SIEMENS

Data sheet

6ES7532-5HF00-0AB0



SIMATIC S7-1500, analog output module AQ8xU/I HS, 16-bit resolution accuracy 0.3%, 8 channels in groups of 8, diagnostics; substitute value 8 channels in 0.125 ms oversampling; the module supports the safety-oriented shutdown of load groups up to SIL2 according to EN IEC 62061:2021 and Category 3 / PL d according to EN ISO 13849-1:2015. delivery including infeed element, shielding bracket and shield terminal: front connector (screw terminals or push-in) to be ordered separately

Figure similar

Product type designation
HW functional status From FS01 Firmware version FW update possible Product function I&M data Isochronous mode Prioritized startup Output range scalable No STEP 7 TIA Portal configurable/integrated from version FROFIBUS from GSD version/GSD revision PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision FROFIGURATION Oversampling MSO CIR - Configuration in RUN Reparameterization possible in RUN Supply voltage Rated value (DC) permissible range, lower limit (DC) PROFISSIBLE range, upper limit (DC) PROFISSIBLE rom GSD version (DC) PROFISSIBLE range, upper limit (DC)
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Operating mode
Oversampling MSO Yes CiR - Configuration in RUN Reparameterization possible in RUN Calibration possible in RUN Yes Supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Reverse polarity protection Yes Yes
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permissible range, lower limit (DC) permissible range, upper limit (DC) Reverse polarity protection 19.2 V 28.8 V Yes
permissible range, upper limit (DC) Reverse polarity protection 28.8 V Yes
Reverse polarity protection Yes
Input current
Current consumption, max. 320 mA; with 19.2 V supply
Power
Power available from the backplane bus 1.15 W
Power loss
Power loss, typ. 7 W
Analog outputs
Number of analog outputs 8
Voltage output, short-circuit protection Yes
Voltage output, short-circuit current, max. 45 mA
Current output, no-load voltage, max. 20 V
Cycle time (all channels), min. 125 µs; independent of number of activated channels
Output ranges, voltage

• 0 to 10 V	Yes
• 1 V to 5 V	Yes
• -5 V to +5 V	No
• -10 V to +10 V	Yes
Output ranges, current	
• 0 to 20 mA	Yes
• -20 mA to +20 mA	Yes
• 4 mA to 20 mA	Yes
Connection of actuators	
 for voltage output two-wire connection 	Yes
for voltage output four-wire connection	Yes
 for current output two-wire connection 	Yes
Load impedance (in rated range of output)	
with voltage outputs, min.	1 kΩ
with voltage outputs, capacitive load, max.	100 nF
with voltage datputs, capability load, max. with current outputs, max.	500 Ω
•	1 mH
with current outputs, inductive load, max. Cable length	I IIIN
Cable length	200 m
• shielded, max.	200 m
Analog value generation for the outputs	
Integration and conversion time/resolution per channel	10.17
Resolution with overrange (bit including sign), max.	16 bit
Conversion time (per channel)	50 μs; independent of number of activated channels
Settling time	
for resistive load	30 μs; see additional description in the manual
 for capacitive load 	100 μs; see additional description in the manual
for inductive load	100 μs; see additional description in the manual
Errors/accuracies	
Output ripple (relative to output range, bandwidth 0 to 50 kHz), (+/-)	0.02 %
Linearity error (relative to output range), (+/-)	0.15 %
Temperature error (relative to output range), (+/-)	0.002 %/K
Crosstalk between the outputs, max.	-100 dB
Repeat accuracy in steady state at 25 °C (relative to output	0.05 %
range), (+/-)	
note regarding accuracy	at temperatures below 0 °C, the figures for operating error and temperature error are doubled
Operational error limit in overall temperature range	
 Voltage, relative to output range, (+/-) 	0.3 %
 Current, relative to output range, (+/-) 	0.3 %
Basic error limit (operational limit at 25 °C)	
 Voltage, relative to output range, (+/-) 	0.2 %
Current, relative to output range, (+/-)	0.2 %
Isochronous mode	
Execution and activation time (TCO), min.	100 μs
Bus cycle time (TDP), min.	250 μs
Interrupts/diagnostics/status information	p-
Diagnostics function	Yes
Substitute values connectable	Yes
	1 00
Alarms • Diagnostic clarm	Voc
Diagnostic alarm	Yes
Diagnoses	Voc
 Monitoring the supply voltage 	Yes
	Y GET LIGHT FOR CHITCHE TYPE "CHITCHE"
Wire-break	Yes; Only for output type "current"
Wire-breakShort-circuit	Yes; Only for output type "voltage"
Wire-breakShort-circuitOverflow/underflow	
Wire-break Short-circuit	Yes; Only for output type "voltage" Yes
Wire-breakShort-circuitOverflow/underflow	Yes; Only for output type "voltage"
Wire-break Short-circuit Overflow/underflow Diagnostics indication LED	Yes; Only for output type "voltage" Yes
Wire-break Short-circuit Overflow/underflow Diagnostics indication LED RUN LED	Yes; Only for output type "voltage" Yes Yes; green LED
Wire-break Short-circuit Overflow/underflow Diagnostics indication LED RUN LED ERROR LED	Yes; Only for output type "voltage" Yes Yes; green LED Yes; red LED

for channel diagnostics	Yes; red LED	
for module diagnostics	Yes; red LED	
Potential separation		
Potential separation channels		
between the channels	No	
 between the channels, in groups of 	8	
 between the channels and backplane bus 	Yes	
 Between the channels and load voltage L+ 	Yes	
Permissible potential difference		
between S- and MANA (UCM)	8 V DC	
Isolation		
Isolation tested with	707 V DC (type test)	
Standards, approvals, certificates		
Suitable for safety-related tripping of standard modules	Yes; from FS04	
Highest safety class achievable for safety-related tripping of standa	rd modules	
 Performance level according to ISO 13849-1 	PL d	
 Category according to ISO 13849-1 	Cat. 3	
• SIL acc. to IEC 62061	SIL 2	
 remark on safety-oriented shutdown 	https://support.industry.siemens.com/cs/de/en/view/39198632	
product functions / security / header		
signed firmware update	No	
data integrity	No	
Ambient conditions		
Ambient temperature during operation		
 horizontal installation, min. 	-30 °C; From FS03	
 horizontal installation, max. 	60 °C	
vertical installation, min.	-30 °C; From FS03	
vertical installation, max.	40 °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.	325 g	

last modified:

3/12/2024