# L000503-02 ✔ ACTIVE

TE Internal #: L000503-02

Helical Antenna, LTE, External Mount, Connector Mount, RP-SMA, Omnidirectional, Single Port, < 0 dBi Peak Gain

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Antennas







Communication Protocol: **LTE**

Mounting Location: **External**

Mounting Type: **Connector Mount**

Frequency Category: **410 – 470**

Antenna Type: **Helical**

## Features

### Product Type Features

| | |
|---|---|
| Antenna Termination | RP-SMA |
| Antenna Product Type | Antenna |

### Configuration Features

| | |
|---|---|
| Antenna Style | Helical |
| Mounting Location | External |
| Antenna Type | Helical |
| Port Configuration | Single Port |

### Electrical Characteristics

| | |
|---|---|
| Impedance | 50 Ω |
| Antenna Operation | Active |
| VSWR (Max) | < 2.0:1 |

### Signal Characteristics

| | |
|---|---|
| Frequency Band | 450 – 470 MHz |
| Frequency Category | 410 – 470 |
| Peak Gain | < 0 dBi |

## Body Features

| | |
|---|---|
| Antenna Weight | 8.6 g[.3 oz] |

## Mechanical Attachment

| | |
|---|---|
| Polarization | Linear |
| Mounting Type | Connector Mount |

## Dimensions

| | |
|---|---|
| Product Diameter | 9.4 mm[.393 in] |
| Product Height | 54 mm[2.1 in] |

## Operation/Application

| | |
|---|---|
| Antenna Environment | Outdoor |
| Wireless Standard | LTE, UMTS, GSM |
| Directionality | Omnidirectional |

## Industry Standards

| | |
|---|---|
| Communication Protocol | LTE |
| Primary Application | LTE |

## Product Availability

| | |
|---|---|
| Applicable Region | Americas & EMEA |

## Packaging Features

| | |
|---|---|
| Packaging Method | Bag & Box |

# Product Compliance

For compliance documentation, visit the product page on TE.com>

| | |
|---|---|
| EU RoHS Directive 2011/65/EU | Compliant with Exemptions |
| EU ELV Directive 2000/53/EC | Out of Scope |
| China RoHS 2 Directive MIIT Order No 32, 2016 | 未针对中国 RoHS 符合性进行审核 Not reviewed for China RoHS compliance |
| EU REACH Regulation (EC) No. 1907/2006 | Current ECHA Candidate List: JUNE 2025 (250)<br>Candidate List Declared Against: JUNE 2025 (250)<br>SVHC > Threshold:<br>Pb (4% in Component Part)<br>**Article Safe Usage Statements:**<br>Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Recycle if possible and dispose of the article by following all applicable governmental regulations relevant to your geographic location. |
| Halogen Content | Low Halogen - Br, Cl, F < 900 ppm per |

| | |
|---|---|
| | homogenous material. Also BFR/CFR/PVC Free |
| Solder Process Capability | Not reviewed for solder process capability |

Product Compliance Disclaimer

This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, mercury, PBB, PBDE, DBP, BBP, DEHP, DIBP, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2011/65/EU (RoHS2). Finished electrical and electronic equipment products will be CE marked as required by Directive 2011/65/EU. Components may not be CE marked.Additionally, the part numbers that TE has identified as EU ELV compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, and mercury, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2000/53/EC (ELV). Regarding the REACH Regulations, TE's information on SVHC in articles for this part number is still based on the European Chemical Agency (ECHA) 'Guidance on requirements for substances in articles'(Version: 2, April 2011), applying the 0.1% weight on weight concentration threshold at the finished product level. TE is aware of the European Court of Justice ruling of September 10th, 2015 also known as O5A (Once An Article Always An Article) stating that, in case of 'complex object', the threshold for a SVHC must be applied to both the product as a whole and simultaneously to each of the articles forming part of its composition. TE has evaluated this ruling based on the new ECHA "Guidance on requirements for substances in articles" (June 2017, version 4.0) and will be updating its statements accordingly.

## Compatible Parts



TE Part # L000939-01
ANTENNA, 5GL PW, LP



TE Part # L000575-01
ANTENNA INTERNAL PW-LPN TYPE #6 SCREW



TE Part # ANT-450-RHS-SMA
Antenna Short Straight 450-470MHz SMA

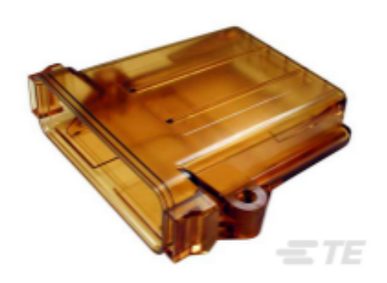


TE Part # L000576-01
ANTENNA, 5GL CW-HW TYPE WHIP - SMA

## Customers Also Bought



TE Part #ANT-W63-CW-RCS-RPS
Antenna 1/4 Wave R-Angle Wifi6/6E RPS



TE Part #EEC-325X4B-E016
ENCLOSURE, 3.25 X 4, CLR, NO VENT



TE Part #WP-4S
WEDGE LOCK, 4P, PLG, ORG, DTP



TE Part #CAT-J41-DDRC
DEUTSCH DT Receptacle Connectors



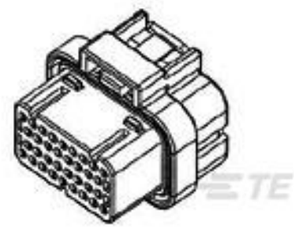
TE Part #W12S-P012
WEDGE LOCK, 12P, PLG, GRN, SL RET, DT



TE Part #206705-1
CPC RECP. ASY SIZE 13-9



TE Part #3-1447221-3
S/S REC CONTACT ASSY, AU, 0.75-1.25



TE Part #1473416-1
SUPER SEAL 26POS PLUG ASSY



TE Part #1625890-8
2W SM M/OX 5% 120R

## Documents

### Product Drawings

ANT-450-CW, RCS-PRS

English

### CAD Files

3D PDF

3D

Customer View Model

ENG_CVM_CVM_L000503-02_1.3d_igs.zip

English

Customer View Model

ENG_CVM_CVM_L000503-02_1.3d_stp.zip

English

Customer View Model

ENG_CVM_CVM_L000503-02_1.2d_dxf.zip

English

By downloading the CAD file I accept and agree to the Terms and Conditions of use.

### Datasheets & Catalog Pages

Datasheet L000503

English