

# ADAPTER DATASHEET

## Adapter Cable

**Model No:**

**BWBNCJ-MCXWJ-RG58L1000**

**Description:**

BNC male to MCX right angle adapter cable

**Features:**

0-6000MHz

**Structure:**

Cable: RG58 x 1m

Connector: BNC male to MCX male

**RoHS & REACH Complaint**



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## BWBNCJ-MCXWJ-RG58L1000

### Part Number Description

BW	Company	BAT WIRELESS
BNCJ	Connector	BNC male
-	Constant	Constant
MCXWJ	Connector	MCX right angle male
-	Constant	Constant
RG58	Cable	RG58
L	Long	Length
1000	Cable Length	1000mm

### Selection Table

Connector	SMA	N	TNC	BNC	SMB	MCX	Customizable
Cable Type	RG174	RG178	RG316	RG58			Customizable
Cable Length	100mm	200mm	300mm	500mm	1000mm	1500mm	Customizable

## 1. Description

Bat Wireless BWBNCJ-MCXWJ-RG58L1000 is a high-performance RF coaxial adapter cable, typically covering the 0-6 GHz frequency range. Designed specifically for wireless communication devices, it connects various interfaces and ensures stable, low-loss signal transmission. It is suitable for use in applications such as Wi-Fi modules, 4G/5G devices, GPS antennas, drones, and IoT terminals, resolving compatibility issues between different interfaces. It can connect to BNC and MCX interfaces or device ports. High-purity coaxial cable minimizes signal attenuation, and optimized processing and coaxial structure ensure low insertion loss.

Classic application scenarios:

Wireless communication modules: GPS/Beidou positioning terminals, 4G/5G modules, Wi-Fi/Bluetooth modules

Test and measurement equipment: RF test probe connection ports, spectrum analyzers, signal generator antenna ports

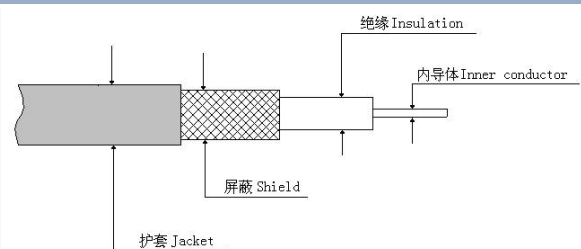
IoT terminals: Signal enhancement for smart homes, drones, and wearable devices

Bat Wireless provides customized services to optimize your device, we have a mature R&D team that can respond quickly to meet your needs. If you have any requirements, please contact our sales and FAE.

## 2. Specifications

Parameters	Typ.	Unites	Notes
Electrical Characteristics			
Product Type	Adapter Cable		
Frequency Range	0-6000	MHz	
Input Impendence	50	$\Omega$	
Contact resistance	IC < 2.5, OC < 1.5	M $\Omega$	
Insulation resistance	>1000	M $\Omega$	
InsertLoss	0.3	dB(6GHz)	
RF leakage	750	V	
Durability	500	Times	
ID of Plug / OD of Jack	-	mm	
DCVoltage	-	V	
Mechanical Characteristics			
Connector Type	BNC Male		
Connector Type	MCX right angle male		
Cable Type	RG58		
Cable Length	1000	mm	
Mount way	BNC screw type, MCX plug-in buckle		
Color	-		
Meterial	Copper		
Weight	600	g	
Environmental Characteristics			
Waterproof Rating	-		
ROHS Complaint	Yes		
Operating Temperature	-45~ +85	$^{\circ}\text{C}$	
Storage Temperature	-45~ +85	$^{\circ}\text{C}$	

3. Specification

Parameters	Parameters	Typ.	Unites	Notes
Electrical Characteristics				
Inner Conductor	Material	Copper		
	Construction	1/0.8±0.05	mm	
	Nom.Dia	0.503	mm <sup>2</sup>	
Insulation	Material	Low-density Polyethylene		
	Average Thickness	1.05	mm	
	Nom.Dia	2.95±0.20	mm	
Outer Conductor	Material	Copper		
	Nom.Dia	0.08±0.003	mm	
	Nom.Dia	3.4±0.10	mm	
Jacket	Material	Polyvinyl Chloride		
	Nom.Dia	5.0±0.20	mm	
Mechanical Characteristics				
Impedanc	-	50±5	Pf/m	
Capacitance	-	100±10	Ω	
20°C Max Attenuation	100 MHz	0.187	dB/m	
	400 MHz	0.378	dB/m	
	800 MHz	0.58	dB/m	
	1000 MHz	0.617	dB/m	
	1800 MHz	1.76	dB/m	
	2000 MHz	2.69	dB/m	
Structure Drawing				
				

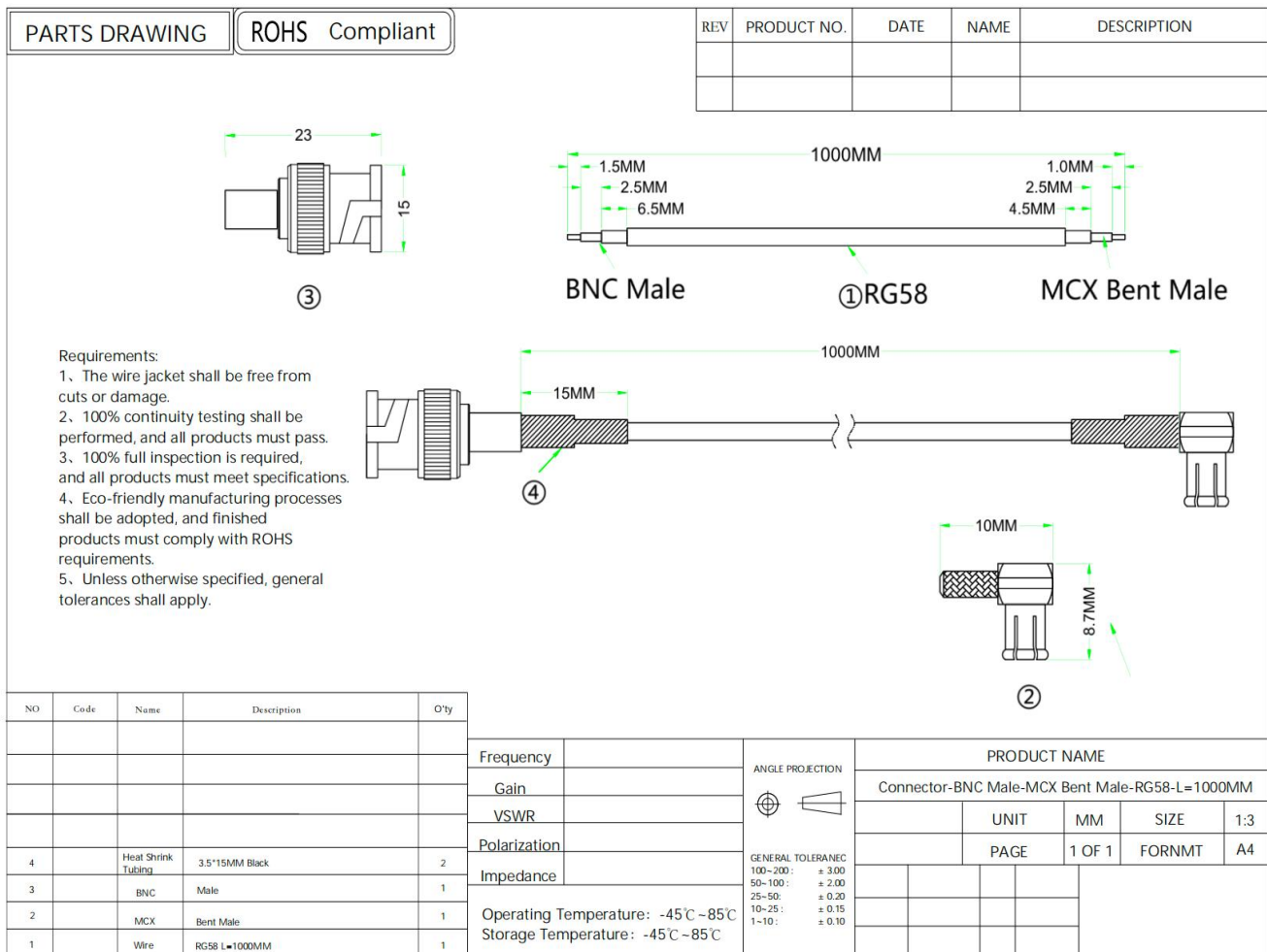
## 4 . Dimensions

### 4.1 Actual Picture



( \* Note: The picture is for reference only. Due to the sensitive nature of the antenna, please notify us of any changes to the surrounding structure for evaluation. )

### 4.2 Parts Drawing



## 5 . Test Equipment



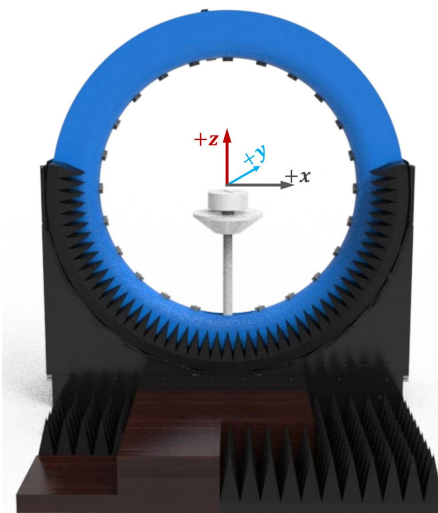
Keysight/E5071C Network Analyzer



R&amp;S/CMW500 Comprehensive tester



R&amp;S/SMBV100B Signal Source

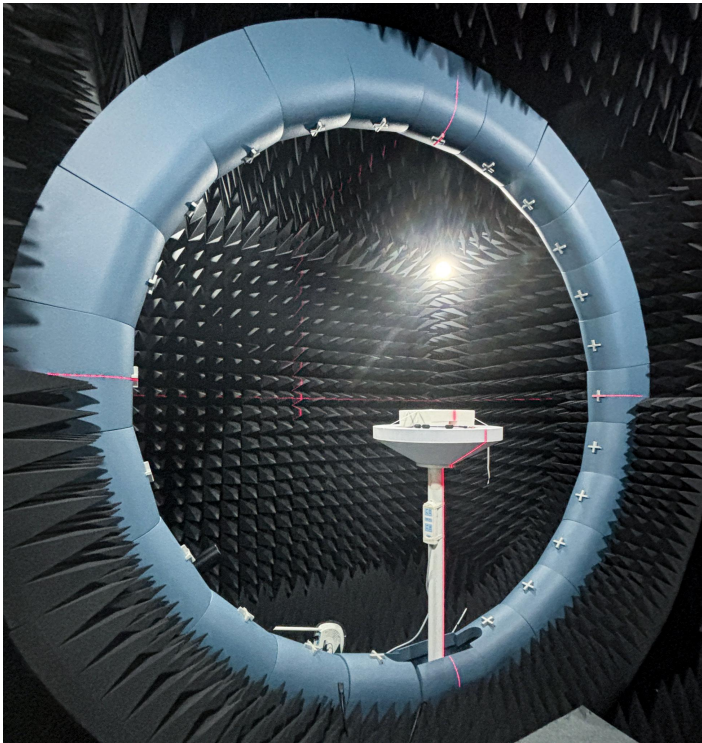


### DT-3500 Datasheet / System Specifications

Specification:	Description
Test Frequency :	400MHz-8.5GHz
System Size :	L*W*H=4*3.5*3.5m
Number of Probes :	23 (Probe) + 1 (link)
Interval Angle :	15°
Sampling Diameter :	2200mm
Carring Capacity :	≤40 kg

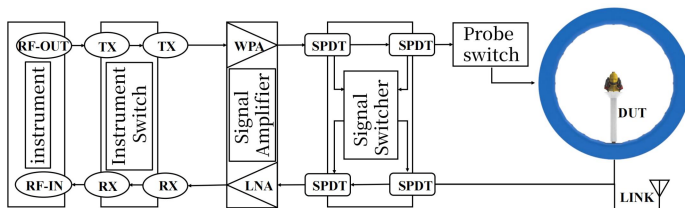
Testing Capability	Description
<b>Active measurement</b>	<b>Capability</b> : TRP、TIS、EIRP、EIS,. etc <b>Mode</b> : 2G/3G/4G/5G、Wi-Fi b/g/n/a/ac/ax、BT、NB-IOT、Cat-M (eMTC)、GPS/BEIDOU/GLONASS、ZigBee、LoRa(Non-Signaling),.etc
<b>Passive measurement</b>	<b>Test category</b> : Gain、Efficiency、2D pattern、3D pattern、Pattern roundness、Axial Ratio、ECC,Phase center,. etc <b>Polarization</b> : Circular polarization, linear polarization, elliptical polarization



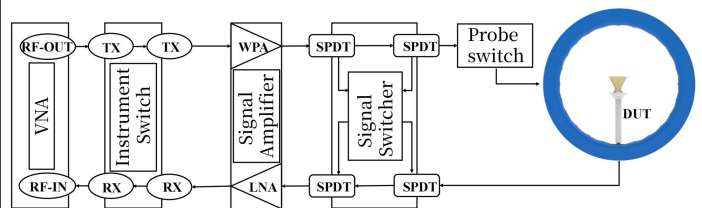


## RF Link diaram of multi probe spherical near-field testing system

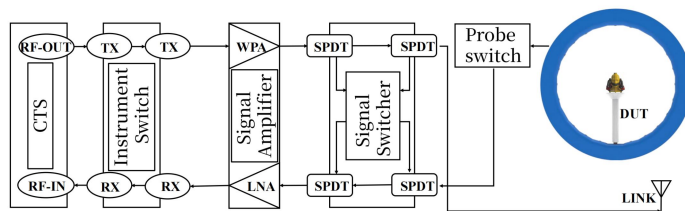
### RF Link Overview



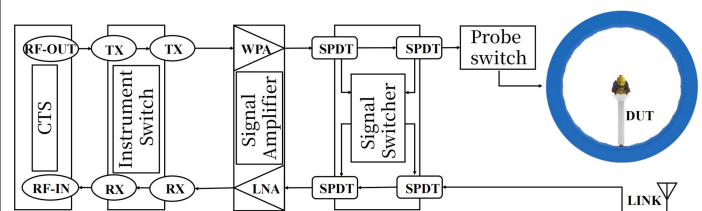
### RF Link of Passivemeasurement



### RF Link Overview



### RF Link of Passivemeasurement







## DECLARATION:

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