SERIES 2000 STICK ANTENNA

FEATURES

- **Best in Class Performance Through Patented HDX Technology**
- **IP 64+ Protected**
- **2 Types Available**
- **Proven in Harsh Industrial Environments**
- **Easy to Install and Use**



APPLICATIONS

- **Access Control**
- **Vehicle Identification**
- **Container Tracking**
- **Asset Management**
- **Waste Management**

DESCRIPTION

These antenna products connect to Radio Frequency Modules (RFM) and reader/writers to form the interface to the low frequency (LF) 134.2 kHz Texas Instruments transponders. In combination with a reader/writer they transmit energy and signals to the transponder and receive the response from the tag. There are two standard stick antennas with 1 or 3 meter cable length available for usage in low frequency systems. Each antenna is capable of creating a specific size and shape of read zone to meet the requirements of the target application. Stick antennas provide a more focused read zone and an ability to discriminate between transponders.

The antennas are well suited for usage in a broad range of applications including, but not limited to, access control, vehicle identification, container tracking, asset management and waste management applications.

Please be aware that an important notice concerning availability, standard warranty, and use in critical applications of Texas Instruments semiconductor products and disclaimers thereto appears at the end of this data sheet.

PRODUCTION DATA information is current as of publication date. Products conform to specifications per the terms of the Texas Instruments standard warranty. Production processing does not necessarily include testing of all parameters.

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ABSOLUTE MAXIMUM RATINGS

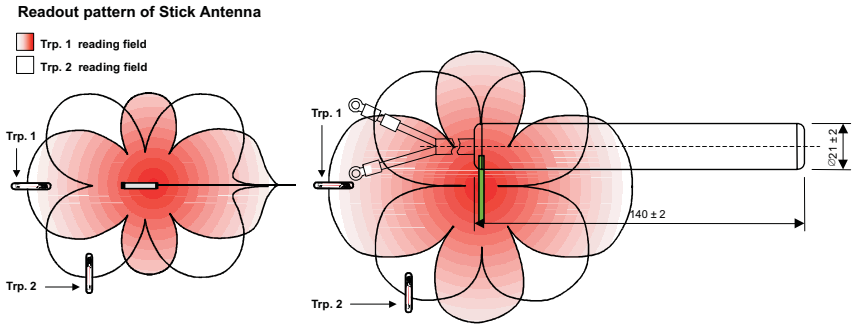
over operating free-air temperature range (unless otherwise noted)

	RI-ANT-S01C	RI-ANT-S02C	UNIT
Operating temperature	–30°C to +70°C	–30°C to +70°C	°C
Storage temperature	–40°C to +85°C	–40°C to +85°C	°C

OPERATING CHARACTERISTICS

over operating free-air temperature range (unless otherwise noted)

PARAMETER	PART NUMBER		UNIT
	RI-ANT-S01C	RI-ANT-S02C	
Type	Ferrite rod		
Inductance	Typically 27 µH @ 134.2 kHz		
Protection class	IP66		
Vibration	Mil-Std -- 810 E, Test 514.4 (Category 1, Procedure 1; Basic transportation)		
Case material	Glass reinforced epoxy (grey)		
Dimensions	21 ± 2 × 140 ± 2		mm
Weight	134	185	g
Cable Lenght	1	3	m
Connection terminals	Ring lugs: 3.5 mm inside diameter, 6 mm outside diameter		
Mounting	Use non-metal clamps. Mounting material is not supplied with the antenna.		



PACKAGING INFORMATION

Orderable Device	Status [1]	Package Type	Package Drawing	Pins	Package Qty	Eco Plan [2]	Lead/Ball Finish	MSL Peak Temp [3]
RI-ANT-S01C-00	ACTIVE			1		TBD	Call TI	Call TI
RI-ANT-S01C-30	ACTIVE			0	1	TBD	Call TI	Call TI
RI-ANT-S02C-00	ACTIVE			1		TBD	Call TI	Call TI
RI-ANT-S02C-30	ACTIVE			0	1	TBD	Call TI	Call TI

[1] The marketing status values are defined as follows:
ACTIVE: Product device recommended for new designs.
LIFEBUY: TI has announced that the device will be discontinued, and a lifetime-buy period is in effect.
NRND: Not recommended for new designs. Device is in production to support existing customers, but TI does not recommend using this part in a new design.
PREVIEW: Device has been announced but is not in production. Samples may or may not be available.
OBSOLETE: TI has discontinued the production of the device.

[2] Eco Plan - The planned eco-friendly classification: Pb-Free (RoHS), Pb-Free (RoHS Exempt), or Green (RoHS & no Sb/Br) - please check http://www.ti.com/productcontent for the latest availability information and additional product content details.
TBD: The Pb-Free/Green conversion plan has not been defined.
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Pb-Free (RoHS Exempt): This component has a RoHS exemption for either 1) lead-based flip-chip solder bumps used between the die and package, or 2) lead-based die adhesive used between the die and leadframe. The component is otherwise considered Pb-Free (RoHS compatible) as defined above.
Green (RoHS & no Sb/Br): TI defines "Green" to mean Pb-Free (RoHS compatible), and free of Bromine (Br) and Antimony (Sb) based flame retardants (Br or Sb do not exceed 0.1% by weight in homogeneous material)

[3] MSL, Peak Temp. -- The Moisture Sensitivity Level rating according to the JEDEC industry standard classifications, and peak solder temperature.

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