

ANT-490-CW-QW-SMA

✓ ACTIVE

TE Internal #: ANT-490-CW-QW-SMA
Terminal/Duck Antenna, Single Band, LPWAN / LoRaWAN,
External Mount, Stud/Screw/Lug Mount, SMA, Omnidirectional,
Single Port, 0 < 3 dBi Peak Gain
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Antennas



Communication Protocol: **LoRaWAN, LPWAN**
Mounting Location: **External**
Mounting Type: **Stud/Screw/Lug Mount**
Frequency Category: **350 – 520**
Antenna Type: **Terminal/Duck**

Features

Product Type Features

Antenna Termination	SMA
Antenna Product Type	Antenna

Configuration Features

Antenna Style	Whip
Mounting Location	External
Antenna Type	Terminal/Duck
Band Type	Single Band
Port Configuration	Single Port

Electrical Characteristics

Impedance	50 Ω
VSWR (Max)	<1.5:1

Signal Characteristics

Frequency Band	490 MHz
Gain (Max)	1.3 dB
Frequency Category	350 – 520
Peak Gain	0 < 3 dBi

Mechanical Attachment

Polarization	Linear
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Mounting Type	Stud/Screw/Lug Mount
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Dimensions

Product Width	14.5 mm[.57 in]
Product Length	157.7 mm[6.21 in]
Product Height	0 mm[0 in]

Operation/Application

Antenna Environment	Outdoor
Directionality	Omnidirectional

Industry Standards

Communication Protocol	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 with Exemptions
EU ELV Directive 2000/53/EC	Not Yet Reviewed
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) Candidate List Declared Against: JAN 2025 (247) SVHC > Threshold: Pb (4% in Component Part) Article Safe Usage Statements: 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	BFR/CFR/PVC Free, but Br/Cl >900 ppm in other sources.
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 # CONSMA002-SMD-G
SMA Jack 50 Ohm PCB Surface Mount

TE Part # CONSMA001
SMA Jack 50 Ohm PCB Through Hole

TE Part # CONSMA008-G
SMA Jack 50 Ohm Through Hole PCB

TE Part # ANT-490-PW-QW
Antenna 1/4 Wave Whip 490MHz RG174

TE Part # CONSMA002-L-G
SMA Jack 50 Ohm PCB Through Hole

Customers Also Bought

TE Part #CONMHF4-SMD-G-T
MHF4 Jack 50 Ohm PCB Surface Mount

TE Part #CONSMA010
SMA Jack to SMA Plug RA

TE Part #CSE-SGAM-305-SGAM
SMA to SMA 305mm RG316

TE Part #CSE-SMBM-305-SMBM
SMB to SMB 305mm RG316

TE Part #1734753-1
MINI USB, TYPE B, VERTICAL, T/H

TE Part #2118715-2
STD SHIELD COVER, CRS-16.90X16.90X2.00MM

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TE Part #2822541-1
PUSH-PUSH MICRO SIM
CONNECTOR



TE Part #5747844-3
09 MSFL RCPT RA 318 (IN,FM,BL)

Documents

Product Drawings

Antenna 1/4 Wave Whip 490MHz SMA

English

CAD Files

Customer View Model

ENG_CVM_CVM_ANT-490-CW-QW-SMA_A.3d_stp.zip

English

Customer View Model

ENG_CVM_CVM_ANT-490-CW-QW-SMA_A.2d_dxf.zip

English

Customer View Model

ENG_CVM_CVM_ANT-490-CW-QW-SMA_A.3d_igs.zip

English

3D PDF

3D

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

Datasheets & Catalog Pages

Single-Band Connectorized Monopole Antenna

English