

ANT-868-HESM

✓ ACTIVE

TE Internal #: ANT-868-HESM
Helical Antenna, Single Band, LPWAN / LoRaWAN, Internal /Embedded Mount, Surface Mount, Solder, Omnidirectional, Single Port, 3 < 6 dBi Peak Gain
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Antennas



Communication Protocol: **LoRaWAN, LPWAN, Wi-Fi**
Mounting Location: **Internal/Embedded**
Mounting Type: **Surface Mount**
Frequency Category: **862 – 870**
Antenna Type: **Helical**

Features

Product Type Features

Antenna Termination	Solder
Antenna Product Type	Antenna

Configuration Features

Antenna Style	Helical
Mounting Location	Internal/Embedded
Antenna Type	Helical
Band Type	Single Band
Port Configuration	Single Port

Electrical Characteristics

Impedance	50 Ω
VSWR (Max)	<2.2:1

Signal Characteristics

Frequency Band	868 MHz
Gain (Max)	5.6 dB
Frequency Category	862 – 870
Peak Gain	3 < 6 dBi

Body Features

Antenna Weight	1 g[.035 oz]
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Mechanical Attachment

Polarization	Linear
Mounting Type	Surface Mount

Dimensions

Product Width	8.9 mm[.35 in]
Product Length	25.4 mm[1 in]
Product Height	0 mm[0 in]

Operation/Application

Directionality	Omnidirectional
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Industry Standards

Communication Protocol	LoRaWAN, LPWAN, Wi-Fi
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	Compliant
China RoHS 2 Directive MIIT Order No 32, 2016	有害物质含量符合标准要求 No Restricted Substance(s) Above Threshold
EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JUNE 2025 (250) Candidate List Declared Against: JUNE 2023 (235) Does not contain REACH SVHC
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 # ANT-868-CHP-T Antenna Chip T&R 868MHz SMT	 TE Part # ANT-868-HETH Antenna 1/4 Wave Coil 868MHz THM	 TE Part # L9000152-01 Antenna uSP PCB RPC 410 868MHz SMT T&R	 TE Part # ANT-868-JJB-ST Antenna Mini Straight 868MHz THM
 TE Part # ANT-868-PW-LP Antenna 1/4 Wave 868MHz Screw #6	 TE Part # ANT-868-CPA Antenna CER Patch 25mm Sq 868MHz Adh	 TE Part # ANT-868-JJB-RA Antenna Mini R-Angle 868MHz THM	 TE Part # ANT-868-JJB-HT-T Antenna Mini Hi-Temp 868MHz THM T&R

Customers Also Bought

 TE Part #CAT-D486-CH8172 DEUTSCH DTP Housings	 TE Part #ANT-868-HETH Antenna 1/4 Wave Coil 868MHz THM	 TE Part #HPP845E131R5 HTU21DF RH/T SENSOR IC B5000	 TE Part #DT13-6P HDR, 6P, GRY, RA, NI/CU
 TE Part #DT06-6S-CE13 PLG, 6P, BLK, E, SEAL RET, XCAP	 TE Part #1622535-1 LR1 1% 5R1	 TE Part #1623109-1 CRG0805 1% 12R	 TE Part #1623195-1 CRG0805 1% 330R

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Documents

Product Drawings

Antenna 1/4 Wave Coil 868MHz SMT

English

CAD Files

Customer View Model

ENG_CVM_CVM_ANT-868-HESM_A.2d_dxf.zip

English

Customer View Model

ENG_CVM_CVM_ANT-868-HESM_A.3d_igs.zip

English

Customer View Model

ENG_CVM_CVM_ANT-868-HESM_A.3d_stp.zip

English

3D PDF

3D

By downloading the CAD file I accept and agree to the [Terms and Conditions](#) of use.

Datasheets & Catalog Pages

HE Series 868 MHz Helical Antenna

English

868 MHz Helical Antenna

English