

product type designation

**RF380T transponder**

SIMATIC RF300 transponder RF380T heat-resistant, 32 KB FRAM IP68, -25 to max.+220 °C cyclically, D=114 mm, H=83 mm



suitability for operation

RF300

product brand name

SIMATIC RF

Technical Product Detail Page

<https://l.siemens.com/1P6GT2800-5DA00>

### radio frequencies

operating frequency / rated value

13.56 MHz

range / maximum

160 mm; range is reader dependent: observe  
<http://support.automation.siemens.com/WW/view/en/67384964>

protocol / with radio transmission

RF300-specific

transfer rate / with radio transmission / maximum

106 kbit/s

product feature / multitag-capable

No

### electrical data

product component / backup battery

No

### memory

type of memory

FRAM / EEPROM

storage capacity / of the user memory

32765 byte

type of memory organization

UID (fixed code) 4 bytes, user memory 32765 bytes, OTP memory 20 bytes

number of read cycles / at ambient temperature < 40 °C / maximum

1E+10

number of write cycles / at ambient temperature < 40 °C / maximum

1E+10

data retention time / at ambient temperature < 40 °C / not less than

10 a

property of memory

Block-by-block write protection of the OTP memory

### mechanical data

material

PPS

color

brown or anthracite

mounting distance / relating to metal surfaces / recommended / minimum

0 mm

### ambient conditions

ambient temperature

- during read/write access -25 ... +110 °C
- outside the read/write area -40 ... +220 °C
- during storage -40 ... +110 °C

ambient condition / for operation

Cyclic operation at ambient temperature >110 °C

protection class IP

IP68

shock resistance

According to DIN EN 60721-3-7 Class 7 M3

shock acceleration

500 m/s<sup>2</sup>

vibrational acceleration

200 m/s<sup>2</sup>

### design, dimensions and weights

height	83 mm
diameter	114 mm
net weight	900 g
fastening method	mount (see accessories)

#### product features, product functions, product components / general

product feature	
<ul style="list-style-type: none"> <li>silicon-free</li> </ul>	Yes
<ul style="list-style-type: none"> <li>printable</li> </ul>	No

#### standards, specifications, approvals

certificate of suitability	
<ul style="list-style-type: none"> <li>IECEX</li> </ul>	Yes
<ul style="list-style-type: none"> <li>for IECEX / as marking</li> </ul>	Ex: II 3G Ex nC IIB T5
<ul style="list-style-type: none"> <li>cULus approval</li> </ul>	Yes
MTBF	1200 a

#### standards, specifications, approvals / Environmental Product Declaration

Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
<ul style="list-style-type: none"> <li>total</li> </ul>	9.985 kg
<ul style="list-style-type: none"> <li>during manufacturing</li> </ul>	9 kg
<ul style="list-style-type: none"> <li>during operation</li> </ul>	0 kg
<ul style="list-style-type: none"> <li>after end of life</li> </ul>	0.807 kg

#### accessories

accessories	Skid holder, shrouding cover, universal holder
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#### further information / internet links

internet link	
<ul style="list-style-type: none"> <li>to web page: selection aid TIA Selection Tool</li> </ul>	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
<ul style="list-style-type: none"> <li>to web page: identification and localization systems</li> </ul>	<a href="https://www.siemens.com/ident">https://www.siemens.com/ident</a>
<ul style="list-style-type: none"> <li>to web page: SiePortal</li> </ul>	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>
<ul style="list-style-type: none"> <li>to website: Image database</li> </ul>	<a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>
<ul style="list-style-type: none"> <li>to website: CAx-Download-Manager</li> </ul>	<a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>
<ul style="list-style-type: none"> <li>to website: Industry Online Support</li> </ul>	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

#### security information

security information	<p>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 <a href="http://www.siemens.com/cybersecurity-industry">www.siemens.com/cybersecurity-industry</a>. 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 <a href="https://www.siemens.com/cert">https://www.siemens.com/cert</a>. (V4.7)</p>
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#### Approvals / Certificates

##### General Product Approval



[China RoHS](#)



[Miscellaneous](#)

General Product Approval	EMV	For use in hazardous locations	Environment
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[Manufacturer Declaration](#)



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