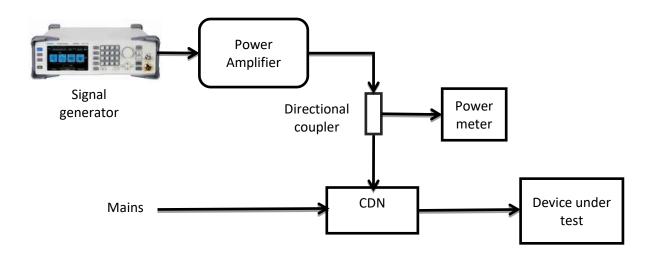


# **Conducted Immunity Test System SMCITS-46** Series



# **Features**

- Conducted Immunity Test System (CITS) is as per IEC/EN61000-4-6, MIL 461 CS114, ISO11452-4 standards. Includes:
- Signal Generator from 9kHz to 2.1GHz
- Inbuilt Power meters
- Inbuilt Dual Directional CouplerPower Amplifiers of different frequencies and injection level requirements.
- Wide ranges of Injection and measuring probes.
- Frequency options available from 10kHz/ 100kHz up to 250MHz/400MHz/1GHz/2GHz
- A simple user friendly software which can corelate with system and give you easy operation
- Possibility of integration of external amplifier for power & frequency expansion

<b>Technical Specifications</b>	SMCITS 250M-25	SMCITS 250M-75	SMCITS 400M-75	
Frequency range	100 kHz to 250 MHz	10 kHz to 250 MHz	100 kHz to 400 MHz	
Frequency resolution	0.01 Hz			
Signal generator range	9 kHz to 2.1 GHz			
Modulation mode	Amplitude modulation, Pulse modulation, Frequency modulation, Phase modulation			
Power Amplifier range	100 kHz to 250 MHz	10 kHz to 250 MHz	100 kHz to 400 MHz	
Amplifier Capacity	25 Watt	75 Watt	75 Watt	
Max Test Level	10V (15V without 6dB) with 80% AM	30V (40V without 6dB) with 80% AM	30V (40V without 6dB) with 80% AM	
Power monitoring	Internal directional coupler and three power meters for measurement of forward power, reflected power and injection level monitoring.			
Communication Interface	LAN, USB			



# Accessories:

- CDN (coupling Dcoupling network for power lines) M1, M2, M3, M2+M3, M4 & M5, 16A, 32A, 63A & 100A with banana plug

- EM Coupling clamp with 20mm and 35mm cable dia.
- Absorbing clamp with 20mm and 35mm cable dia. for additional decoupling
- Attenuator: 6dB/25W, 6dB/100W, customized as per requirement available
- Calibration accessories : Mounting Plate, 50/150 ohm adaptors, 50 ohm termination
- Appropriate Connection adaptors for CDNs

# **CDN Ranges:**

Model	Description
SMCDN L1-16	1 line, 280VAC, 16A, 150kHz – 230MHz
SMCDN L1-32	1 line, 280VAC, 32A, 150kHz – 230MHz
SMCDN M1	Ground cable PE, 280 VAC, 150kHz–230MHz
SMCDN M2-16	2 lines L + N, 280 VAC, 16 A, 150kHz – 230MHz
SMCDN M2-32	2 lines L + N, 280 VAC, 32 A, 150kHz – 230MHz
SMCDN M2-63	2 lines L + N, 280 VAC, 63 A, 150kHz – 230MHz
SMCDN M3-16	3 lines L + N + PE, 280 VAC, 16 A, 150kHz – 230MHz
SMCDN M3-32	3 lines L + N + PE, 280 VAC, 32 A, 150kHz – 230MHz
SMCDN M3-63	3 lines L + N + PE, 280 VAC, 63 A, 150kHz – 230MHz
SMCDN M2+M3-16	2 + 3 lines, switchable, 280 VAC, 16 A, 150kHz – 230MHz
SMCDN M2+M3-32	2 + 3 lines, switchable, 280 VAC, 32 A, 150kHz – 230MHz
SMCDN M4-16	4 lines 3 x L, 1 x PE, 280 VAC, 16 A, 150kHz – 230MHz
SMCDN M4-32	4 lines 3 x L, 1 x PE, 280 VAC, 32 A, 150kHz – 230MHz
SMCDN M4-63	4 lines 3 x L, 1 x PE, 280 VAC, 63 A, 150kHz – 230MHz
SMCDN M4-100	4 lines 3 x L, 1 x PE, 280 VAC, 100 A, 150kHz – 230MHz
SMCDN M4-N16	4 lines 3 x L, 1 x N, 280 VAC, 16 A, 150kHz – 230MHz
SMCDN M4-N32	4 lines 3 x L, 1 x N, 280 VAC, 32 A, 150kHz – 230MHz
SMCDN M4-N63	4 lines 3 x L, 1 x N, 280 VAC, 63 A, 150kHz – 230MHz
SMCDN M4-N100	4 lines 3 x L, 1 x N, 280 VAC, 100 A, 150kHz – 230MHz
SMCDN M5-16	5 lines 3 x L, 1 x N, 1 x PE, 280 VAC, 16 A, 150kHz – 230MHz
SMCDN M5-32	5 lines 3 x L, 1 x N, 1 x PE, 280 VAC, 32 A, 150kHz – 230MHz
SMCDN M5-63	5 lines 3 x L, 1 x N, 1 x PE, 280 VAC, 63 A, 150kHz – 230MHz
SMCDN M5-100	5 lines 3 x L, 1 x N, 1 x PE, 280 VAC, 100 A, 150kHz – 230MHz



# **Test Accessories for IEC60601-1-2 Ed. 4/61000-4-39**

The IEC 60601-1-2 standard is the international standard for testing medical equipment to EMC. The latest update adds a new test as more transmitter products are present in homes, offices (locations where medical equipment may be used), and hospitals. Three frequencies that are in use are: 30 kHz, 134.2 kHz, and 13.56 MHz.

The standard IEC 61000-4-39 for testing fields in close proximity is referenced for this testing. With our SMCITS-46 system these test fields can be produced by using accessories Coil Sets, Matching Networks, Stand & Cables.

Coil Set:

Loop Sensor	Schloder MGA LS 040	Schloder MGA LS 040-1
Frequency Range	9kHz - 1MHz	100kHz - 30MHz
Impedance	50 Ohm	50 Ohm

Radiating Loop	Schloder MGA RL 120	Schloder MGA RL 100-3
Frequency Range	9kHz - 500kHz	100kHz - 30MHz
DC resistance	40 mOhm	35 mOhm

### Complete set for frequency range: 9 kHz – 150 kHz Article No.: Set 9kHz-150kHz -1-2/-4-39

Coil set RL-120 & LS-040 incl. stand and matching network for tests according to IEC 60601-1-2 Ed. 4.1 (30 kHz, 134.2 kHz) and IEC 61000-4-39 (9 kHz to 150 kHz)

#### Complete set for frequency range: 150 kHz – 26 MHz Article No.: Set 150kHz-26MHz -1-2/-4-39

Coil set RL-100-3 & LS-040-1 incl. stand and matching network for tests according to IEC 61000-4-39 (150 kHz to 26 MHz) and IEC 60601-1-2 (13.56 MHz)

## Capacitor Article No.: Capacitor 1/2W 134.2 kHz -1-2

Capacitor in housing (resonance matching) for RL-120 with matching network BNC male/ BNC female. When testing for IEC 60601-1-2: 134.2 kHz, 65 A/m, the required power can be halved from 46.3 dBm / 43 W to 43.1 dBm / 20 W with the optional resonance matching. The capacitor in the housing is plugged in front of the matching network.

## PreAmp 150kHz-26MHz -4-39

Preamplifier for tests according to IEC 61000-4-39 (Loop sensor MGA LS 040-1 provides too low an output level for the power meter for the lowest standard levels at low frequencies)

