Radio Frequency Conducted Immunity Test System

RIS-6091【Introduction】

The RIS-6091 is a sophisticated and versatile Radio Frequency Conducted Immunity Test System developed. The main unit is equipped with a built-in signal generator, power meter, directional coupler, and power amplifier module. Additionally, it supports the expansion of using external power amplifier modules to extend its testing capabilities, encompassing CS testing in accordance with IEC 61000-4-6 standards, BCI testing for automotive electronics as specified in ISO 11452-4 standards, and other high-current testing applications.

It is noteworthy that has developed and manufactured a variety of CS Coupling/Decoupling Networks with excellent high-frequency impedance characteristics. These CDNs meet the impedance requirements specified in the standards across the full frequency range from 150 kHz to 230 MHz and can be paired with any brand of CS testing system. Furthermore, they come in various specifications and models, catering to different testing needs, ranging from power lines to signal lines.

Technical Features

- Upper computer control, equipped with standard professional testing software in both Chinese and English versions, featuring complete functions and excellent scalability.
- A comprehensive range of coupling/decoupling networks of various specifications to meet the needs of different test ports. Full system frequency range: 150 kHz to 230 MHz.
- Built-in signal generator frequency range: 9 kHz to 3 GHz.
- Built-in power amplifier frequency range: 150 kHz to 230 MHz, with options of 35 W or 85 W.
- Built-in power meter: 100 kHz to 400 MHz.
- Fully automatic calibration, fully automatic testing, and output power monitoring during the testing process.
- External expansion capabilities to support BCI testing.

Parameter List

Specification Model	RIS-6091		
Output Voltag	35 W Power Amplifier	Electromagnetic Clamp Method	domestically produced：1 ～ 10 Vrms

			imported：1 ～ 25 Vrms
		CDN Method	1 ～ 30Vrms
	85 W Power Amplifier	Electromagnetic Clamp Method	domestically produced：1 ～ 16 Vrms
			imported：1 ～ 40 Vrms
		Current Clamp Method	domestically produced：1 ～ 7 Vrms
			imported：1 ～ 18 Vrms
		CDN Method	1 ～ 30 Vrms
Output Impedance	50 Ω		
VSWR	≤ 1.2		
Signal Source			
Frequency	9 kHz ～ 3 GHz		
Output Level	-120 ～ +10 dBm		
Unmodulated Signal	Continuous Wave		
Specification Model	RIS-6091		
Modulation Mode	Amplitude Modulation Modulation Frequency：0.1 Hz ～ 1 MHz Modulation Depth：0 ～ 100% Pulse Modulation Modulation Period：200 ns ～ 160s Pulse Width：100 ns ～ 85s On-Off Ratio：≥ 65 dB		
Power Amplifier			
Output Frequency	150 kHz ～ 230 MHz(Scalable to 10 kHz ～ 400 MHz)		
Maximum Output Power	+44 dBm/35 W(Scalable up to +49 dBm/85 W)		
Harmonic	< 15 dBc		
Power Meter			
Input Frequency	100 kHz ～ 400 MHz		
Input Power	-40 dBm ～ +30 dBm		

System Configuration	
Software	Support for Windows
Control Interface	USB
Output Interface	N-type Connector
Dimensions	19''/4 U
Weight	20 kg