SIEMENS

Data sheet 6ES7522-5EH00-0AB0



SIMATIC S7-1500, digital output module DQ16x24..48VUC/125V DC/0.5A ST; 16 channels in groups of 1; 0.5 A per group; substitute value: observe derating 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. front connector (screw terminals or push-in) to be ordered separately

General information	
Product type designation	DQ 16x24 ... 48 V UC/125 V DC/0.5 A ST
HW functional status	from FS01
Firmware version	from V1.0.0
● FW update possible	Yes
Product function	
● I&M data	Yes; I&M0 to I&M3
● Isochronous mode	No
● Prioritized startup	Yes
Engineering with	
● STEP 7 TIA Portal configurable/integrated from version	V13 SP1 / -
● STEP 7 configurable/integrated from version	V5.5 SP3 / -
● PROFIBUS from GSD version/GSD revision	V1.0 / V5.1
● PROFINET from GSD version/GSD revision	V2.3 / -
Operating mode	
● DQ	Yes
● DQ with energy-saving function	No
● PWM	No
● Cam control (switching at comparison values)	No
● Oversampling	No
● MSO	Yes
● Integrated operating cycle counter	Yes; FW V1.1.0 or higher
Output voltage	
Rated value (DC)	24 V; 48 V, 125 V
Rated value (AC)	24 V; 48 V (50 - 60 Hz)
Power	
Power consumption from the backplane bus	2 W
Power loss	
Power loss, typ.	3.8 W
Address area	
Address space per module	
● Inputs	0 byte
● Outputs	2 byte
Digital outputs	
Type of digital output	Transistor
Number of digital outputs	16

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Current-sinking	Yes
Current-sourcing	Yes
Digital outputs, parameterizable	Yes
Short-circuit protection	No
Limitation of inductive shutdown voltage to	200 V (suppressor diode)
Controlling a digital input	Yes
Digital output functions, parameterizable	
● Switching tripped by comparison values	No
● Freely usable digital output	No
● PWM output	No
● Digital output with oversampling	No
Switching capacity of the outputs	
● with resistive load, max.	0.5 A
● on lamp load, max.	40 W; At 125 V DC, 10 W at 48 V UC, 5 W at 24 V UC
Output voltage	
● for signal "1", min.	L+ (-1.0 V)
Output current	
● for signal "1" rated value	0.5 A
● for signal "1" permissible range, max.	0.6 A
Output delay with resistive load	
● "0" to "1", max.	5 ms
● "1" to "0", max.	5 ms
Parallel switching of two outputs	
● for logic links	Yes
● for uprating	No
● for redundant control of a load	Yes
Switching frequency	
● with resistive load, max.	25 Hz
● with inductive load, max.	0.5 Hz
● on lamp load, max.	10 Hz
Total current of the outputs	
● Current per channel, max.	0.5 A
● Current per group, max.	0.5 A
● Current per module, max.	8 A
Cable length	
● shielded, max.	1 000 m
● unshielded, max.	600 m
Interrupts/diagnostics/status information	
Diagnostics function	No
Substitute values connectable	Yes
Alarms	
● Diagnostic alarm	No
● Maintenance interrupt	Yes; maintenance alarm for switching cycle counter
Diagnoses	
● Monitoring the supply voltage	No
● Wire break	No
● Short-circuit	No
● Group error	No
Diagnostics indication LED	
● RUN LED	Yes; green LED
● ERROR LED	Yes; red LED
● MAINT LED	Yes; Yellow LED
● Monitoring of the supply voltage (PWR-LED)	No
● Channel status display	Yes; green LED
● for channel diagnostics	No
● for module diagnostics	Yes; red LED
Potential separation	
Potential separation channels	
● between the channels	Yes

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● between the channels, in groups of	1
● between the channels and backplane bus	Yes
Permissible potential difference	
between different circuits	125 V DC/48 V AC
Isolation	
Isolation tested with	2 000 V DC
Standards, approvals, certificates	
Siemens Eco Profile (SEP)	Siemens EcoTech
Suitable for safety functions	No
Suitable for safety-related tripping of standard modules	Yes; From FS02
Ecological footprint	
● environmental product declaration	Yes
Global warming potential	
— global warming potential, (total) [CO2 eq]	43.8 kg
— global warming potential, (during production) [CO2 eq]	9.5 kg
— global warming potential, (during operation) [CO2 eq]	34.5 kg
— global warming potential, (after end of life cycle) [CO2 eq]	-0.231 kg
Highest safety class achievable for safety-related tripping of standard 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://www.plcbin.com/?s=6ES7522-5EH00-0AB0
Security	
signed firmware update	Yes
safely removing data	No
data integrity	No
Ambient conditions	
Ambient temperature during operation	
● horizontal installation, min.	-25 °C; From FS05
● horizontal installation, max.	60 °C
● vertical installation, min.	-25 °C; From FS05
● vertical installation, max.	40 °C
Altitude during operation relating to sea level	
● Installation altitude above sea level, max.	2 000 m
Absolute humidity	
● dew point, min.	-60 °C; suitable for dry room applications
Dimensions	
Width	35 mm
Height	147 mm
Depth	129 mm
Weights	
Weight, approx.	230 g
Classifications	

	Version	Classification
eClass	16	27-24-22-04
eClass	14	27-24-22-04
eClass	12	27-24-22-04
eClass	9.1	27-24-22-04
eClass	9	27-24-22-04
eClass	8	27-24-22-04
eClass	7.1	27-24-22-04
eClass	6	27-24-22-04
ETIM	10	EC001419
ETIM	9	EC001419

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ETIM	8	EC001419
ETIM	7	EC001419
IDEA	4	3566
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval

Manufacturer Declaration | Miscellaneous

General Product Approval | EMV

Manufacturer Declaration | China RoHS

For use in hazardous locations | Maritime application

FM | FM

Maritime application

NK / Nippon Kaiji Kyokai | CCS (China Classification Society) | KR (Korean Register of Shipping)

Environment

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