

Product type designation

Reader RF680R ARIB

SIMATIC RF600 Reader RF680R ARIB; Interface Ethernet M12, PROFINET M12, 4 antennas, 4 dig. inputs/ 4 dig. outputs, 24 V DC; IP65; -25 to +55 °C; without accessories and antennas



Suitability for operation

RF600 Transponder, for direct connection to Ethernet, PROFINET, EtherNet/IP or PROFIBUS via communication module, OPC UA server integrated

Radio frequencies

Operating frequency	916 ... 920 MHz
Transmit power	3 ... 1000 mW
Equivalent isotropically radiated power	4000 mW
<ul style="list-style-type: none"> • for each external antenna / maximum 	
Range / maximum	8 m; Extended ranges possible, see RF600 System Manual, Range table: http://support.automation.siemens.com/WW/view/en/67384964
Protocol / with radio transmission	EPCglobal Class 1 Gen 2 V2 / ISO/IEC 18000-62/-63
Transfer rate / with radio transmission / maximum	400 kbit/s
Product feature / multitag-capable	Yes

Electrical data

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	4
Standard for interfaces / for communication	Ethernet, PROFINET, OPC UA, EtherNet/IP, RS422
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, 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 • 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

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
Resistance to mechanical stress	The maximum stress of shock and vibration acceleration is guaranteed only in combination with the VESA mount

Design, dimensions and weights	
Width	258 mm
Height	258 mm
Depth	80 mm
Net weight	2.4 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 	1 m
<ul style="list-style-type: none"> • of antenna cable / maximum 	40 m

Product features, product functions, product components / general

Display version	two LED rows with 8 and 9 LEDs
Protocol / is supported / Media Redundancy Protocol (MRP)	Yes
Product function / of the PROFINET IO device / is supported / H-Sync forwarding	No
Protocol / is supported	
<ul style="list-style-type: none"> • LLDP 	Yes
<ul style="list-style-type: none"> • PROFINET IO protocol 	Yes
<ul style="list-style-type: none"> • TCP/IP 	Yes
<ul style="list-style-type: none"> • SNMP v1 	Yes
<ul style="list-style-type: none"> • SNMP v2 	No
<ul style="list-style-type: none"> • SNMP v3 	No
<ul style="list-style-type: none"> • DCP 	Yes
<ul style="list-style-type: none"> • EtherNet/IP protocol 	Yes
<ul style="list-style-type: none"> • OPC UA 	Yes
Product feature / silicon-free	Yes

Standards, specifications, approvals

Certificate of suitability	
<ul style="list-style-type: none"> • IECEx 	No
MTBF	28 y

accessories

accessories	up to 4 external antennas, set for mounting on top-hat rail or profile rail
-------------	---

Further information / Internet-Links

Internet-Link	
<ul style="list-style-type: none"> • to website: Selector SIMATIC NET SELECTION TOOL 	https://support.industry.siemens.com/cs/ww/en/view/67384964
<ul style="list-style-type: none"> • to website: Industrial communication 	http://www.siemens.com/ident/rfid
<ul style="list-style-type: none"> • to website: Industry Mall 	https://mall.industry.siemens.com
<ul style="list-style-type: none"> • to website: Information and Download Center 	http://www.siemens.com/industry/infocenter
<ul style="list-style-type: none"> • to website: Image database 	http://automation.siemens.com/bilddb
<ul style="list-style-type: none"> • to website: CAx Download Manager 	http://www.siemens.com/cax
<ul style="list-style-type: none"> • to website: Industry Online Support 	https://support.industry.siemens.com
last modified:	05/12/2020