.5 A

Input 100 ... 240 V AC  
Output 24 V DC, 2.5 A

Extended temperature range  
and exposure to environmental  
substances

6AG1332-6SB00-7AY0

##### SIPLUS LOGO!Power 24 V 4 A

Input 100 ... 240 V AC  
Output 24 V DC, 4 A

Extended temperature range  
and exposure to environmental  
substances

6AG1333-6SB00-7AY0

##### SIPLUS smart

##### SIPLUS PSU100S 24 V/10 A

Stabilized power supply  
Input: 120/230 V AC  
Output: 24 V DC/10 A

Extended temperature range and  
media exposure

6AG1334-2BA20-4AA0

##### SIPLUS PSU300S 3-phase

Stabilized power supply  
Input: 400 ... 500 V 3 AC

- Output: 24 V DC/5 A
- Output: 24 V DC/10 A
- Output: 24 V DC/20 A

Extended temperature range and  
exposure to environmental  
substances

6AG1433-2BA20-7AA0  
6AG1434-2BA20-7AA0  
6AG1436-2BA10-7AA0

##### SIPLUS modular

##### SIPLUS Modular 40 A

Stabilized power supply  
Input: 120/230 V AC  
Output: 24 V DC/40 A

- Loading of media
- Extended temperature range and  
exposure to media

6AG1337-3BA00-4AA0  
6AG1337-3BA00-7AA0

##### SIPLUS PS PSU200M 1-phase and 2-phase, 24 V DC/5 A

Stabilized power supply  
Input:  
120 ... 230 V/230 ... 500 V AC

- Output: 24 V DC/5 A
- Output: 24 V DC / 10 A

Exposure to media

6AG1333-3BA10-7AA0  
6AG1334-3BA10-7AA0

##### SIPLUS PS PSU8200 3-phase, 24 V DC/40 A

Stabilized power supply  
Input: 400 ... 500 V 3 AC  
Output: 24 V DC / 40 A

Exposure to media

6AG1437-3BA10-7AA0

##### Article No.

##### SIPLUS in SIMATIC design

For industrial applications with particularly demanding ambient  
conditions

##### SIPLUS S7-300 PS 305

Input: 24 ... 110 V DC  
Output: 24 V DC/2 A

Extended temperature range and  
exposure to media

6AG1305-1BA80-2AA0

##### SIPLUS S7-300 PS 307 5 A

Incl. connection bracket  
120/230 V AC; 24 V DC  
Output current 5 A  
(dimensions 60 x 125 x 120)

Extended temperature range and  
exposure to media

6AG1307-1EA01-7AA0

##### SIPLUS S7-300 PS 307 10 A

Incl. connection bracket  
120/230 V AC; 24 V DC  
Output current 10 A  
(dimensions 80 x 125 x 120)

Extended temperature range and  
exposure to media

6AG1307-1KA02-7AA0

##### SIPLUS S7-1200 PM 1207 power supply

Input 120/230 V AC,  
output 24 V DC, 2.5 A;  
derating from +55 °C to +70 °C to  
1.2 A output current

- Ambient temperature -25 ... +70 °C
- Ambient temperature 0 ... +60 °C

Extended temperature range and  
exposure to media

6AG1332-1SH71-7AA0  
6AG1332-1SH71-4AA0

##### SIPLUS S7-1500 PM 1507

Input 120/230 V AC

- Output 24 V DC, 3 A
- Output 24 V DC, 8 A

Extended temperature range and  
medial exposure

6AG1332-4BA00-7AA0  
6AG1333-4BA00-7AA0

##### SIPLUS S7-1500 system power supply

For supplying the backplane bus of  
the S7-1500 controller

- 24 V DC input voltage,  
power 25 W
- 24/48/60 V DC input voltage,  
power 60 W
- 120/230 V AC input voltage,  
power 60 W

Extended temperature range and  
exposure to media

6AG1505-0KA00-7AB0  
6AG1505-0RA00-7AB0  
6AG1507-0RA00-7AB0

| Ordering data                                                                                                                                                                                                                                                    |                                                            | Article No.                                                                                                                                                                                                                    |                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| For rolling stock railway applications                                                                                                                                                                                                                           |                                                            |                                                                                                                                                                                                                                |                                                            |
| <b>SIPLUS S7-300 PS 305</b><br><br>Input: 24 ... 110 V DC<br>Output: 24 V DC/2 A<br><br>Extended temperature range and exposure to media                                                                                                                         | <b>6AG1305-1BA80-2AA0</b>                                  | <b>SIPLUS modular buffer module</b><br><br>For 6AG1961-3BA01-7AA0;<br>buffer time 100 ms to 10 s,<br>dependent on load current                                                                                                 | <b>6AG1961-3BA01-7AA0</b>                                  |
| <b>SIPLUS PS PSU2600 24V/5A TX RAIL</b><br><br>Stabilized power supply<br>Input: 110 V AC<br>Output: 24 V DC/5 A<br><br>For areas with extreme exposure to environmental substances (conformal coating); ambient temperature -40 ... +70 °C (+85 °C for 10 min.) | <b>6AG2333-0SB00-4AY0</b>                                  | <b>SIPLUS PS signaling module modular</b><br><br>For 6AG1XXX-3BA00 -XXXX<br>signaling contacts:<br>Output voltage ok,<br>operational availability ok,<br>remote ON/OFF<br><br>Extended temperature range and exposure to media | <b>6AG1961-3BA10-7AA0</b>                                  |
| SIPLUS DC/DC converter                                                                                                                                                                                                                                           |                                                            |                                                                                                                                                                                                                                |                                                            |
| <b>SIPLUS PS 24V/0.375A</b><br><br>DC/DC stabilized power supply<br>Input: 48 ... 220 V DC<br>Output: 24 V DC/0.375 A<br>condensation permissible<br><br>Medial exposure                                                                                         | <b>6AG1931-2BA00-3AA0</b>                                  | <b>SIPLUS signaling module</b><br><br>Hard gold-plated contacts;<br>for 6AG1XXX-3BA00 -XXXX<br>signaling contacts:<br>Output voltage ok,<br>operational availability ok,<br>remote ON/OFF                                      | <b>6AG1961-3BA10-6AA0</b>                                  |
| SIPLUS DC UPS, uninterruptible power supplies                                                                                                                                                                                                                    |                                                            |                                                                                                                                                                                                                                |                                                            |
| <b>SIPLUS PS DC/24 V DC/2 A</b><br><br>DC/DC stabilized power supply<br>Input: 48/60/110 V DC<br>Output: 24 V DC/2 A<br><br>Medial exposure                                                                                                                      | <b>6AG1732-0AA00-7AA0</b>                                  | <b>SIPLUS PS DC UPS module 15 A</b><br><br>Uninterruptible power supply<br>without interface;<br>input: 24 V DC/16 A,<br>output: 24 V DC/15 A<br><br>Extended temperature range and medial exposure                            | <b>6AG1931-2EC21-2AA0</b>                                  |
| SIPLUS add-on modules                                                                                                                                                                                                                                            |                                                            |                                                                                                                                                                                                                                |                                                            |
| <b>SIPLUS PS E202U redundancy module</b><br><br>Input/output: 24 V DC/40 A<br>suitable for decoupling two<br>SITOP power supplies with a<br>maximum of 20 A output current<br><br>• Extended temperature range and medial exposure<br><br>• Medial exposure      | <b>6AG1961-3BA21-7AX0</b><br><br><b>6AG1961-3BA21-4AX0</b> | <b>SIPLUS PS DC UPS module 40 A</b><br><br>Uninterruptible power supply<br>without interface;<br>input 24 V DC/43 A,<br>output 24 V DC/40 A<br><br>Extended temperature range and medial exposure                              | <b>6AG1931-2FC21-7AA0</b>                                  |
| <b>SIPLUS PSE200U 3 A</b><br><br>4-channel selectivity module<br>Input: 24 V AC<br>Output: 24 V DC/3A per channel<br>output current adjustable<br>0.5 ... 3 A<br><br>For environmental stress                                                                    | <b>6AG1961-2BA31-7AA0</b>                                  | <b>SIPLUS UPS1600 24 V/ 10 A</b><br><br>• Without interface<br><br>• With PROFINET/Ethernet:<br>two RJ45 sockets (2-port switch)<br><br>Extended temperature range and medial exposure                                         | <b>6AG1134-3AB00-7AY0</b><br><br><b>6AG1134-3AB00-7AY2</b> |
| <b>SIPLUS PSE200U 10 A</b><br><br>4-channel selectivity module<br>Input: 24 V AC<br>Output: 24 V DC/10 A per channel<br>output current adjustable<br>3 ... 10 A<br><br>For environmental stress                                                                  | <b>6AG1961-2BA41-7AA0</b>                                  | <b>SIPLUS PS UPS1100 battery module 7 Ah</b><br><br>With maintenance-free, sealed<br>rechargeable lead-acid batteries for<br>SIPLUS UPS1600 DC UPS module,<br>10 A<br><br>Medial exposure                                      | <b>6AG1134-0GB00-4AY0</b>                                  |