

SIMATIC S7-400



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Brochures

For brochures serving as selection guides for SIMATIC products refer to:

<http://www.siemens.com/simatic/printmaterial>

SIMATIC S7-400

SIPLUS central processing units

SIPLUS CPU 417H

Overview



CPU for SIMATIC S7-400H and S7-400F/FH

- For use in S7-400H fault-tolerant systems
- Can be used with F-Runtime license as fail-safe CPU in safety-related S7-400F/FH systems
- With integral PROFIBUS DP master interface
- With 2 plug-in slots for sync modules

For further technical documentation on SIPLUS, see:
<http://www.siemens.com/siplus-extreme/techdoku>

Environmental conditions	SIPLUS extreme		
Ambient temperature range	-40/-25 to +60 °C		
Relative humidity	100% Dewing, condensation and icing permissible		
Contaminant concentration	EN60721-3-3 3C4 and ISA S71.04 G1, G2, G3, GX ¹⁾		
		Constant load	Limit value ²⁾
	SO ₂	4.8 ppm	17.8 ppm
	H ₂ S	9.9 ppm	49.7 ppm
	Cl	0.2 ppm	1.0 ppm
	HCl	0.66 ppm	3.3 ppm
	HF	0.12 ppm	2.4 ppm
	NH ₃	49 ppm	247 ppm
	O ₃	0.1 ppm	1.0 ppm
	NO _x	5.2 ppm	10.4 ppm
	At RH < 75%, condensation permitted		
Saline fog	Saline fog test (EN 60068-2-52)		
Mechanically active substances	EN60721-3-3 3S4		
	• Dust (suspended substance content)	4.0 mg/m ² h	
	• Dust (precipitation)	40 mg/m ² h incl. conductive sand/dust ("Arizona dust")	
Biologically active substances	EN60721-3-3 3B2 Mildew growth, Fungus, excluding fauna		

¹⁾ ISA -S71.04 severity level GX from October 2010

²⁾ 30 min/day

SIPLUS CPU 417-4H

Order No.	6AG1 417-4HT14-4AB0
Order No. based on	6ES7 417-4HT14-0AB0
Ambient conditions	Resistant in accordance with EN60721 to chemically (-3C4), mechanically (-3S4) and biologically (-3B2) active substances and compliant with ISA S71.04 G1, G2, G3, GX ¹⁾ . For further information, refer to Environmental conditions of SIPLUS extreme (on this page) or go to www.siemens.com/siplus-extreme
Technical data	The technical data of the standard product apply with the exception of the environmental conditions.

¹⁾ ISA -S71.04 severity level GX from October 2010

Ordering data

SIPLUS CPU 417-4H
 (Medial exposure)
 for S7-400H and S7-400F/FH;
 30 MB work memory,
 MPI/PROFIBUS DP master interface,
 2 slots for sync modules,
 slot for memory card, incl. slot
 number plates

Accessories

Order No.

6AG1 417-4HT14-4AB0

see S7-400 central processing units, catalog ST 70 · 2009, page 5/46

C: Subject to export regulations: AL: N and ECCN: EAR99H

SIMATIC S7-400

SIPLUS central processing units

SIPLUS sync module

Overview



- For interfacing the two CPU 414-4H/417-4H devices in the subunits of the S7-400H
- Pluggable directly into the CPU

For further technical documentation on SIPLUS, see:
<http://www.siemens.com/siplus-extreme/techdoku>

SIPLUS sync module (up to 10 m)

Order No.	6AG1 960-1AA04-4XA0
Order No. based on	6ES7 960-1AA04-0XA0
Ambient conditions	Resistant in accordance with EN60721 to chemically (-3C4), mechanically (-3S4) and biologically (-3B2) active substances and compliant with ISA S71.04 G1, G2, G3, GX ¹⁾ . For further information, refer to Environmental conditions of SIPLUS extreme (on page 6/2) or go to www.siemens.com/siplus-extreme
Technical data	The technical data of the standard product apply with the exception of the environmental conditions.

¹⁾ ISA -S71.04 severity level GX from October 2010

Ordering data

Order No.

SIPLUS sync module

6AG1 960-1AA04-4XA0

(Medial exposure)

for coupling the CPU 41xH for S7-400H/F/FH;
 2 modules required per CPU;
 for 6ES7 412-3HJ14-0AB0,
 6ES7 414-4HM14-0AB0 and
 6ES7 417-4HT14-0AB0;
 for patch cable, can be used for
 fiber-optic cables up to 10 m in
 length

Accessories

see S7-400 sync module,
 catalog ST 70, page 5/56

SIMATIC S7-400

SIPLUS analog modules

SIPLUS SM 431 analog input modules

Overview



- Analog inputs for SIMATIC S7-400
- Connecting voltage sensors and current sensors, thermo elements, resistors and resistance thermometers
- Resolution 13 to 16 bit

For further technical documentation on SIPLUS, see:
<http://www.siemens.com/siplus-extreme/techdoku>

SIPLUS SM 431 analog input modules		
Order No.	6AG1 431-0HH00-4AB0	6AG1 431-1KF20-4AY0
Order No. based on	6ES7 431-0HH00-0AB0	6ES7 431-1KF20-0AB0
Ambient conditions	Resistant in accordance with EN60721 to chemically (-3C4), mechanically (-3S4) and biologically (-3B2) active substances and compliant with ISA S71.04 G1, G2, G3, GX ¹⁾ . For further information, refer to Environmental conditions of SIPLUS extreme (on page 6/2) or go to www.siemens.com/siplus-extreme	
Technical data	The technical data of the standard product apply with the exception of the environmental conditions.	

¹⁾ ISA -S71.04 severity level GX from October 2010

Ordering data

Order No.

SIPLUS SM 431 analog input modules

(Medial exposure)

16 inputs, non-floating, 13 bit

8 inputs, floating, 14 bit

6AG1 431-0HH00-4AB0

6AG1 431-1KF20-4AY0

Accessories

see analog input modules SM 431, catalog ST 70 · 2009, page 5/78