

product type designation

Transponder **RF642L**

SIMATIC RF642L SmartLabel (FCC) PET white, 22.5 x 1.6 mm ISO 18000-63, EPC Class 1 Gen 2 frequency 902 to 928 MHz NXP UCODE 7xm-2k 448 bits (56 bytes) EPC ID 2048 bits (256 bytes) user memory self-adhesive on metal printable thermotransfer temperature from -25 °C to +85 °C IP68 500 units/roll 1 roll 500 units MOQ



suitability for operation

RF600

Technical Product Detail Page

<https://l.siemens.com/1P6GT2810-3AC10>

radio frequencies

operating frequency	902 ... 928 MHz
range / maximum	2.8 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	256 byte
type of memory organization	EPC memory 96 bit (12 byte) assigned with sequential identifier and expandable up to 448 bit (56 byte), user memory 2048 bit (256 byte), TID memory 96 bit (12 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	50 a
property of memory	lock, unlock, kill, write protection, password protection
type of transponder chip used	NXP Ucode 7-xm 2k

mechanical data

material	Top side: PET
color	white
mounting distance / relating to metal surfaces / recommended / minimum	0 mm

ambient conditions

ambient temperature	<ul style="list-style-type: none"> during read/write access: -20 ... +85 °C outside the read/write area: -25 ... +85 °C during storage: 13 ... 23 °C
protection class IP	IP68
resistance to mechanical stress	Torsion and bending stress conditionally permissible

design, dimensions and weights

width	50 mm
height	1.65 mm
depth	22.5 mm
net weight	4 g
fastening method	one-side adhesible

product features, product functions, product components / general

product feature	
• silicon-free	Yes
• tamper-proof	No
• printable	Yes
printing process	Thermal transfer process

standards, specifications, approvals

certificate of suitability	
• IECEx	No

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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