

8.1 Technical details

Technical details	
Application range	Standard
Module's device code	0300h
Number of ST input bits	32
Number of ST status bits	16
Support in system environment A	
from ST firmware version for other head modules	7
from ST firmware version PSSu H S PN	1
from ST firmware version PSSu WR S IDN	4
Support in system environment B	
from head module ST firmware version	1.0.0
Electrical data	
Internal supply voltage (module supply)	
Supply voltage range of module supply	4.8 - 5.4 V
Module's current consumption	43 mA
Module's power consumption	0.22 W
Periphery's supply voltage (periphery supply)	
Voltage range	16.8 - 30.0 V
Module's current consumption with no load	10 mA
Module's power consumption with no load	0.24 W
Max. power dissipation of the module	0.50 W
Inputs	
Number of analogue inputs	2
Type of analogue inputs	Voltage
Input range	0 .. 10 V (differential input), 0 .. 10 V (single-ended), -10 .. 10 V (differential input)
Resolution (without sign bit)	12 Bit
Max. continuous voltage	12 V
Max. common mode voltage	5 V
Input resistance (voltage input)	100 kOhm
Deviations from the measuring range limit value	
Linearity error	0.05 %
Output variable error at 25° C	0.2 %
Temperature coefficient	0.0200 %/K
Max. measurement error during EMC test	1.0 %
Analogue input filter	RC filter
Cutoff frequency	130 Hz
Potential isolation between input and voltage for the internal module bus	yes
Potential isolation between input and periphery supply	yes
Times	
Typ. processing time	1.0 ms

8.1 Technical details

Environmental data	
Climatic suitability	EN 60068-2-14, EN 60068-2-1, EN 60068-2-2, EN 60068-2-30, EN 60068-2-78
Ambient temperature in accordance with EN 60068-2-14	0 - 60 °C -40 - 70 °C coated version (-T)
Storage temperature in accordance with EN 60068-2-1/-2	-25 - 70 °C -40 - 70 °C coated version (-T)
Climatic suitability in accordance with EN 60068-2-30, EN 60068-2-78	93 % r. h. at 40 °C
Condensation	no yes coated version (-T)
Max. operating height above sea level	5000 m coated version (-T)
EMC	EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-6-2, EN 61000-6-4
Vibration to EN 60068-2-6	
Frequency	10 - 150 Hz
Max. acceleration	1g
Shock stress	
EN 60068-2-27	15g 11 ms
EN 60068-2-29	10g 16 ms
Protection type in accordance with EN 60529	
Mounting (e.g. cabinet)	IP54
Housing	IP20
Terminals	IP20
Airgap creepage in accordance with EN 60664-1	
Overvoltage category	II
Pollution degree	2
Mechanical data	
Housing material	
Front	PC
Bottom	PC
Coding	PA
Dimensions	
Height	76.0 mm
Width	12.6 mm
Depth	60.2 mm
Weight	37 g
Mechanical coding	
Type	D
Colour	dark grey

The standards current on **2005-04** apply.

8.2 Order reference

Order reference	
Description	Order no.
PSSu E S 2AI U (Electronic module)	312 440
PSSu E S 2AI U-T (Electronic module, coated version)	314 440
Base modules	Order no.
PSSu BP 1/8S (Base module without C-rail with screw terminals)	312 600
PSSu BP 1/8S-T (Base module without C-rail with screw terminals, coated version)	314 600
PSSu BP 1/8C (Base module without C-rail with cage clamp terminals)	312 601
PSSu BP 1/8C-T (Base module without C-rail with cage clamp terminals, coated version)	314 601
PSSu BP-C 1/8S (Base module with C-rail with screw terminals)	312 610
PSSu BP-C 1/8S-T (Base module with C-rail with screw terminals, coated version)	314 610
PSSu BP-C 1/8C (Base module with C-rail with cage clamp terminals)	312 611
PSSu BP-C 1/8C-T (Base module with C-rail with cage clamp terminals, coated version)	314 611
PSSu BP 1/12S (Base module without C-rail with screw terminals)	312 618
PSSu BP 1/12S-T (Base module without C-rail with screw terminals, coated version)	314 618
PSSu BP 1/12C (Base module without C-rail with cage clamp terminals)	312 619
PSSu BP 1/12C-T (Base module without C-rail with cage clamp terminals, coated version)	314 619
PSSu BP-C 1/12S (Base module with C-rail with screw terminals)	312 620
PSSu BP-C 1/12S-T (Base module with C-rail with screw terminals, coated version)	314 620
PSSu BP-C 1/12C (Base module with C-rail with cage clamp terminals)	312 621
PSSu BP-C 1/12C-T (Base module with C-rail with cage clamp terminals, coated version)	314 621