Radio((Controlli

Wireless Modules

915MHz Helical Antenna

RC-ANT1-915-EL is a helical antenna that can be used for 915MHz wireless data transmission / meter communication systems.
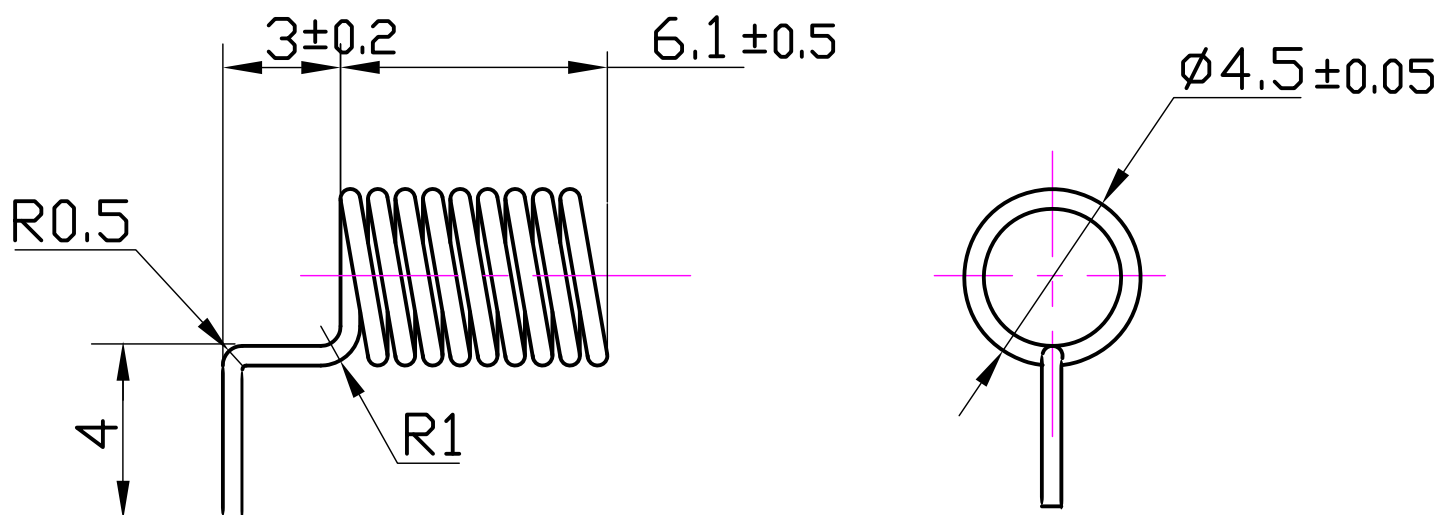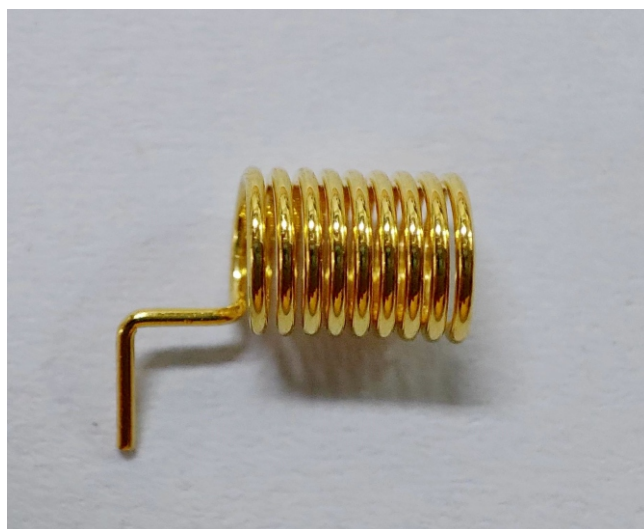Good VSWR performance, compact dimensions, clever structure, easy installation, stable performance, with good anti-vibration and aging capacity.
Material : Phosphor bronze

Manufacturer. :
Beijing Jia An Electronics Technology Co., Ltd.

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 thematch, and the more inefficient the system. Since a perfect match cannotever 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	915MHz ± 5MHz
VSWR	<= 1.5
Input Impedence	50 Ohm
Gain	0 dBi
Diameter	0.5mm
Lenght	6.1mm ± 0.1
Height	4.5mm ± 0.5
Number of coils	9.0

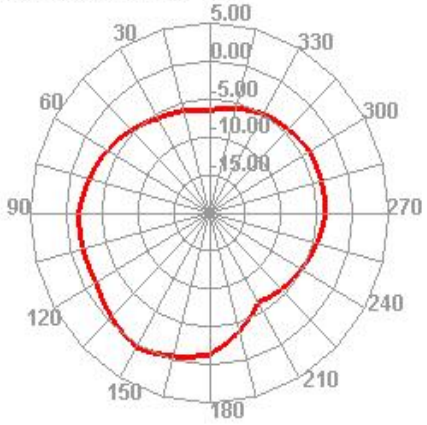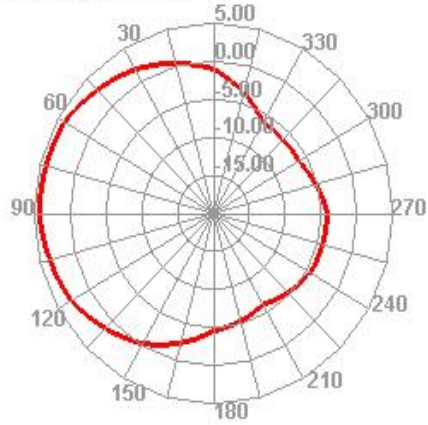| Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
900	40.32	−3.94	−1.3	−1.33	20.26	20.059	0.82	−11.58	40.24	40.04
910	65.7	−1.82	−1.8	0.15	33.349	32.352	2.3	−7.42	40.35	40.45
920	74.7	−1.27	0	0.67	36.676	38.022	3.82	−9.73	40.43	40.7
930	72.11	−1.42	−1.7	0.71	34.377	37.737	4.31	−17.28	40.35	40.84
940	49.14	−3.09	−1.6	−0.8	22.856	26.285	2.67	−15.06	39.97	40.62

920.000MHz
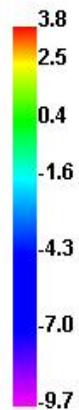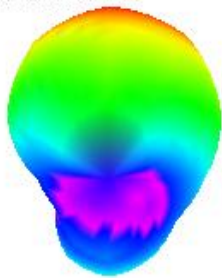
920.000MHz H
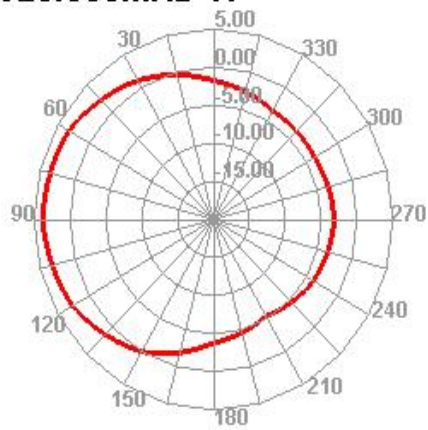
920.000MHz E1

920.000MHz E2
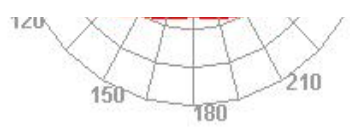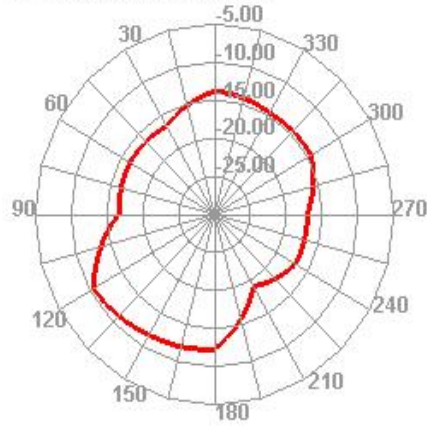

930.000MHz

4.3
2.2
-1.1
-4.3
-8.6
-13.0
-17.3
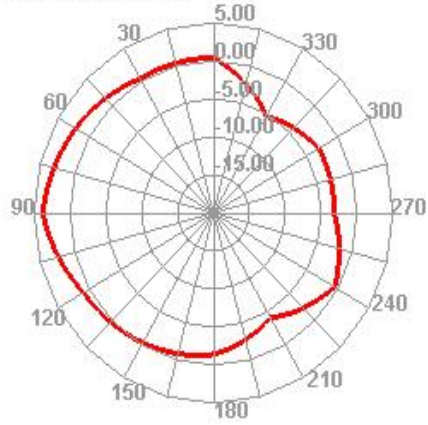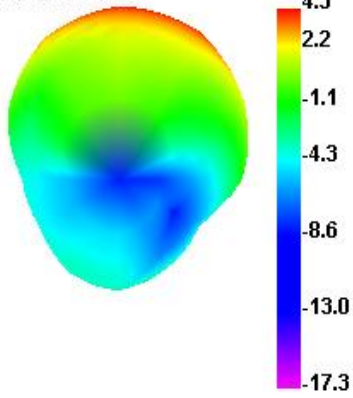
930.000MHz H

1000.000MHz E1

1000.000MHz E2