

Product type designation

Reader RF685R FCC

SIMATIC RF600 Reader RF685R FCC; Interfaces: 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	902 ... 928 MHz
Transmit power	3 ... 2000 mW
Equivalent isotropically radiated power	
<ul style="list-style-type: none"> • for each external antenna / maximum 	4000 mW
<ul style="list-style-type: none"> • minimum 	10 mW
<ul style="list-style-type: none"> • maximum 	4000 mW

Electrical data

Range / maximum	8 m
Transfer rate / with radio transmission / maximum	400 kbit/s
Product feature / multitag-capable	Yes
Transmission time / for user data	
<ul style="list-style-type: none"> • for write access / per byte / typical 	2 ms
<ul style="list-style-type: none"> • for read access / per byte / typical 	0.15 ms

Interfaces

Number of external antennas	1
Type of electrical connection	

<ul style="list-style-type: none"> • for external antenna(s) • for supply voltage • for communications interface • at the digital inputs/outputs 	RP-TNC M12, 8-pin, connector 2 x M12 4-pin D-coded, M12 8-pin (RS422) M12, 12-pin, female connector
Number of digital inputs	4
Number of digital outputs	4

Mechanical data	
Material	Aluminum, Pccan
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 • at DC 	24 V 20 ... 30 V
Consumed current / at DC / at 24 V	
<ul style="list-style-type: none"> • typical • maximum 	0.38 A 2 A

Permitted ambient conditions	
Ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport 	-25 ... +55 °C -40 ... +85 °C -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	
<ul style="list-style-type: none"> • of antenna cable / minimum • of antenna cable / maximum 	1 m 40 m

Product properties, functions, components / general	
Display version	two LED rows with 8 and 9 LEDs

Product feature / silicon-free	Yes
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Standards, specifications, approvals

Certificate of suitability	Wireless according to FCC, IC (Canada), cULus
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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	
<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">https://support.industry.siemens.com/cs/ww/en/view/67384964http://www.siemens.com/ident/rfidhttps://mall.industry.siemens.comhttp://www.siemens.com/industry/infocenterhttp://automation.siemens.com/bilddbhttp://www.siemens.com/caxhttps://support.industry.siemens.com

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