



SIPLUS S7-300 SM332 4AO U/I -25 ... +70 DEGREES C
WITH CONFORMAL COATING BASED ON 6ES7332-
5HD01-0AB0 . ANALOG OUTPUT SM 332,
OPTICALLY ISOLATED, 4 AO, U/I;
DIAGNOSTICS;
RESOLUTION 11/12 BITS, 20 PIN,
REMOVE/INSERT W. ACTIVE, BACKPLANE BUS

Supply voltage	
Load voltage L+	
Rated value (DC)	24 V
Input current	
from load voltage L+ (without load), max.	240 mA
from backplane bus 5 V DC, max.	60 mA
Power loss	
Power loss, typ.	3 W
Analog outputs	
Number of analog outputs	4
Voltage output, short-circuit protection	Yes
Voltage output, short-circuit current, max.	25 mA
Current output, no-load voltage, max.	18 V
Output ranges, voltage	
0 to 10 V	Yes
1 to 5 V	Yes
-10 to +10 V	Yes
Output ranges, current	

0 to 20 mA	Yes
-20 to +20 mA	Yes
4 to 20 mA	Yes
Load impedance (in rated range of output)	
with voltage outputs, min.	1 k Ω
with voltage outputs, capacitive load, max.	1 μ F
with current outputs, max.	500 Ω
with current outputs, inductive load, max.	10 mH
Cable length	
Cable length, shielded, max.	200 m
Analog value generation	
Integration and conversion time/resolution per channel	
Resolution with overrange (bit including sign), max.	12 bit ; +/-10 V, +/-20 mA, 4 to 20 mA, 1 to 5 V: 11 bits + sign; 0 to 10 V, 0 to 20 mA: 12 bits
Conversion time (per channel)	0.8 ms
Settling time	
for resistive load	0.2 ms
for capacitive load	3.3 ms
for inductive load	0.5 ms ; 0.5 ms (1 mH); 3.3 ms (10 mH)
Errors/accuracies	
Operational error limit in overall temperature range	
Voltage, relative to output area, (+/-)	0.5 % ; +/-0.6% @ <0 °C or >60 °C
Current, relative to output area, (+/-)	0.6 % ; +/-0.7% @ <0 °C or >60 °C
Basic error limit (operational limit at 25 °C)	
Voltage, relative to output area, (+/-)	0.4 %
Current, relative to output area, (+/-)	0.5 %
Interrupts/diagnostics/status information	
Substitute values connectable	Yes ; Parameterizable
Alarms	
Diagnostic alarm	Yes ; Parameterizable
Diagnostic messages	
Diagnostic information readable	Yes
Diagnostics	Yes
Diagnostics indication LED	
Group error SF (red)	Yes
Galvanic isolation	
Galvanic isolation analog outputs	
between the channels and the backplane bus	Yes

Isolation	
Isolation tested with	500 V DC
Standards, approvals, certificates	
CE mark	Yes
KC approval	Yes
UL approval	Yes ; File E239877
RCM (former C-TICK)	Yes
FM approval	Yes ; CofC 3028431
EAC (former Gost-R)	Yes
EN 50155	No
EN 50121-4	No
Ambient conditions	
Operating temperature	
min.	-25 °C ; = Tmin
max.	70 °C ; = Tmax; 60 °C @ UL/cUL, ATEX and FM use
Extended ambient conditions	
relative to ambient temperature-atmospheric pressure-installation altitude	Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m) // Tmin ... (Tmax - 10K) at 795 hPa ... 658 hPa (+2000 m ... +3500 m) // Tmin ... (Tmax - 20K) at 658 hPa ... 540 hPa (+3500 m ... +5000 m)
Relative humidity	
with condensation, tested in accordance with IEC 60068-2-38, maximum	100 % ; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
to biologically active substances/conformity with EN 60721-3-3	Yes ; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!
to chemically active substances/conformity with EN 60721-3-3	Yes ; Class 3C4 (RH < 75%) incl. salt spray according to EN 60068-2-52 (degree of severity 3). The supplied connector covers must remain on the unused interfaces during operation!
to mechanically active substances/conformity with EN 60721-3-3	Yes ; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!
Connection method	
required front connector	20-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	220 g
Status	Jul 7, 2014