

Product type designation



Reader RF685R ETSI

SIMATIC RF600 READER RF685R ETSI (865 ... 868 MHz);
INTERFACES: ETHERNET M12 PROFINET M12 1 INTEGRATED
ANTENNA + 1 EXT. ANTENNA PORT, 4 DIG. INPUTS/ 4 DIG.
OUTPUTS, 24 V DC; IP65; -25 UP TO +55 DGR/C; WITHOUT
ACCESSORIES

Wireless frequencies	
Operating frequency	865 ... 868 MHz
Transmit power	3 ... 2000 mW
Effective radiant power	
• for each external antenna / maximum	2000 mW
• minimum	10 mW
• maximum	2000 mW
Electrical data	
Range / maximum	8 m; Observe system manual RF600: Overreaches are possible, range is dependent on transponder type: observe http://support.automation.siemens.com/WW/view/en/67384964
Protocol / with radio transmission	EPCglobal Class 1 Gen 2 / ISO 18000-6B/-6C
Transfer rate / with radio transmission / maximum	300 kbit/s
Product feature / multitag-capable	Yes
Polarization	linear, circular, auto
Transmission time / for user data	
• for write access / per byte / typical	2 ms
• for read access / per byte / typical	0.15 ms

Interfaces	
Number of external antennas	1
Type of electrical connection	
• for external antenna(s)	RP-TNC
• for supply voltage	M12, 8-pin, connector
• for communications interface	2 x M12 4-pin D-coded, M12 8-pin (RS422)
• at the digital inputs/outputs	M12, 12-pin, female connector
Number of digital inputs	4
Number of digital outputs	4
Mechanical data	
Material	Aluminum, Pocan
Color	silver, TI-Grey
Mounting distance / relating to metal surfaces / recommended / minimum	0 mm
Supply voltage, current consumption, power loss	
Supply voltage	
• at DC / Rated value	24 V
• at DC	20 ... 30 V
Consumed current / at DC / at 24 V	
• typical	0.38 A
• maximum	2 A
Permitted ambient conditions	
Ambient temperature	
• during operation	-25 ... +55 °C
• during storage	-40 ... +85 °C
• during transport	-40 ... +85 °C
Ambient condition / for operation	With operating temperature below -20 °C: Warming-up time at least 10 minutes
Protection class IP	IP65
Shock resistance	EN 60068-2-27, EN 60068-2-6
Shock acceleration	500 m/s ²
Vibrational acceleration	200 m/s ²
Design, dimensions and weight	
Width	258 mm
Height	258 mm
Depth	80 mm
Net weight	2.47 kg
Mounting type	Vesa 100 with 4 x M4 screws, top-hat rail 35 mm, profile rail S7-300, S7-1200 or S7-1500
Wire length	
• of antenna cable / minimum	1 m

- of antenna cable / maximum

40 m

Product properties, functions, components / general

Display version	two LED rows with 8 and 9 LEDs
Product feature / silicon-free	Yes

Standards, specifications, approvals

Certificate of suitability	Wireless according to R&TTE guideline, CE, IEC 60950
MTBF	29 y

Accessories

accessories	one external antenna, set for mounting on top-hat rail or profile rail
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Further Information / Internet Links

Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL • to website: Industrial communication • to website: Industry Mall • to website: Information and Download Center • to website: Image database • to website: CAx Download Manager • to website: Industry Online Support	https://support.industry.siemens.com/cs/ww/en/view/67384964 http://www.siemens.com/ident/rfid https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter http://automation.siemens.com/bilddb http://www.siemens.com/cax https://support.industry.siemens.com

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