

product type designation

RF680T transponder

SIMATIC RF680T PPS, 130 x 32 x 15 mm ISO 18000-63, EPC Class 1 Gen 2 frequency 865 to 928 MHz NXP UCODE G2XM 240 bits (30 bytes) EPC ID 512 bits (64 bytes) user memory fixing by mounting on metal, heat-resistant printing not possible temperature from -40 °C to +200 °C IP68/IPx9K 10 units/carton 1 carton 10 units MOQ



suitability for operation

RF600

Technical Product Detail Page

<https://i.siemens.com/1P6GT2810-2HG81>

radio frequencies

operating frequency	865 ... 928 MHz
range / maximum	5 m; observe system manual RF600: overrange is possible, range is reader dependent: observe http://support.automation.siemens.com/WW/view/en/67384964
protocol / with radio transmission	EPCglobal Class 1 Gen 2 / ISO 18000-63
transfer rate / with radio transmission / maximum	320 kbit/s
product feature / multitag-capable	Yes
polarization	Linear

electrical data

product component / backup battery	No
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memory

type of memory	EEPROM
storage capacity / of the user memory	64 byte
type of memory organization	EPC memory 96 bit (12 byte) assigned with sequential identifier and expandable up to 240 bit (30 byte), user memory 512 bit (64 byte), TID memory 64 bit (8 byte)
number of read cycles / at ambient temperature < 40 °C / maximum	1E+14
number of write cycles / at ambient temperature < 40 °C / maximum	100000
data retention time / at ambient temperature < 40 °C / not less than	10 a
property of memory	lock, unlock, write protection, password protection
type of transponder chip used	NXP G2XM

mechanical data

material	PPS
color	black
tightening torque / of the screw for securing the equipment / maximum	1 N·m
mounting distance / relating to metal surfaces / recommended / minimum	0 mm

ambient conditions

ambient temperature	-25 ... +100 °C
<ul style="list-style-type: none"> during read/write access outside the read/write area during storage 	-40 ... +220 °C
ambient condition / for operation	Operating temperature permanent up to 140 °C, for 5000 hours or 3000 cycles up to 200 °C, for 2000 hours or 1500 cycles up to 220 °C

protection class IP	IP68/IPx9K
shock resistance	According to DIN EN 60721-3-7 Class 7 M3
shock acceleration	1000 m/s ²
vibrational acceleration	200 m/s ²
resistance to mechanical stress	Torsion and bending stress not permissible

design, dimensions and weights

width	32 mm
height	15 mm
depth	130 mm
net weight	50 g
fastening method	2 x M6 screws

product features, product functions, product components / general

product feature	
• silicon-free	Yes
• tamper-proof	No
• printable	No

standards, specifications, approvals

certificate of suitability	
• IECEx	No
MTBF	1940 a

further information / internet links

internet link	
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
• 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
• to website: Industry Online Support	https://support.industry.siemens.com

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 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)</p>
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Approvals / Certificates

General Product Approval



[Manufacturer Declaration](#)



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