

Product type designation

Reader RF685R ETSI

SIMATIC RF600 Reader RF685R ETSI; Interface Ethernet M12 PROFINET M12 1 integrated antenna+1 ext. antenna port, 4 dig. inputs/ 4 dig. outputs, 24V DC; IP65; -25 to +55 °C; without accessories



Wireless frequencies

Operating frequency	865 ... 868 MHz
Transmit power	3 ... 2000 mW
Effective radiant power	
<ul style="list-style-type: none"> • for each external antenna / maximum • minimum • maximum 	2000 mW 10 mW 2000 mW
Range / maximum	8 m; Extended ranges possible, see RF600 System Manual, Range table: http://support.automation.siemens.com/WW/view/en/67384964
Transfer rate / with radio transmission / maximum	400 kbit/s
Product feature / multitag-capable	Yes
Polarization	Linear (h/v), circular, combined

Electrical data

Transmission time / for user data	
<ul style="list-style-type: none"> • for write access / per byte / typical • for read access / per byte / typical 	2 ms 0.15 ms

Interfaces	
Number of external antennas	1
Type of electrical connection	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • at DC / Rated value 24 V • at DC 20 ... 30 V
Consumed current / at DC / at 24 V	<ul style="list-style-type: none"> • typical 0.38 A • maximum 2 A

Permitted ambient conditions	
Ambient temperature	<ul style="list-style-type: none"> • 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
Resistance to mechanical stress	The maximum stress of shock and vibration acceleration is guaranteed only in combination with the VESA mount

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
Protocol / is supported / Media Redundancy Protocol (MRP)	Yes
Protocol / is supported	
• LLDP	Yes
• TCP/IP	Yes
• SNMP v1	Yes
• SNMP v2	No
• SNMP v3	No
• DCP	Yes
• EtherNet/IP protocol	Yes
Product feature / silicon-free	Yes

Standards, specifications, approvals

MTBF	29 y
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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	https://support.industry.siemens.com/cs/ww/en/view/67384964
• to website: Industrial communication	http://www.siemens.com/ident/rfid
• to website: Industry Mall	https://mall.industry.siemens.com
• to website: Information and Download Center	http://www.siemens.com/industry/infocenter
• to website: Image database	http://automation.siemens.com/bilddb
• to website: CAx Download Manager	http://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com
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