

ANT-433-USP ✓ ACTIVE

TE Internal #: L9000121-01

PCB Antenna, Single Band, LoRaWAN / LPWAN, Internal

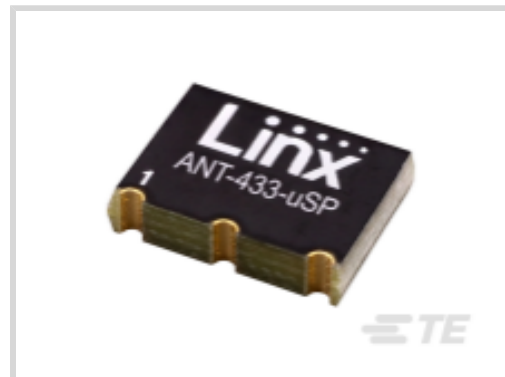
/Embedded Mount, Surface Mount, Solder, Omnidirectional, Single

Port, Gain < 0 dBi

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Antennas



Wireless Application: **LoRaWAN, LPWAN**

Mounting Location: **Internal/Embedded**

Mounting Type: **Surface Mount**

Antenna Termination: **Solder**

Antenna Type: **PCB**

Features

Product Type Features

| | |
|----------------------|---------|
| Antenna Product Type | Antenna |
| Antenna Termination | Solder |

Configuration Features

| | |
|--------------------|-------------------|
| Antenna Style | PCB |
| Mounting Location | Internal/Embedded |
| Antenna Type | PCB |
| Band Type | Single Band |
| Port Configuration | Single Port |

Electrical Characteristics

| | |
|------------|-------------|
| VSWR (Max) | <2.1:1 |
| Impedance | 50 Ω |

Signal Characteristics

| | |
|-------------------------|-----------|
| Frequency Band | 433 MHz |
| Nominal Frequency Range | 410 – 470 |
| Peak Gain | < 0 dBi |

Body Features

| | |
|----------------|------------------|
| Product Weight | .34 g[.01199 oz] |
|----------------|------------------|



Mechanical Attachment

| | |
|---------------|---------------|
| Polarization | Linear |
| Mounting Type | Surface Mount |

Dimensions

| | |
|----------------|-----------------|
| Product Width | 9.14 mm[.36 in] |
| Product Length | 12.7 mm[.5 in] |
| Product Height | 2.62 mm[.1 in] |

Operation/Application

| | |
|----------------|-----------------|
| Directionality | Omnidirectional |
|----------------|-----------------|

Industry Standards

| | |
|----------------------|----------------|
| Wireless Application | LoRaWAN, LPWAN |
| Primary Application | LoRaWAN, LPWAN |

Product Compliance

[For compliance documentation, visit the product page on TE.com>](#)

| | |
|---|--|
| EU RoHS Directive 2011/65/EU | Compliant |
| EU ELV Directive 2000/53/EC | Not Yet Reviewed |
| China RoHS 2 Directive MIIT Order No 32, 2016 | No Restricted Materials Above Threshold |
| EU REACH Regulation (EC) No. 1907/2006 | Current ECHA Candidate List: JUNE 2023 (235) Not Yet Reviewed |
| Halogen Content | Not Yet Reviewed for halogen content |
| 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



Customers Also Bought



Documents

Product Drawings

[Antenna uSP PCB RPC 433MHz SMT](#)

English

Datasheets & Catalog Pages

[ANT-433-USP](#)

English



[Sub-6 Cellular LTE-5G NR Frequency Band Guide](#)

English

[Virtual Antenna](#)

English

[Microslatch Ground Plane Optimization](#)

English