



SIMATIC S7-300, Digital output SM 322, isolated, 8 DO, 24 V DC, 2A, 1x 20-pole

Figure similar

Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V
• permissible range, lower limit (DC)	20.4 V
• permissible range, upper limit (DC)	28.8 V
Input current	
from load voltage L+ (without load), max.	60 mA
from backplane bus 5 V DC, max.	40 mA
Power loss	
Power loss, typ.	6.8 W
Digital outputs	
Number of digital outputs	8
Short-circuit protection	Yes; Electronic
• Response threshold, typ.	3 A
Limitation of inductive shutdown voltage to	L+ (-48 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
• on lamp load, max.	10 W
Load resistance range	
• lower limit	12 Ω
• upper limit	4 kΩ
Output voltage	
• for signal "1", min.	L+ (-0.8 V)
Output current	
• for signal "1" rated value	2 A
• for signal "1" permissible range for 0 to 40 °C, min.	5 mA
• for signal "1" permissible range for 0 to 40 °C, max.	2.4 A
• for signal "1" permissible range for 40 to 60 °C, min.	5 mA
• for signal "1" permissible range for 40 to 60 °C, max.	2.4 A
• for signal "1" minimum load current	5 mA
• for signal "0" residual current, max.	0.5 mA
Output delay with resistive load	
• "0" to "1", max.	100 μs
• "1" to "0", max.	500 μs
Parallel switching of two outputs	
• for uprating	No
• for redundant control of a load	Yes
Switching frequency	
• with resistive load, max.	100 Hz

<ul style="list-style-type: none"> • with inductive load, max. 	0.5 Hz	
<ul style="list-style-type: none"> • with inductive load (acc. to IEC 60947-5-1, DC13), max. 	0.5 Hz	
<ul style="list-style-type: none"> • on lamp load, max. 	10 Hz	
Total current of the outputs (per group)		
horizontal installation		
— up to 40 °C, max.	4 A	
— up to 60 °C, max.	4 A	
vertical installation		
— up to 40 °C, max.	4 A	
Cable length		
<ul style="list-style-type: none"> • shielded, max. 	1 000 m	
<ul style="list-style-type: none"> • unshielded, max. 	600 m	
Interrupts/diagnostics/status information		
Alarms	No	
Diagnostics function	No	
Alarms		
<ul style="list-style-type: none"> • Diagnostic alarm 	No	
Diagnoses		
<ul style="list-style-type: none"> • Wire-break 	No	
<ul style="list-style-type: none"> • Short-circuit 	No	
<ul style="list-style-type: none"> • Fuse blown 	No	
<ul style="list-style-type: none"> • missing load voltage 	No	
Diagnostics indication LED		
<ul style="list-style-type: none"> • Rated load voltage PWR (green) 	No	
<ul style="list-style-type: none"> • Fuse OK FSG (green) 	No	
<ul style="list-style-type: none"> • Status indicator digital output (green) 	Yes; per channel	
Potential separation		
Potential separation digital outputs		
<ul style="list-style-type: none"> • between the channels 	Yes	
<ul style="list-style-type: none"> • between the channels, in groups of 	4	
<ul style="list-style-type: none"> • between the channels and backplane bus 	Yes; Optocoupler	
Isolation		
Isolation tested with	500 V DC	
connection method		
required front connector	20-pin	
Dimensions		
Width	40 mm	
Height	125 mm	
Depth	120 mm	
Weights		
Weight, approx.	190 g	
Classifications		
	Version	Classification
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	9	EC001419
ETIM	8	EC001419
ETIM	7	EC001419
IDEA	4	3566
UNSPSC	15	32-15-17-05
Approvals / Certificates		
General Product Approval	EMV	

[Manufacturer Declaration](#)



EMV

For use in hazardous locations



[EM](#)



For use in hazardous locations

Marine / Shipping



[Miscellaneous](#)

[CCC-Ex](#)



Marine / Shipping



LRS

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PRS



RINA

[CCS \(China Classification Society\)](#)

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