

Product type designation

RF640T transponder

SIMATIC RF640T Tool Tag; 50x 8 mm (DxH); On-Metal Transponder
ISO 18000-6C, EPC Class 1 GEN 2, frequency 865 to 868 MHz
(ETSI), Chip type NXP G2XM, EPC 240 bit 64-byte add-on memory,
Minimum order quantity 10 units



Wireless frequencies

Operating frequency	865 ... 868 MHz
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Electrical data

Range / maximum	4 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 18000-6C
Transfer rate / with radio transmission / maximum	320 kbit/s
Product feature / multitag-capable	Yes
Polarization	Linear
Product component / Backup battery	No

Memory

Type of memory	EEPROM
Storage capacity / of the user memory	64 byte
Type of memory organization	EPC memory 96/240 bits, user memory 64 bytes (512 bits), TID memory 8 bytes
Number of read cycles / at ambient temperature < 40 °C / maximum	100000000000000

Number of write cycles / at ambient temperature < 40 °C / maximum	100000
Data retention time / at ambient temperature < 40 °C / not less than	10 y
Property of memory	lock, unlock, write protection, password protection
Type of transponder chip used	NXP G2XM

Mechanical data

Material	PA12
Color	anthracite
Tightening torque / of the screw for securing the equipment / maximum	1.2 N·m
Mounting distance / relating to metal surfaces / recommended / minimum	0 mm

Permitted ambient conditions

Ambient temperature	
• during read/write access	-25 ... +85 °C
• outside the read/write area	-40 ... +125 °C
• during storage	-40 ... +125 °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

Design, dimensions and weight

Height	8 mm
Diameter	50 mm
Net weight	13 g
Mounting type	2 x M4 screws

Product properties, functions, components / general

Product feature	
• silicon-free	Yes
• printable	No

Standards, specifications, approvals

Certificate of suitability	Ex: II 2 G Ex ib IIC T6 to T3, II 2 D Ex ibD 21 T140°C, -25 °C < Ta° < +85 °C
MTBF	1757 y

Accessories

Further Information / Internet Links

Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	https://support.industry.siemens.com/cs/ww/en/view/67384964
• to website: Industrial communication	http://www.siemens.com/ident/rfid

- to website: Industry Mall
- to website: Information and Download Center
- to website: Image database
- to website: CAx Download Manager
- to website: Industry Online Support

<https://mall.industry.siemens.com>

<http://www.siemens.com/industry/infocenter>

<http://automation.siemens.com/bilddb>

<http://www.siemens.com/cax>

<https://support.industry.siemens.com>

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