

SIEMENS

SIMATIC RTLS

Localization systems

SIMATIC RTLS PCB OEM AC

(6GT2700-8DF00-0AX1)

Device manual

10/2018

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Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

⚠ DANGER
indicates that death or severe personal injury will result if proper precautions are not taken.

⚠ WARNING
indicates that death or severe personal injury may result if proper precautions are not taken.

⚠ CAUTION
indicates that minor personal injury can result if proper precautions are not taken.

NOTICE
indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of Agilion products

Note the following:

⚠ WARNING
Agilion products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Agilion. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

Trademarks

All names identified by ® are registered trademarks of Siemens AG. The remaining trademarks in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

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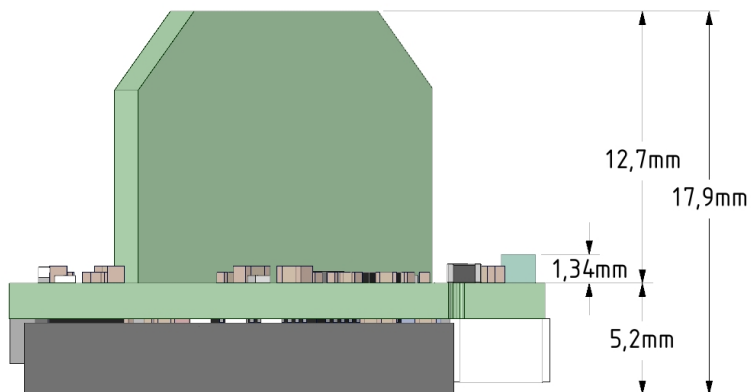
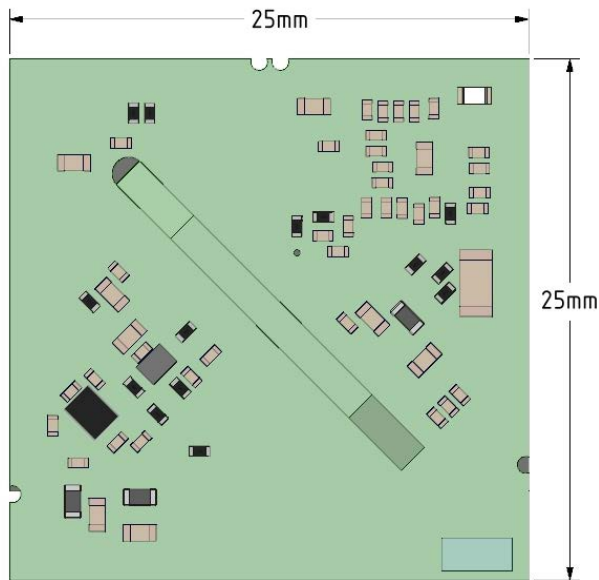
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1 Mechanics and connectors

1.1 Dimensions

The UWB antenna is arranged diagonally standing up on the top side of the PCB.



1.2 Displays

Display (LED)	Description
Flashing	Device is in operation
Off	Device not in operation

1.3 P2 socket

Type: JST SM02B-SRSS-TB

Pin	Description/function
1	3.3 V power supply
2	GND

1.4 P1 connector

Internal interface for production and manufacturing test, do not use.

2 Technical specifications

2.1 Connections and power supply

Connections and power supply	
Voltage	3.3 V DC (± 100 mV)
Energy intake	Max. 0.5 A

2.2 Wireless

Wireless PULSE (localization)	
Wireless process	IEEE 802.15.4-2011 UWB
Frequency range	3100 MHz ... 4800 MHz 6000 MHz ... 7000 MHz
Transmit power	0.037 mW (-41.3 dBm/MHz)
Antenna	UWB antenna integrated
Wireless PHASE (data transmission and optional localization)	
Wireless process	IEEE 802.15.4
Frequency range	2.40 ... 2.48 GHz ISM band
Bandwidth	2 MHz; data transmission on 802.15.4; channels can be set
Transmit power	Max. 4 dBm (can be set)
Antenna	2.4 GHz antenna integrated

2.3 Environment

Environment and dimensions	
Dimensions of PCB	25 x 25 x 17.7 mm
Antenna dimensions	20.6 x 12.7 x 1.6 mm
Weight	Approx. 6 g
Temperature range	0 ... +50 °C

3 Approvals

3.1 EU declaration of conformity

The EU declaration of conformity is available to all responsible authorities at:

Agilion GmbH
Blankenauer Straße 74
09113 Chemnitz
Germany

You can find the current EU declaration of conformity for this product on the Internet pages under Siemens Industry Online Support

(<https://support.industry.siemens.com/cs/ww/en/ps/14970/cert>)

The products described in this document meet the requirements of the following EU directives:

- RoHS directive 2011/65/EU
Directive of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment, official journal of the EU L174, 01/07/2011, pages 88-110
- Radio Equipment Directive 2014/53/EU (RED)
Directive of the European Parliament and of the Council of 16 April 2014 on the harmonization of the laws of the member states relating to placing radio equipment on the market; official journal of the EU L153, 22/05/2014, pages 62–106

3.2 RoHS

RoHS directive (restriction of the use of certain hazardous substances)

The products described in these operating instructions meet the requirements of the EU directive 2011/65/EU for the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Applied standard:

- EN 50581
Technical documentation for the assessment of electrical and electronic products with respect to restriction of hazardous substances

3.3 RED

3.3.1 Protection of health and safety

The products described in this document meet the requirements of the applied standards:

Article 3 (1) a) Protection of health and safety

- EN 62368-1
Equipment for audio, video, information and communication technology – Part 1: Safety requirements
- EN 62311
Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz – 300 GHz)

The products described in these operating instructions meet the requirements of **art. 3 (1) b) EMC** harmonized standards:

- ETSI EN 301 489-1
Electromagnetic compatibility and radio spectrum matters (ERM) - Electromagnetic compatibility for radio equipment and services - Part 1: Common technical requirements
- ETSI EN 301 489-17
Electromagnetic compatibility and radio spectrum matters (ERM) - Electromagnetic compatibility for radio equipment and services - Part 17:
Specific conditions for broadband data transmission systems
- ETSI EN 301 489-33
Electromagnetic compatibility and radio spectrum matters (ERM) - Electromagnetic compatibility for radio equipment and services - Part 33: Specific conditions for ultra-wideband (UWB) devices
- EN 55011
Industrial, scientific and medical (ISM) radio-frequency equipment – Electromagnetic disturbance characteristics – Limits and methods of measurement
- EN 55032 Class A, Class B
Electromagnetic compatibility of multimedia equipment – Emission requirements
- EN 55035
Electromagnetic compatibility of multimedia equipment - Immunity requirements
- EN 61000-6-1
Electromagnetic compatibility (EMC) - Part 6-1: Generic standards - Immunity for residential, commercial and light-industrial environments
- EN 61000-6-2
Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments

- EN 61000-6-3
Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments
- EN 61000-6-4
Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments

Art. 3 (2) Efficient use of the radio spectrum

- ETSI EN 300 328
Broadband transmission systems – Data transmission equipment operating in the 2.4 GHz ISM band and using broadband modulation techniques. Harmonized EN covering the essential requirements of article 3.2 of the EU Directive 2014/53/EU
- ETSI EN 302 065-2
Short-range devices (SRD) using ultra-wideband (UWB) technology - Harmonized EN covering the essential requirements of article 3.2 of the EU directive 2014/53/EU, Part 2: Requirements for ultra-wideband location monitoring

Note

The specified approvals apply only when the corresponding mark is printed on the device.

3.4 Recycling and disposal



The products are low in harmful substances, can be recycled and meet the requirements of the Directive 2012/19/EU for disposal of waste electrical and electronic equipment (WEEE).

Do not dispose of the products at public disposal sites.

For environmentally compliant recycling and disposal of your electronic waste, please contact a company certified for the disposal of electronic waste or your Siemens representative.

Note the different national regulations.