



### MODEL NUMBER: RFCI-75

# CONDUCTED IMMUNITY TEST SYSTEM ACC. TO ISO 11452-4 (BCI)

The EMC Shop's RFCI-75 conducted immunity test system generates and monitors intereferences between 1 MHz and 400 MHz as set out per ISO 11452-4 and other automotive compliance test standards. The system is



a portable, turnkey and easy to setup solution allowing engineers to quickly evaluate automotive products. Accessory bundles for BCI or TWC methods are supplied with each solution, including PC's and ground planes as required.

# **FEATURES**

EASY SETUP AND TESTING		
■ LIGHTWEIGHT AND PORTABLE		
- ACHIEVES	→ 400 mA substitute method $→$ 200 mA closed loop	
■ MEETS	<ul> <li>→ ISO 11452-4</li> <li>→ FMC 1278</li> <li>→ GMW 3097</li> <li>→ many more</li> </ul>	

## **OVERVIEW:**

- **✓** COMPUTER-BASED SYSTEM (USB).
- **✓** SELF-CALIBRATION OF THE TEST SYSTEM (GENERATOR) BCI PROBE OR TWC PROBE
- **✓** RF-GENERATOR, AMPLIFIER AND RF-VOLTMETER MAY AS WELL BE USED AS STAND-ALONE DEVICES
- **✓** CONNECTIONS: EUT "FAIL", EUT MONITORING BY EXTERNAL MULTIMETER. E.G. DUT SIGNAL
- ✓ CALIBRATION OF COUPLING/DECOUPLING **DEVICES AND EM CLAMP IS PERFORMED** AUTOMATICALLY
- ✓ EASY EXTERNAL AMPLIFIER INTEGRATION

### TECHNICAL DATA

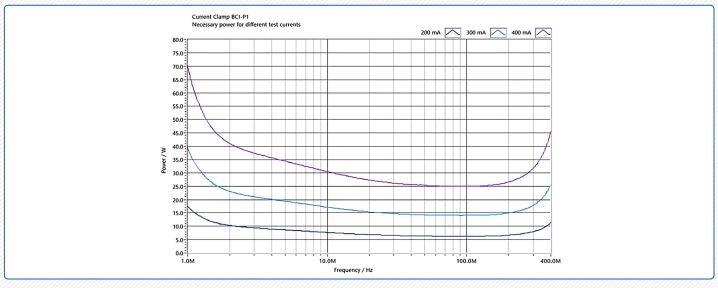
RF VOLTMETER (EXTERNAL INPUT)		
Frequency range	10 kHz - 400 MHz	
Measuring range	+30 dBm to - 40 dBm	
Input	BNC, 50 Ohm	





# **RFCI-75 MAIN SPECIFICATIONS**

RF GENERATOR	
Output	BNC, 50 Ohm
Frequency range	10 kHz - 400 MHz
Frequency resolution	1 Hz
Output level range	0 to -63 dBm (level resolution 0.1 dB)
Amplitude modulation	0 - 100%; resolution 1% (internal AF-Generator)
Amplitude modulation (ext.)	BNC jack, Input impedance > 100 k $\Omega$ 1 Hz to 100 kHz, 0 to 100%
Pulse modulation	1 Hz to 100 kHz, Resolution 0,1 Hz duty cycle 5 - 95 %; resolution 1% (internal AF-Generator)
AF GENERATOR	
Output jack	BNC
Frequency range	1 Hz - 100 kHz, resolution 0.1 Hz
Output voltage	0 - 1 V amplitude
Signal	Sine wave / rectangular / triangle
POWER AMPLIFIER	RFCI-AUTO
Frequency range	100 kHz - 400 MHz
Gain	51 dB ±1.5 dB
Output power	75 W nom.
Distortion	< 20 dBc at 50 W
Input impedance Output impedance	50 Ohm, VSWR < 1.5 : 1 50 Ohm nom
EUT-fail input	BNC socket



EUT-MONITOR INPUT	
Input voltage	0 - 10 V (resolution 2.5 mV), impedance 100 kΩ

# AMPLIFIER MONITOR Output BNC, 50 Ω / -40 dB (amplifier output), ±3 dB

INTERFACES	
USB-A	Multimeter (for EUT control) and Relays switching unit
USB-B	Connection to Computer

GENERAL DATA		
Temperature range	0 - 40 °C	
Housing / weight	19" desktop case (84 TE; 3 HE) / aprox. 11 kg	
Width / height / depth	app. 450 / 150 / 480 mm	
AC Input	100 - 240 VAC; 50/60 Hz	

### **BCIP400M**

- Clamp for Bulk Current Injection (BCI)
- Frequency range 1 400 MHz
- For cables up to Ø 40mm
- Included calibration set

### CMP400M

- Current monitoring probe 10 kHz 400 MHz, foldable
- For cables up to Ø 45mm
- Option: Calibration set RFCI-CMP-CAL

### STANDART KIT

- RFCI-75 Mainframe
- RFCI-Cable-Kit
- RFCI Attenuator Set
- User Manual
- Software Dongle
- PC Interface Cable
- Calibration Certificate
- AC Powe Chord
- Two Year Warranty

