

SIPLUS S7-1500 DQ 32X24VDC/ 0.5A ST -40 ... +70 DEGREES C
WITH CONFORMAL COATING BASED ON 6ES7522-1BL00-0AB0 .
DIGITAL OUTPUT MODULE 32 CHANNELS IN GROUPS OF 8, 4 A
PER GROUP; DIAGNOSIS; SUBSTITUTE VALUE



Figure similar

General information	
Product type designation	DQ 32x24VDC/0.5A ST
HW functional status	E01
Firmware version	V1.0.0
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 / -
Supply voltage	
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes; through internal protection with 7 A per group
Input current	
Current consumption, max.	60 mA

Output voltage	
Rated value (DC)	24 V
Power	
Power available from the backplane bus	1.1 W
Power loss	
Power loss, typ.	3.5 W
Digital outputs	
Number of digital outputs	32
Short-circuit protection	Yes; Clocked electronically
• Response threshold, typ.	1 A
Switching capacity of the outputs	
• with resistive load, max.	0.5 A
• on lamp load, max.	5 W
Load resistance range	
• lower limit	48 Ω
• upper limit	12 k Ω
Output voltage	
• for signal "1", min.	L+ (-0.8 V)
Output current	
• for signal "1" rated value	0.5 A
• for signal "1" permissible range, max.	0.5 A
• for signal "0" residual current, max.	0.5 mA
Output delay with resistive load	
• "0" to "1", max.	100 μ s
• "1" to "0", max.	500 μ s
Parallel switching of two outputs	
• for logic links	Yes
• for redundant control of a load	Yes
Switching frequency	
• with resistive load, max.	100 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; see additional description in the manual
• Current per group, max.	4 A; see additional description in the manual
• Current per module, max.	16 A; see additional description in the manual
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Isochronous mode	

Isochronous operation (application synchronized up to terminal)	Yes
Execution and activation time (TCO), min.	70 µs
Bus cycle time (TDP), min.	250 µs

Interrupts/diagnostics/status information

Diagnostics function	Yes
Substitute values connectable	Yes

Alarms

- Diagnostic alarm

Yes

Diagnostic messages

- Monitoring the supply voltage
- Wire-break
- Short-circuit
- Fuse blown

Yes

No

Yes

No

Diagnostics indication LED

- RUN LED
- ERROR LED
- Monitoring of the supply voltage (PWR-LED)
- Channel status display
- for channel diagnostics
- for module diagnostics

Yes; Green LED

Yes; Red LED

Yes; Green LED

Yes; Green LED

No

Yes; Red LED

Potential separation

Potential separation channels

- between the channels
- between the channels, in groups of
- between the channels and backplane bus

No

8

Yes

Permissible potential difference

between different circuits 75 V DC/60 V AC (base isolation)

Isolation

Isolation tested with 707 V DC (type test)

Ambient conditions

Ambient temperature during operation

- horizontal installation, min.
- horizontal installation, max.
- vertical installation, min.
- vertical installation, max.

-40 °C; = Tmin

70 °C; = Tmax

-40 °C; = Tmin

50 °C; = Tmax

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, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
— against 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!
— against 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!
— against 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!
Decentralized operation	
Fast Startup supported	Yes; 500 ms
Dimensions	
Width	35 mm
Height	147 mm
Depth	129 mm
Weights	
Weight, approx.	280 g
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