

### product type designation



### Reader RF680R CMIIT

SIMATIC RF600 Reader RF680R CMIIT; 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	920 ... 925 MHz
transmit power	3 ... 2000 mW
effective radiated power	2000 mW
<ul style="list-style-type: none"> <li>for each external antenna / maximum</li> </ul>	
range / maximum	8 m; Extended ranges possible, see RF600 System Manual, Range table: <a href="http://support.automation.siemens.com/WW/view/en/67384964">http://support.automation.siemens.com/WW/view/en/67384964</a>
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	2 ms
<ul style="list-style-type: none"> <li>for write access / per byte / typical</li> </ul>	
<ul style="list-style-type: none"> <li>for read access / per byte / typical</li> </ul>	
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	RP-TNC M12, 8-pin, connector 2 x M12 4-pin D-coded, M12 8-pin (RS422) M12, 12-pin, female connector
<ul style="list-style-type: none"> <li>for external antenna(s)</li> </ul>	
<ul style="list-style-type: none"> <li>for supply voltage</li> </ul>	
<ul style="list-style-type: none"> <li>for communications interface</li> </ul>	
<ul style="list-style-type: none"> <li>at the digital inputs/outputs</li> </ul>	
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	24 V
<ul style="list-style-type: none"> <li>at DC / rated value</li> </ul>	
<ul style="list-style-type: none"> <li>at DC</li> </ul>	
consumed current / at DC	20 ... 30 V

<ul style="list-style-type: none"> <li>• at 24 V / typical</li> <li>• at 24 V / maximum</li> </ul>	<p>0.38 A</p> <p>2 A</p>
<b>ambient conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> </ul>	<p>-25 ... +55 °C</p> <p>-40 ... +85 °C</p> <p>-40 ... +85 °C</p>
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 <sup>2</sup>
vibrational acceleration	200 m/s <sup>2</sup>
resistance to mechanical stress	The maximum stress of shock and vibration acceleration is guaranteed only in combination with the VESA mount
<b>design, dimensions and weights</b>	
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	
<ul style="list-style-type: none"> <li>• of antenna wire / minimum</li> <li>• of antenna wire / maximum</li> </ul>	<p>1 m</p> <p>40 m</p>
<b>product features, product functions, product components / general</b>	
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"> <li>• LLDP</li> <li>• PROFINET IO protocol</li> <li>• TCP/IP</li> <li>• SNMP v1</li> <li>• SNMP v2</li> <li>• SNMP v3</li> <li>• DCP</li> <li>• EtherNet/IP protocol</li> <li>• OPC UA</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No</p> <p>No</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
product feature / silicon-free	Yes
<b>standards, specifications, approvals</b>	
certificate of suitability	wireless acc. to CMIIT, OPC UA: embedded UA Server Profile
certificate of suitability	
<ul style="list-style-type: none"> <li>• IECEx</li> </ul>	No
MTBF	28 y
<b>accessories</b>	
accessories	up to 4 external antennas, set for mounting on top-hat rail or profile rail
<b>further information / internet-Links</b>	
Internet-Link	
<ul style="list-style-type: none"> <li>• to web page: selection aid TIA Selection Tool</li> <li>• to website: Industrial communication</li> <li>• to website: Industry Mall</li> <li>• to website: Information and Download Center</li> <li>• to website: Image database</li> <li>• to website: CAx-Download-Manager</li> <li>• to website: Industry Online Support</li> </ul>	<p><a href="https://support.industry.siemens.com/cs/ww/en/view/67384964">https://support.industry.siemens.com/cs/ww/en/view/67384964</a></p> <p><a href="http://www.siemens.com/ident/rfid">http://www.siemens.com/ident/rfid</a></p> <p><a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a></p> <p><a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a></p> <p><a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a></p> <p><a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a></p> <p><a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a></p>
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