## Data sheet

\*\*\* SPARE PART\*\*\* SIMATIC S7-1200, DIGITAL OUTPUT SM 1222, 16 DO, 24V DC, TRANSISTOR 0.5A



Supply voltage	
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Input current	
from backplane bus 5 V DC, max.	140 mA
Power loss	
Power loss, typ.	2.5 W
Digital outputs	
Number of digital outputs	16
• in groups of	1
Short-circuit protection	No; to be provided externally
Limitation of inductive shutdown voltage to	typ. (L+) -48 V
Switching capacity of the outputs	
• with resistive load, max.	0.5 A
• on lamp load, max.	5 W
Output voltage	
• Rated value (DC)	24 V

• for signal "0", max.	0.1 V; with 10 kOhm load
● for signal "1", min.	20 V DC
Output current	
• for signal "1" rated value	0.5 A
• for signal "0" residual current, max.	10 μΑ
Output delay with resistive load	
• "0" to "1", max.	50 μs
• "1" to "0", max.	200 μs
Total current of the outputs (per group)	
horizontal installation	
— up to 50 °C, max.	8 A; Current per mass
Relay outputs	
Switching capacity of contacts	
— with inductive load, max.	0.5 A
— on lamp load, max.	5 W
— with resistive load, max.	0.5 A
Cable length	
• shielded, max.	500 m
• unshielded, max.	150 m
Interrupts/diagnostics/status information  Alarms	Voc
Diagnostic functions	Yes
Alarms	165
Diagnostic alarm	Yes
Diagnostics indication LED	
• for status of the outputs	Yes
• for maintenance	Yes
- 101 maintenance	.00
Potential separation	
Potential separation digital outputs	
<ul><li>between the channels, in groups of</li></ul>	1
<ul> <li>between the channels and backplane bus</li> </ul>	500 V AC
Degree and class of protection	
Degree of protection acc. to EN 60529	
● IP20	Yes
Standards, approvals, certificates	
CE mark	Yes
FM approval	Yes
RCM (formerly C-TICK)	Yes
Ambient conditions	
Ambient conditions  Free fall	

• Fall height, max.	0.3 m; five times, in product package
Ambient temperature during operation	
permissible temperature range	0 °C to 55 °C horizontal mounting, 0 °C to 45 °C vertical mounting, 95% non-condensing humidity
<ul> <li>permissible temperature change</li> </ul>	5°C to 55°C, 3°C / minute
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Air pressure acc. to IEC 60068-2-13	
• Storage/transport, min.	660 hPa
<ul> <li>Storage/transport, max.</li> </ul>	1 080 hPa
Relative humidity	
<ul> <li>permissible range (without condensation) at 25</li> <li>°C</li> </ul>	95 %
Connection method	
required front connector	Yes
Mechanics/material	
Enclosure material (front)	
• Plastic	Yes
Dimensions	
Width	45 mm
Height	100 mm
Depth	75 mm
Weights	
Weight, approx.	220 g
	220 g