

Laboratory **EMC Division, Sameer - Centre for Microwave Research, Sector-7,  
Rain Tree Marg, CBD-Belapur, Navi Mumbai, Maharashtra**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **TC-6969**

Page 1 of 4

Validity **05.03.2018 to 04.03.2020**

Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
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**ELECTRONICS TESTING**

I.	<b>EMI/EMC TEST FACILITY</b>			
1.	<b>Electrical / Electronic Product</b>	Conducted Emission	CISPR 11 CISPR 15 CISPR 22 BS EN 55011 BS EN 55015 BS EN 55022 FCC Part 15 & 18 IEC 61000-6-3 IEC 61000-6-4 IEC 61326-1 IEC 60601-1-2	9 kHz to 30 MHz Max. Current: 16 A for 1 to $\Phi$ 32 A for 3 to $\Phi$
		Harmonic Current Emission	IEC 61000-3-2 BS EN 61000-3-2 IEC 61000-6-3 BS EN 61000-6-3 IEC 60601-1-2	Upto 40 <sup>th</sup> Harmonic 16 A /1- $\Phi$
		Voltage Fluctuation & Flicker	IEC 61000-3-3 BS EN 61000-3-3 IEC 61000-6-3 BS EN 61000-6-3 IEC 60601-1-2	16 A / 1- $\Phi$
		Radiated Emission	CISPR 11 CISPR 14-1 CISPR 22 CISPR 25 BS EN 55011 BS EN 55014-1 BS EN 55022 BS EN 55025 FCC Part 15 & 18	30 MHz to 1 GHz at 3 m Distance

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Page 2 of 4

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			IEC 61000-6-3 IEC 61000-6-4 IEC 61326-1 IEC 60601-1-2	
		RF Radiated Susceptibility	IEC 61000-4-3 BS EN 61000-4-3 CISPR 24 BS EN 55024 BS EN 55014-2 BS EN 61000-6-1 BS EN 61000-6-2 IEC 61000-6-1 IEC 61000-6-2 IEC 61326-1 IEC 60601-1-2	80 MHz to 1GHz 3 V/m at 3 m distance  1 GHz to 3 GHz 10 V/m at 1 m distance
		Electrostatic Discharge Immunity	IEC 61000-4-2 BS EN 61000-4-2 BS EN 55014-2 BS EN 55024 BS EN 61000-6-1 BS EN 61000-6-2 IEC 61000-6-1 IEC 61000-6-2 CISPR 24 IEC 61326-1 IEC 60601-1-2	15 kV Air discharge  8 kV Contact discharge
		Electrical Fast Transient (EFT) / Burst Immunity	IEC 61000-4-4 BS EN 61000-4-4 BS EN 55014-2 BS EN 55024 CISPR 24 BS EN 61000-6-1 BS EN 61000-6-2 IEC 61000-6-1 IEC 61000-6-2	16 A / 1-Φ  32 A / 3-Φ

**Mandeep Kumar**  
Convenor

**N. Venkateswaran**  
Program Director

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**Page 3 of 4**

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			IEC 61326-1 IEC 60601-1-2	
		High Energy / Telecom Surge Immunity	IEC 61000-4-5 BS EN 61000-4-5 BS EN 55014-2 BS EN 55024 CISPR 24 BS EN 61000-6-1 BS EN 61000-6-2 IEC 61000-6-1 IEC 61000-6-2 IEC 61326-1 IEC 60601-1-2	Surge level – $\pm 0.25$ to $\pm 4$ kV  16 A / 1- $\Phi$  32 A / 3- $\Phi$
		Conducted RF Susceptibility	IEC 61000-4-6 BS EN 61000-4-6 CISPR 24 BS EN 55024 BS EN 61000-6-1 BS EN 61000-6-2 IEC 61000-6-1 IEC 61000-6-2 BS EN 55014-2 IEC 61326-1 IEC 60601-1-2	16 A / 1- $\Phi$  32 A / 3- $\Phi$
		Power Frequency Magnetic Field Immunity	IEC 61000-4-8 BS EN 61000-4-8 BS EN 55014-2 BS EN 55024 CISPR 24 BS EN 61000-6-1 BS EN 61000-6-2 IEC 61000-6-1 IEC 61000-6-2 IEC 61326-1 IEC 60601-1-2	Field - 2 G (Max.)  EUT size: Maximum 1 m <sup>3</sup>

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**Page 4 of 4**

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		Voltage dips, Short Interruptions & Voltage Variations Immunity	IEC 61000-4-11 BS EN 61000-4-11 BS EN 55014-2 BS EN 55024 CISPR 24 BS EN 61000-6-1 BS EN 61000-6-2 IEC 61000-6-1 IEC 61000-6-2 IEC 61326-1 IEC 60601-1-2	16 A / 1-Φ
		DC Voltage dips, Short Interruptions & Voltage Variations Immunity	IEC 61000-4-29 BS EN 61000-4-29	16 A DC
<b>2.</b>	<b>Electrical/ Electronic Equipment System/ Subsystem</b>	Conducted Emission	CE101-MIL 461E & F CE102-MIL 461E & F	30 Hz to 10 KHz 10 KHz to 10 MHz
		Conducted Susceptibility Power leads	CS101-MIL 461E & F	30 Hz to 150 KHz
		Conducted susceptibility Structure current	CS109-MIL 461E & F	60 Hz to 100 kHz
		Conducted Susceptibility Bulk Cable injection	CS114-MIL 461E & F	10 KHz to 200 MHz
		Conducted Susceptibility Bulk Cable injection impulse Excitation	CS115-MIL 461E & F	5 Amp Amplitude
		Conducted Susceptibility Damped Sinusoidal Transients, Cable and Power Lead	CS116-MIL 461E & F	0.1 Amp to 10 Amp Peak Amplitude 10 kHz to 100 MHz

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