# ANT-868-USP410 ACTIVE

TE Internal #: L9000152-01

PCB Antenna, Single Band, LPWAN / LoRaWAN, Internal

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

Port, 0 < 3 dBi Peak Gain

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#### Antennas



Antenna Type: PCB

Band Type: Single Band

Primary Application: LoRaWAN, LPWAN

Wireless Application: LoRaWAN, LPWAN, Wi-Fi

Mounting Location: Internal/Embedded

#### **Features**

### **Product Type Features**

| Antenna Termination    | Solder  |
|------------------------|---------|
| Antenna Product Type   | Antenna |
| Configuration Features |         |
|                        | DCD     |

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

#### **Electrical Characteristics**

| Impedance  | 50 Ω |
|------------|------|
| VSWR (Max) | <2:1 |

### Signal Characteristics

| Frequency Band     | 868 MHz   |
|--------------------|-----------|
| Gain (Max)         | .7 dB     |
| Frequency Category | 862 – 870 |
| Peak Gain          | 0 < 3 dBi |

#### **Body Features**

| Product Weight | .6 g[.02116 oz] |
|----------------|-----------------|
|                | <u>J[ </u>      |



| Mechanical Attachment |                       |
|-----------------------|-----------------------|
| Polarization          | Linear                |
| Mounting Type         | Surface Mount         |
| Dimensions            |                       |
| Product Width         | 9.14 mm[.36 in]       |
| Product Length        | 13.2 mm[.52 in]       |
| Product Height        | 2.9 mm[.11 in]        |
| Operation/Application |                       |
| Directionality        | Omnidirectional       |
| Industry Standards    |                       |
| Primary Application   | LoRaWAN, LPWAN        |
| Wireless Application  | LoRaWAN, LPWAN, Wi-Fi |

#### **Product Compliance**

**Packaging Features** 

Packaging Method

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: JAN 2025<br>(247)<br>Not Yet Reviewed                  |
| Halogen Content                               | Low Halogen - Br, Cl, F, I < 900 ppm per homogenous material. Also BFR/CFR/PVC Free |
| Solder Process Capability                     | Not reviewed for solder process capability  |

Reel/Carton

#### 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



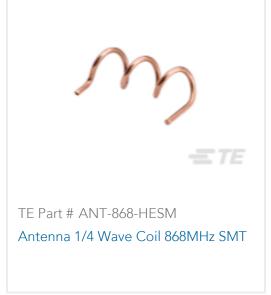
substances in articles' (Version: 2, April 2011), applying the 0.1% weight on weight concentration threshold at the finished product level. TE is aware of the European Court of Justice ruling of September 10th, 2015 also known as O5A (Once An Article Always An Article) stating that, in case of 'complex 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 410 868MHz SMT T&R

English

**CAD Files** 

3D PDF

3D

**Customer View Model** 

ENG\_CVM\_CVM\_L9000152-01\_B.3d\_stp.zip

English

**Customer View Model** 

ENG\_CVM\_CVM\_L9000152-01\_B.2d\_dxf.zip

English

**Customer View Model** 

ENG\_CVM\_CVM\_L9000152-01\_B.3d\_igs.zip

English

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

Datasheets & Catalog Pages

Embedded 868 MHz LPWA Antenna

English