SIEMENS

Data sheet 6GT2811-6AA10-1AA0

product type designation



Reader RF680R FCC

SIMATIC RF600 Reader RF680R FCC; Interfaces 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	902 ... 928 MHz
transmit power	3 ... 2000 mW
equivalent isotropically radiated power	
● for each external antenna / maximum	4000 mW
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	
● for write access / per byte / typical	2 ms
● 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	
● 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
●	20 ... 30 V
consumed current / at DC	
● at 24 V / typical	0.38 A
● at 24 V / maximum	2 A
ambient conditions	
ambient temperature	

Subject to change without notice
© Copyright Siemens

● 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	250 m/s²
vibrational acceleration	30 m/s²
resistance to mechanical stress	The maximum values for shock and vibration acceleration must not occur as continuous stress and they apply exclusively to assembly using screws
design, dimensions and weights	
width	258 mm
height	258 mm
depth	80 mm
net weight	2.4 kg
fastening method	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 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	
● LLDP	Yes
● PROFINET IO protocol	Yes
● TCP/IP	Yes
● SNMP v1	Yes
● SNMP v2	No
● SNMP v3	Yes
● DCP	Yes
● EtherNet/IP protocol	Yes
● OPC UA	Yes
product feature / silicon-free	Yes
standards, specifications, approvals	
certificate of suitability	wireless according to FCC, IC (Canada), cULus, OPC UA: embedded UA Server Profile
certificate of suitability	
● IECEx	No
MTBF	28 a
reference code	
● according to IEC 81346-2:2019	BYB
standards, specifications, approvals / Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
● total	321.37 kg
● during manufacturing	71.5 kg
● during operation	249 kg
● after end of life	0.87 kg
accessories	
accessories	up to 4 external antennas, set for mounting on top-hat rail or profile rail
further information / internet links	
internet link	
● to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
● to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
● to web page: RFID country approval	https://www.siemens.com/rfid-approvals
● to web page: identification and localization systems	https://www.siemens.com/ident
● to web page: SiePortal	https://sieportal.siemens.com/
● to website: Image database	https://www.automation.siemens.com/bilddb
● to website: CAx-Download-Manager	https://www.siemens.com/cax

Subject to change without notice
© Copyright Siemens

● to website: Industry Online Support	https://support.industry.siemens.com

security information

security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)

Approvals / Certificates

General Product Approval					EMV
CCC	EAC	UL	Declaration of Conformity	RCM	KC

Radio Equipment Type Approval Certificate

Miscellaneous	Industry Canada (IC)	Miscellaneous	FCC	Miscellaneous	KC

Environment		Industrial Communication
Confirmation	EPD	PROFINET

last modified: 3/25/2025

Subject to change without notice
© Copyright Siemens