

## Near Field Probe Set

EM5030

EM5030LF

EM5030E



# 产品说明书

**Product User Manual** 



#### 1.Summary

**EM5030/EM5030LF** series probe set contains 7 probes specially designed for testing magnetic field. These probes are used to locating the interference source in EMI pre-compliance debugging and can effectively shield the interference from electric field. EM5030's frequency range is between 30MHz~3GHz, and it has 4 types of probe head shapes.EM5030LF's frequency range is 9kHz~50MHz, with 3 types of probe head shapes.

**EM5030E** series probe set contains two probes specially designed for testing electric field, with frequency range from 30MHz to 3GHz. They are mainly used for locating the electric field interference source, and the rest of the probe body is shielding design.

The probe is directly connected to the spectrum analyzer or oscilloscope with  $50\Omega$  BNC cable. When the radiation or the conduction disturbance of the product surpass the standard, users can use the near field probe to search for the certain component or circuit generating the interference of certain frequency by measuring the coupling channel between the module and the signal shifting speed, RF voltage of the evaluating system. When the interference signal is relatively weak, users can improve the system sensitivity with the EM5020A(20dB gain) or EM5020B(30dB gain) pre-amplifier.

### 2. Specification

Module	Description	Characteristics			
EM5030-1	<ul> <li>♦ H probe for detecting H field 10 cm around</li> <li>♦ Frequency range:30MHz to 3GHz</li> <li>♦ Resolution:25mm</li> </ul>	-20 -40 -60 30 1500 3000 Frequency(MHz)			
EM5030-2	<ul> <li>◆ H probe for detecting H field 3 cm around</li> <li>◆ Frequency range:30MHz to 3GHz</li> <li>◆ Resolution:10mm</li> </ul>	-20 -40 -60 30 1500 3000 Frequency(MHz)			
EM5030-3	<ul> <li>♦ H probe mainly used to detect the emission leakage of a wire.</li> <li>♦ Frequency range:30MHz to 2GHz</li> <li>♦ Resolution:5mm</li> </ul>	-20 -40 -60 30 1500 2000 Frequency(MHz)			
EM5030-4	<ul> <li>◆ H probe can be used to detect the vertical H field.</li> <li>◆ Frequency range:30MHz to 3GHz</li> <li>◆ Resolution: 2mm</li> </ul>	-20 -40 -60 30 1500 3000 Frequency(MHz)			

Frequency(MHz)



知用电子 助力中国质造 ZHIYONG PROBEMASTER www.cybertek.cn H probe can be used to check Gain(dB) the H field within 10cm range -20 Mainly used for LW conduct -40 debug testing Frequency Range 1MHz to -60 50MHz. EM5030LF-5 Resolution rate: around 25mm Frequency(MHz) 0 H probe can be used to check the H field within 3cm range -20 Mainly used for low frequency -40 debug testing Frequency Range: 1MHz to -60 50MHz Frequency(MHz) EM5030LF-6 Resolution rate: around 10mm H probe can be used to check -30 the H field within 10cm range Mainly used for LW conduct -50 debug testing -70 Frequency Range: 9kHz to EM5030LF-7 1.5MHz Frequency(MHz) Resolution rate: around 25mm E probe used to test the Gain(dB) 0 surface electric field. Covering zone 2\*5cm. Used for bus -20 structure or large component -40 zone -60 Frequency Range: 30MHz to 1.5GHz Frequency(MHz) EM5030E-8 E probe used for the testing of 0 Gain(dB) electric field generated on the -20 surface single cable surface. -40 Frequency range: 30MHz to -60 3GHz 3000

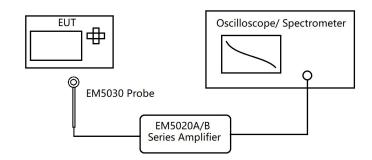
## 3. Application

EM5030E-9

- ♦ Tracking the EMI radio interference sources
- ◆ Tracking the EMI conduct interference sources
- ♦ H field detection



#### **Application Diagram:**



## 4. Products Description

#### **Probes**



#### Accessories





Output Cable: 1m

Adapter: SMA female to N male

## 5. Packing List

	EM5030	EM5030LF	EM5030E		EM5030	EM5030LF	EM5030E
H probe EM5030-1	1			H probe EM5030E-8			1
H probe EM5030-2	1			H probe EM5030E-9			1
H probe EM5030-3	1			CK-317(SMB-SMA	1	1	1
				connecting cable)			
H probe EM5030-4	1			CK-22(SMA	1	1	1
				(female) to N (male))			
H probe EM5030LF-5		1		Instruction Manual	1	1	1
H probe EM5030LF-6		1		Warranty Card	1	1	1
H probe EM5030LF-7		1		Test Report	1	1	1

## **CYBERTEK**

### SHENZHEN ZHIYONG ELECTRONICS CO., LTD.

Addr: Room A1702, Building 4, TianAn Cyber Park, HuangGe Road, LongGang

District, ShenZhen City, China

**Tel:** (86) 400 852 0005 / (86 755) 86628000

Email: <a href="mailto:cybertek@cybertek.cn">cybertek@cybertek.cn</a> © Zhiyong Electronics, 2025

Url: <a href="http://www.cybertek.cn">http://www.cybertek.cn</a> Published in China, Oct. 1, 2025