

DATASHEET

IPEX Antenna Connector

Model No:

BWIPEX-002E

Description:

IPEX-1 Board-End Connector 4-pin version

Features :

0-6000MHz

IPEX-1 male



RoHS & REACH Complaint

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BWIPEX-002E

Part Number Description

BW	Company	BAT WIRELESS
IPEX	Name	IPEX connector
-	Constant	Constant
002	Number	002
E	Type	Board-End Connector

1. Description

Bat Wireless BWIPEX-002E is an ultra-small RF coaxial connector with a frequency range of 0~6 GHz, suitable for mainstream wireless communication frequency bands, such as Wi-Fi, Connection of Bluetooth, GPS, 4G/5G antenna and other modules. Use a super-small design and small size suitable for high-density PCB layouts. The interface type is a male terminal, with a central pin terminal. Usually soldered on the PCB and used with the female head. Low loss design, optimized process and coaxial structure to ensure low interpolation loss for signal transmission.

Typical Applications:

Wireless module: Wi-Fi, Blue Tooth module, cellular module

Antenna connection: PCB antenna, external FPC, rubber antenna

Consumer electronics: notebooks, tablets, smart home 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. Specification

Parameters	Typ.	Unites	Notes
Electrical Characteristics			
Antenna Type	IPEX Antenna Connector		
Frequency Range	0-6000	MHz	
Input Impedence	50	Ω	
Contact resistance	-	m Ω	
Insulation resistance	500	M Ω	
Insert Loss	0.15	dB(6GHz)	
RF leakage	200	V	
Durability	500	Times	
PLUG / JACK	-	mm	
DC Voltage	-	V	
Mechanical Characteristics			
Dimensions	2.6 x 2.6 x 1.25	mm	
Connector Type	Jack		
Cable Type	-		
Cable Length	-	mm	
Mount way	SMD		
Color	Gold		
Material	Gold-Plated Brass		
Weight	0.09	g	
Environmental Characteristics			
Waterproof Rating	-		
ROHS Complaint	Yes		
Operating Temperature	-45~ +85	$^{\circ}\text{C}$	
Storage Temperature	-45~ +85	$^{\circ}\text{C}$	

3. Dimensions

3.1 Actual Picture



3.2 Parts Drawing

PART NO.	SEE TABLE	REVISIONS	
LTR	DESCRIPTION	Drawing	DATE
A	RELEASE NEW PRODUCT	pang	20/04/18

GROUND CONTACT

INNER CONTACT

NOTE:

1. ELECTRICAL CHARACTERISTICS:
 - 1.1 CURRENT RATING: 0.5A MAX.
 - 1.2 IMPEDANCE: 50OHM NOMINAL
2. MECHANICAL CHARACTERISTICS:
 - 2.1 OPERATING TEMP. -40°~90°
 - 2.2 VEWR UP TO 3GHz: 1.3MAX. 3GHz TO 6GHz: 1.4MAX.
 - 2.3 DURABILITY: 30CYCLES
3. MATERIAL:
 - 3.1 CONTACT: BRASS, C2680 R-O, T=0.15±0.01mm
 - 3.2 SHELL: PHOSPHOR BRONZE, C5210 R41, T=0.15±0.01mm

3	GROUND CONTACT	1	COPPER ALLOY	Au PLATING OVER NI OVER ALL	
2	INNER CONTACT	1	COPPER ALLOY	Au PLATING OVER NI OVER ALL	
1	HOUSING	1	LCP UL94V-0		
ITEM	DESCRIPTION	Q'TY	MATERIAL	FINISH	REMARK

DIMENSION ARE MILLIMETERS		APPROVALS		DATE
TOLERANCES ARE :		DRAWN	BANG	07/16/18
X ± 0.25		CHECKED		
XX ± 0.25		APPROVALS		
ANGLE:		THE DRAFT AND DESIGN DIS-CLOSED WHO OWNED BY AND IS THE PROPERTY OF Semitek Technology Corporation, Semitek Technology Corporation RECEIVES ALL PROPRIETARY DESIGN INFORMATION AND PREVENTS REUSE AND SALES RIGHTS		
X ± 3°		SIZE	SCALE :	DRAWING NO.
DO NOT SCALE DIMENS		mm	1 : 1	001115
		D NO.	XXXXXXXXXX	REV. A
				SHEET 1 OF 1

4 . Test Equipment



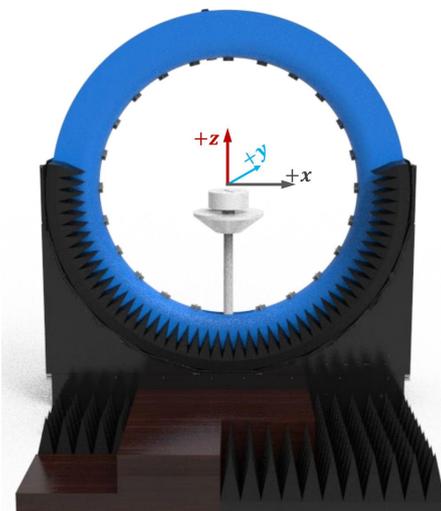
Keysight/E5071C Network Analyzer



R&S/CMW500 Comprehensive tester



R&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 :	≤40kg

Testing Capability

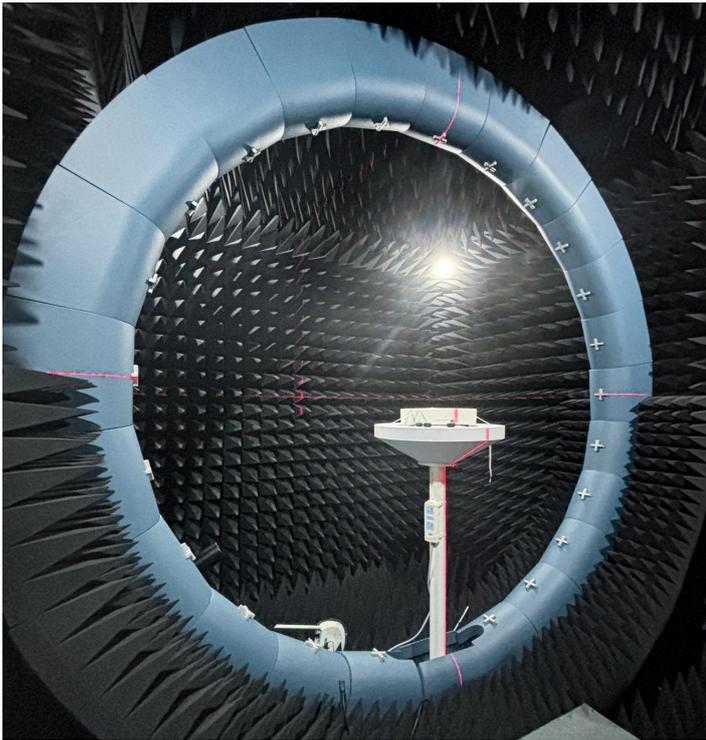
Description

Active measurement

Capability : TRP、TIS、EIRP、EIS,. etc
Mode : 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

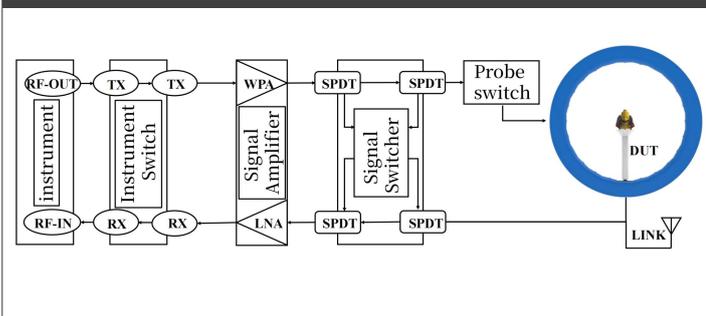
Passive measurement

Test category : Gain、Efficiency、2D pattern、3D pattern、Pattern roundness、Axial Ratio、ECC,Phase center,. etc
Polarization : Circular polarization, linear polarization, elliptical polarization

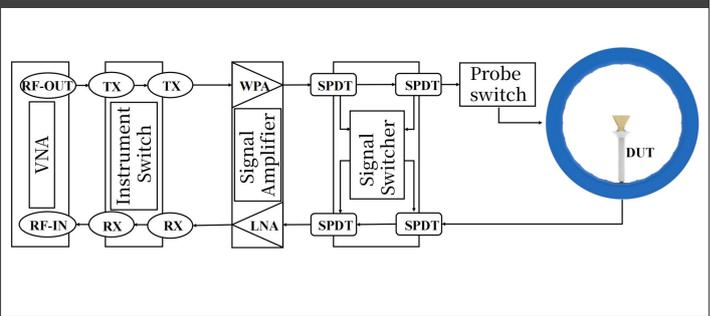


RF Link diaram of multi probe spherical near-field testing system

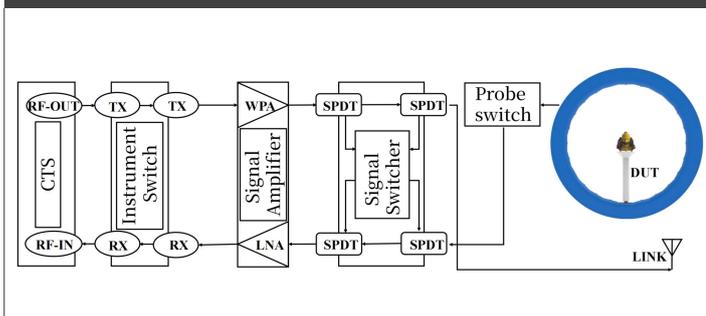
RF Link Overview



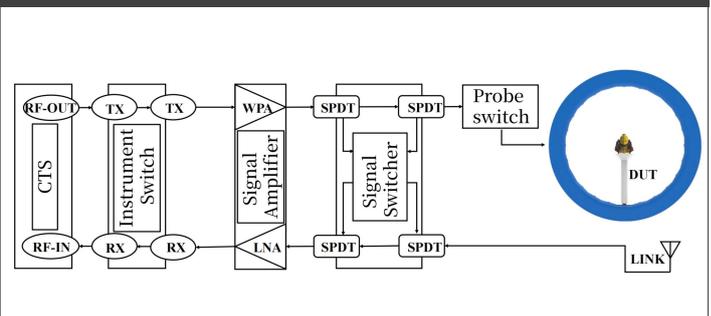
RF Link of Passivemeasurement



RF Link Overview



RF Link of Passivemeasurement





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Shenzhen Bat Wireless Technology Co.,Ltd

Office Add: Room 1301, 13th Floor, No. 8 Langhua Road, Xinshi Community, Dalang Street, Longhua District, Shenzhen

Email: marketing@batwireless.com

Tel: 0755-21031236

Documentation

Version:	Aug-21-2025-A01
Date:	2025-08-21
Note:	First released
Author:	Carly / Lisa

Change Log
