

433MHz Antenna

RC-ANT-433A-SMA is an antenna that can be used for 433MHz wireless data transmission / meter communication systems.

Good VSWR performance, compact dimensions, clever structure, easy installation, stable performance, with good anti-vibration and aging capacity.

Available also with the connector UFL-SMA

Mechanical Dimensions:



What is VSWR?

VSWR (Voltage Standing Wave Ratio) is a metric commonly used with antenna systems for ham or shortwave radio communication. VSWR is normally defined as a ratio with a 1:1 VSWR, indicating that there is an exact or perfect match between all antenna system elements. The higher the first number, the worse the match, and the more inefficient the system. Since a perfect match cannot be obtained, some benchmark for performance needs to be set. VSWR is a measure of the amount of signal that is reflected back from a connector.

It is a vector quantity in that it has both amplitude and a phase component.

This is important when considering the impact of multiple connectors in a transmission line. Mismatched impedances cause the reflections. If the cable being used has a characteristic impedance of 50 ohms, then the connector must also maintain 50 ohm impedance. The transition from the cable to connector transmission line sizes and captivation of insulators and contacts are the main causes of mismatches within the connector.

Technical Characteristics

Characteristics	Value
Frequency Range	433MHz \pm 3MHz
VSWR	< 1.5
Input Impedence	50 Ohm
Gain	3.0 dBi
Polarization	Vertical
Length	195mm
Diameter	13 mm
Connector	SMA Male
Weight	50 gr.