



SIMATIC S7-1500, System power supply PS 25W 24 V DC, supplies the backplane bus of the S7-1500 with operating voltage

General information	
Product type designation	PS 25W 24VDC
HW functional status	From FS01
Firmware version	from V1.0.0
Engineering with	
<ul style="list-style-type: none"> <li>STEP 7 TIA Portal configurable/integrated from version</li> </ul>	V12 / V12
<ul style="list-style-type: none"> <li>STEP 7 configurable/integrated from version</li> </ul>	V5.5 SP3 or higher
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V; Static 19.2 V, dynamic 18.5 V
permissible range, upper limit (DC)	28.8 V; Static 28.8 V, dynamic 30.2 V
Reverse polarity protection	Yes
Short-circuit protection	Yes
Mains buffering	
<ul style="list-style-type: none"> <li>Mains/voltage failure stored energy time</li> </ul>	20 ms
Input current	
Rated value at 24 V DC	1.3 A
Output current	
Short-circuit protection	Yes
Power	
Infeed power to the backplane bus	25 W
Power loss	
Power loss at nominal rating conditions	6.2 W
Interrupts/diagnostics/status information	
Status indicator	Yes
Potential separation	
primary/secondary	Yes
Isolation	
Isolation tested with	707 V DC (type test)
EMC	
Interference immunity against voltage surge	
<ul style="list-style-type: none"> <li>Interference immunity on supply lines acc. to IEC 61000-4-5</li> </ul>	Yes; ±1 kV (acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge asymm.), no external protective circuit required
Degree and class of protection	
Equipment protection class	III, with protective conductor
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> <li>min.</li> <li>max.</li> </ul>	-25 °C; up to FS03: 0 °C 60 °C
Altitude during operation relating to sea level	

- Installation altitude above sea level, max.

5 000 m; Restrictions for installation altitudes > 2 000 m, see manual

#### Dimensions

Width	35 mm
Height	147 mm
Depth	129 mm

#### Weights

Weight, approx.	350 g
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SIMATIC S7-1500, System power supply PS 60W 24/48/60 V DC, supplies the backplane bus of the S7-1500 with operating voltage

General information	
Product type designation	PS 60 W 24/48/60 V DC
HW functional status	from FS04
Firmware version	from V1.0.0
Engineering with	
<ul style="list-style-type: none"> <li>STEP 7 TIA Portal configurable/integrated from version</li> </ul>	V12 / V12
<ul style="list-style-type: none"> <li>STEP 7 configurable/integrated from version</li> </ul>	V5.5 SP3 or higher
Supply voltage	
Rated value (DC)	24 V / 48 V / 60 V
permissible range, lower limit (DC)	19.2 V; Static 19.2 V, dynamic 18.5 V
permissible range, upper limit (DC)	72 V; Static 72 V, dynamic 75.5 V
Reverse polarity protection	Yes
Short-circuit protection	Yes
Mains buffering	
<ul style="list-style-type: none"> <li>Mains/voltage failure stored energy time</li> </ul>	20 ms
Input current	
Rated value at 24 V DC	3 A
Rated value at 48 V DC	1.5 A
Rated value at 60 V DC	1.2 A
Output current	
Short-circuit protection	Yes
Power	
Infeed power to the backplane bus	60 W
Power loss	
Power loss at nominal rating conditions	12 W
Interrupts/diagnostics/status information	
Status indicator	Yes
Potential separation	
primary/secondary	Yes; Electrical isolation for 230 V AC (reinforced isolation)
Isolation	
Isolation tested with	2 500 V DC/2 s (routine test)
EMC	
Interference immunity against voltage surge	
<ul style="list-style-type: none"> <li>Interference immunity on supply lines acc. to IEC 61000-4-5</li> </ul>	Yes; ±1 kV (acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge asymm.), no external protective circuit required
Degree and class of protection	
Equipment protection class	I, with protective conductor
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> <li>min.</li> </ul>	-25 °C
<ul style="list-style-type: none"> <li>max.</li> </ul>	60 °C
Dimensions	
Width	70 mm
Height	147 mm
Depth	129 mm
Weights	
Weight, approx.	600 g

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SIMATIC S7-1500, System power supply with buffer functionality PS 60W 24/48/60V DC HF, supplies the backplane bus of the S7-1500 with operating voltage and permits the CPU to retain RAM (data) retentively

General information	
Product type designation	PS 60 W 24/48/60 V DC HF
HW functional status	From FS01
Firmware version	from V1.0.0
Engineering with	
<ul style="list-style-type: none"> <li>STEP 7 TIA Portal configurable/integrated from version</li> </ul>	V14 SP1
Supply voltage	
Rated value (DC)	24 V / 48 V / 60 V
permissible range, lower limit (DC)	19.2 V; Static 19.2 V, dynamic 18.5 V
permissible range, upper limit (DC)	72 V; Static 72 V, dynamic 75.5 V
Reverse polarity protection	Yes
Short-circuit protection	Yes
Mains buffering	
<ul style="list-style-type: none"> <li>Mains/voltage failure stored energy time</li> </ul>	20 ms
Input current	
Rated value at 24 V DC	3 A
Rated value at 48 V DC	1.5 A
Rated value at 60 V DC	1.2 A
Inrush current, max.	≤ 8 A for $t \leq 1$ s
Output current	
Short-circuit protection	Yes
Power	
Infeed power to the backplane bus	60 W
Power loss	
Power loss at nominal rating conditions	12 W
Interrupts/diagnostics/status information	
Status indicator	Yes
Isolation	
Isolation tested with	2 500 V DC (type test)
EMC	
Interference immunity against voltage surge	
<ul style="list-style-type: none"> <li>Interference immunity on supply lines acc. to IEC 61000-4-5</li> </ul>	Yes; ±1 kV (acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge asymm.), no external protective circuit required
Degree and class of protection	
Equipment protection class	I, with protective conductor
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> <li>min.</li> <li>max.</li> </ul>	-25 °C 60 °C
Dimensions	

Width	105 mm
Height	147 mm
Depth	129 mm
<b>Weights</b>	
Weight, approx.	865 g

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SIMATIC S7-1500, system power supply PS 60W 120/230V AC/DC, supplies the backplane bus of S7-1500 with operating voltage

General information	
Product type designation	PS 60 W 120/230 V AC/DC
HW functional status	From FS01
Firmware version	from V1.0.0
Engineering with	
<ul style="list-style-type: none"> <li>STEP 7 TIA Portal configurable/integrated from version</li> </ul>	V12 / V12
<ul style="list-style-type: none"> <li>STEP 7 configurable/integrated from version</li> </ul>	V5.5 SP3 or higher
Supply voltage	
Rated value (DC)	120 V / 230 V
permissible range, lower limit (DC)	88 V
permissible range, upper limit (DC)	300 V
Rated value (AC)	120 V / 230 V
permissible range, lower limit (AC)	85 V
permissible range, upper limit (AC)	264 V
Short-circuit protection	Yes
Line frequency	
<ul style="list-style-type: none"> <li>Rated value 50 Hz</li> </ul>	Yes
<ul style="list-style-type: none"> <li>permissible range, lower limit</li> </ul>	47 Hz
<ul style="list-style-type: none"> <li>permissible range, upper limit</li> </ul>	63 Hz
Mains buffering	
<ul style="list-style-type: none"> <li>Mains/voltage failure stored energy time</li> </ul>	20 ms
Input current	
Rated value at 120 V DC	0.6 A
Rated value at 230 V DC	0.3 A
Rated value at 120 V AC	0.6 A
Rated value at 230 V AC	0.34 A
Output current	
Short-circuit protection	Yes
Power	
Infeed power to the backplane bus	60 W
Power loss	
Power loss at nominal rating conditions	12 W
Interrupts/diagnostics/status information	
Status indicator	Yes
Potential separation	
primary/secondary	Yes
Isolation	
Isolation tested with	2 500 V DC/2 s (routine test)
EMC	
Interference immunity against voltage surge	

- Interference immunity on supply lines acc. to IEC 61000-4-5

Yes;  $\pm 1$  kV (acc. to IEC 61000-4-5; 1995; surge symm.),  $\pm 2$  kV (acc. to IEC 61000-4-5; 1995; surge asymm.), no external protective circuit required

#### Degree and class of protection

Equipment protection class I, with protective conductor

#### Ambient conditions

Ambient temperature during operation

- min. -25 °C
- max. 60 °C

#### Dimensions

Width 70 mm  
 Height 147 mm  
 Depth 129 mm

#### Weights

Weight, approx. 600 g

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