SIEMENS

## Data sheet 6GT2811-6AB20-2AA0

**product type designation**

**Reader RF650R CMIIT**

SIMATIC RF600 Reader RF650R CMIIT; Interfaces: Ethernet RJ45 4 antennas, 4 dig. inputs/ 4 dig. outputs, 24 V DC; IP30; -25 to +55 °C; without accessories and antennas.




| | |
|---|---|
| product brand name | SIMATIC RF |
| Technical Product Detail Page | https://i.siemens.com/1P6GT2811-6AB20-2AA0 |
| suitability for operation | RF600 transponder, for connecting via Ethernet, OPC UA server integrated |
| **radio frequencies** | |
| operating frequency | 920 ... 925 MHz |
| transmit power | 3 ... 1000 mW |
| effective radiated power | |
| ● for each external antenna / maximum | 2000 mW |
| range / maximum | 8 m; Extended ranges possible, see RF600 System Manual, Range table: http://support.automation.siemens.com/WW/view/en/67384964 |
| protocol / with radio transmission | EPCglobal Class 1 Gen 2 V2 / ISO/IEC 18000-62/-63 |
| transfer rate / with radio transmission / maximum | 400 kbit/s |
| product feature / multitag-capable | Yes |
| **electrical data** | |
| transmission time / for user data | |
| ● for write access / per byte / typical | 2 ms |
| ● for read access / per byte / typical | 0.15 ms |
| **interfaces** | |
| number of external antennas | 4 |
| standard for interfaces / for communication | Ethernet, OPC UA |
| type of electrical connection | |
| ● for external antenna(s) | RP-TNC |
| ● for supply voltage | M12, 8-pin, connector |
| ● for communications interface | RJ45 |
| ● at the digital inputs/outputs | M12, 12-pin, female connector |
| number of digital inputs | 4 |
| number of digital outputs | 4 |
| **mechanical data** | |
| material | Aluminum, Pocan |
| color | silver, TI-Grey |
| 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 ... 30 V |
| consumed current / at DC | |
| ● at 24 V / typical | 0.37 A |


Subject to change without notice
© Copyright Siemens

| | |
|---|---|
| ● at 24 V / maximum | 2 A |
| **ambient conditions** | |
| ambient temperature | |
| ● during operation | -25 ... +55 °C |
| ● during storage | -40 ... +85 °C |
| ● during transport | -40 ... +85 °C |
| ambient condition / for operation | With operating temperature below -20 °C: Warming-up time at least 10 minutes |
| protection class IP | IP30 |
| shock resistance | EN 60068-2-27, EN 60068-2-6 |
| shock acceleration | 250 m/s² |
| vibrational acceleration | 30 m/s² |
| resistance to mechanical stress | The maximum values for shock and vibration acceleration must not occur as continuous stress and they apply exclusively to assembly using screws |
| **design, dimensions and weights** | |
| width | 258 mm |
| height | 258 mm |
| depth | 80 mm |
| net weight | 2.4 kg |
| fastening method | Vesa 100 with 4 x M4 screws, top-hat rail 35 mm, profile rail S7-300, S7-1200 or S7-1500 |
| wire length | |
| ● of antenna cable / minimum | 1 m |
| ● of antenna cable / maximum | 40 m |
| **product features, product functions, product components / general** | |
| display version | LED row with 6 LEDs |
| protocol / is supported / Media Redundancy Protocol (MRP) | No |
| product function / of the PROFINET IO device / is supported / H-Sync forwarding | No |
| protocol / is supported | |
| ● LLDP | Yes |
| ● PROFINET IO protocol | No |
| ● TCP/IP | Yes |
| ● SNMP v1 | Yes |
| ● SNMP v2 | No |
| ● SNMP v3 | Yes |
| ● DCP | Yes |
| ● EtherNet/IP protocol | No |
| ● OPC UA | Yes |
| product feature / silicon-free | Yes |
| **product functions / management, configuration, engineering** | |
| type of parameterization | WBM |
| type of programming | OPC UA, XML |
| type of computer-switched communication | TCP/IP |
| **standards, specifications, approvals** | |
| certificate of suitability | wireless acc. to CMIIT, OPC UA: embedded UA Server Profile |
| certificate of suitability | |
| ● IECEx | No |
| MTBF | 31 a |
| product function / is supported / identification link | Yes; acc. to IEC 61406-1:2022 |
| **standards, specifications, approvals / Environmental Product Declaration** | |
| Environmental Product Declaration | Yes |
| global warming potential [CO2 eq] | |
| ● total | 313.9 kg |
| ● during manufacturing | 71.5 kg |
| ● during operation | 241.53 kg |
| ● after end of life | 0.87 kg |
| **accessories** | |
| accessories | up to 4 external antennas, set for mounting on top-hat rail or profile rail |
| **further information / internet links** | |


Subject to change without notice
© Copyright Siemens

| | |
|---|---|
| ● internet link / to website: Selection guide for cables and connectors | https://support.industry.siemens.com/cs/ww/en/view/109766358 |
| ● internet link / to web page: selection aid TIA Selection Tool | https://www.siemens.com/tstcloud |
| ● internet link / to web page: RFID country approval | https://www.siemens.com/rfid-approvals |
| ● internet link / to web page: identification and localization systems | https://www.siemens.com/ident |
| ● internet link / to web page: SiePortal | https://sieportal.siemens.com/ |
| ● internet link / to website: Image database | https://www.automation.siemens.com/bilddb |
| ● internet link / to website: CAx-Download-Manager | https://www.siemens.com/cax |
| ● internet link / 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**

| | | | | | |
|---|---|---|---|---|---|
| EAC | China RoHS | Manufacturer Declaration | UL | Declaration of Conformity | China RoHS |

| EMV | Radio Equipment Type Approval Certificate | | Environment |
|---|---|---|---|
| KC | Miscellaneous | Miscellaneous | EPD |

**last modified:** 8/29/2026


Subject to change without notice
© Copyright Siemens