

### 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

### Wireless frequencies

Operating frequency	916 ... 920 MHz
Transmit power	3 ... 1000 mW
Equivalent isotropically radiated power	
• for each external antenna / maximum	4000 mW

### Electrical data

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 / ISO/IEC 18000-62/-63
Transfer rate / with radio transmission / maximum	400 kbit/s
Product feature / multitag-capable	Yes
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, Ethernet/IP, RS422
Type of electrical connection	<ul style="list-style-type: none"> <li>• for external antenna(s) RP-TNC</li> <li>• for supply voltage M12, 8-pin, connector</li> <li>• for communications interface 2 x M12 4-pin D-coded, M12 8-pin (RS422)</li> <li>• at the digital inputs/outputs M12, 12-pin, female connector</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	<ul style="list-style-type: none"> <li>• at DC / Rated value 24 V</li> <li>• at DC 20 ... 30 V</li> </ul>
Consumed current / at DC / at 24 V	<ul style="list-style-type: none"> <li>• typical 0.38 A</li> <li>• maximum 2 A</li> </ul>

Permitted ambient conditions	
Ambient temperature	<ul style="list-style-type: none"> <li>• during operation -25 ... +55 °C</li> <li>• during storage -40 ... +85 °C</li> <li>• during transport -40 ... +85 °C</li> </ul>
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

Design, dimensions and weight	
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	
• 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
Product feature / silicon-free	Yes

#### Standards, specifications, approvals

Certificate of suitability	Radio acc. to ARIB (STD-T106)
MTBF	28 y

#### Accessories

accessories	up to 4 external antennas, 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	<a href="https://support.industry.siemens.com/cs/ww/en/view/67384964">https://support.industry.siemens.com/cs/ww/en/view/67384964</a>
• to website: Industrial communication	<a href="http://www.siemens.com/ident/rfid">http://www.siemens.com/ident/rfid</a>
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Information and Download Center	<a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
• to website: Image database	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
• to website: CAx Download Manager	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

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