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## Data sheet 6GT2801-1BA10-0AX1

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| **product type designation** | **RF310R reader** |
| | SIMATIC RF300; Reader RF310R (GEN2) with RS422 interface (3964R); IP67, -25 to +70 °C, 55x 75x 30 mm, with integrated antenna; special variant with rotated base plate (90°). |




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|---|---|
| suitability for operation | RF300, ISO 15693 and MOBY E transponder, for connecting to communication modules, rotated base plate |
| **radio frequencies** | |
| operating frequency / rated value | 13.56 MHz |
| range / maximum | 60 mm; Range is dependent on transponder type: observe http://support.automation.siemens.com/WW/view/en/67384964 |
| protocol / with radio transmission | RF300 specific, ISO 15693, ISO 18000-3, ISO 14443 |
| transfer rate / with radio transmission / maximum | 106 kbit/s |
| product feature / multitag-capable | No |
| **electrical data** | |
| transfer rate / at the point-to-point connection / serial / maximum | 115.2 kbit/s |
| transmission time / for user data | |
| ● for write access / per byte / typical | 0.13 ms |
| ● for read access / per byte / typical | 0.13 ms |
| **interfaces** | |
| standard for interfaces / for communication | RS422 |
| type of electrical connection | M12, 8-pin |
| **mechanical data** | |
| material | PA 12 |
| color | titanium gray |
| tightening torque / of the screw for securing the equipment / maximum | 1.5 N·m |
| mounting distance / relating to metal surfaces / recommended / minimum | 0 mm |
| **supply voltage, current consumption, power loss** | |
| supply voltage / at DC | |
| ● rated value | 24 V |
| ● | 20.4 ... 28.8 V |
| consumed current / at DC | |
| ● at 24 V / typical | 0.06 A |
| **ambient conditions** | |
| ambient temperature | |
| ● during operation | -25 ... +70 °C |
| ● during storage | -40 ... +85 °C |
| ● during transport | -40 ... +85 °C |
| protection class IP | IP67 |
| shock resistance | EN 60721-3-7 Class 7 M2 |
| shock acceleration | 500 m/s² |
| vibrational acceleration | 200 m/s² |
| **design, dimensions and weights** | |


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| width | 75 mm |
| height | 30 mm |
| depth | 55 mm |
| net weight | 0.2 kg |
| fastening method | 4 x M5 screws |
| wire length | |
| ● for RS 422 interface / maximum | 1000 m |
| **product features, product functions, product components / general** | |
| display version | 5-color LED |
| product feature / silicon-free | Yes |
| **standards, specifications, approvals** | |
| certificate of suitability | Radio acc. to R&TTE guidelines EN 300 330, EN 301489, CE, FCC, cULus |
| certificate of suitability | |
| ● IECEx | No |
| MTBF | 273 a |
| reference code | |
| ● according to IEC 81346-2:2019 | BYB |
| **standards, specifications, approvals / Environmental Product Declaration** | |
| Environmental Product Declaration | Yes |
| global warming potential [CO2 eq] | |
| ● total | 50.4 kg |
| ● during manufacturing | 10.7 kg |
| ● during operation | 39.4 kg |
| ● after end of life | 0.3 kg |
| **further information / internet links** | |
| internet link | |
| ● to website: Selection guide for cables and connectors | https://support.industry.siemens.com/cs/ww/en/view/109766358 |
| ● to web page: selection aid TIA Selection Tool | https://www.siemens.com/tstcloud |
| ● to web page: RFID country approval | https://www.siemens.com/rfid-approvals |
| ● 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 | 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) |

**Approvals / Certificates**

**General Product Approval**










China RoHS | Manufacturer Declaration

| General Product Approval | EMV | Radio Equipment Type Approval Certificate |
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