SIEMENS

Product data sheet 6ES7532-5HF00-0AB0

SIMATIC S7-1500,
ANALOG OUTPUT MODULE AQ 8 X U/I HS 16 BITS OF RESOLUTION,
ACCURACY 0.3 %,
8CHANNELS IN GROUPS OF 8, DIAGNOSIS,
SUBSTITUTE VALUE 8 CHANNELS IN 0.125 MS INCL. INFEED ELEMENT,
SHIELD CLAMP AND SHIELD TERMINAL

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General information	
Hardware product version	E01
Firmware version	V2.0.0
Product function	
I&M data	Yes ; I&M0 to I&M3
Engineering with	
STEP 7 TIA Portal configurable/integrated as of version	V12 / V12
STEP 7 configurable/integrated as of version	V5.5 SP3 / -
PROFIBUS as of GSD version/GSD revision	V1.0 / V5.1
PROFINET as of GSD version/GSD revision	V2.3 / -
Operating mode	
MSO	Yes
CiR - Configuration in RUN	
Reparameterization possible in RUN	Yes
Calibration possible in RUN	Yes
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V

Reverse polarity protection	Yes
Input current	
Current consumption, max.	260 mA ; with 24 V DC 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 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
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 current outputs, max.	500 Ω
with current outputs, inductive load, max.	1 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.	16 bit
Conversion time (per channel)	50 µs
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 (based on output area, bandwidth 0 to 50 kHz), (+/-)	0.02 %
Linearity error (relative to output range), (+/-)	0.15 %
Temperature error (relative to output range), (+/-)	0.0020 %/K
Crosstalk between the outputs, max.	-100 dB
Repeat accuracy in steady state at 25 °C (relative to output area), (+/-)	0.05 %
Operational error limit in overall temperature range	
Voltage, relative to output area, (+/-)	0.3 %
Current, relative to output area, (+/-)	0.3 %
Basic error limit (operational limit at 25 °C)	
Voltage, relative to output area, (+/-)	0.2 %
Current, relative to output area, (+/-)	0.2 %
Isochronous mode	
Isochronous mode (application synchronized up to terminal)	Yes
Execution and activation time (TCO), min.	100 µs
Bus cycle time (TDP), min.	250 µs
Interrupts/diagnostics/status information	
Substitute values connectable	Yes
Alarms	
Diagnostic alarm	Yes
Diagnostic messages	
Diagnostics	Yes
Monitoring the supply voltage	Yes
Wire-break	Yes ; Only for output type "current"
Short-circuit	Yes ; Only for output type "voltage"
Overflow/underflow	Yes
Diagnostics indication LED	
RUN LED	Yes ; Green LED
ERROR LED	Yes ; Red LED
Monitoring the supply voltage (PWR-LED)	Yes ; Green LED
Channel status display	Yes ; Green LED
for channel diagnostics	Yes ; Red LED
for module diagnostics	Yes ; Red LED
Galvanic isolation	
Galvanic isolation channels	
between the channels	No

between the channels, in groups of	8
between the channels and the backplane bus	Yes
between the channels and the load voltage L+	Yes
Permissible potential difference	
between MANA and M internally (UISO)	75 V DC/60 V AC (base isolation)
between S- and MANA (UCM)	+/- 8 V
Isolation	
Isolation tested with	707 V DC (type test)
Decentralized operation	
Prioritized startup	No
Dimensions	
Width	35 mm
Height	147 mm
Depth	129 mm
Weights	
Weight, approx.	325 g
Status	Jul 21, 2014