



ELECTROMAGNETIC COMPATIBILITY (EMC) TESTING AND CERTIFICATION

ELECTRONICS AND ELECTRICALS

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SGS



INTRODUCTION

Electromagnetic Compatibility (EMC) testing services by SGS, supports manufacturers, product designers and innovators by detecting the slightest anomaly in the electromagnetic and electrical operation of their products and addresses the frequent due diligence, compliance and market access challenges in the fast-growing and increasingly complex world of connected devices to support a faster go-to-market.

Our state-of-the-art laboratory in Bengaluru, Karnataka state, is one of the most technologically advanced EMC testing laboratories in India. It is accredited by the National Accreditation Board for Testing and Calibration Laboratories (NABL) and offers a diverse range of testing and certification services to clients across industries.

WHY DO YOU NEED EMC TESTING?

Electromagnetic Compatibility (EMC) testing is a critical part of a product's design journey and its lifecycle. Compliance with Electromagnetic Compatibility (EMC) standards is required by various domestic as well as international laws and demanded by industries and consumers. EMC tests the ability of devices to withstand interference from other electrical or electronic equipment and environments. It also verifies that the emission of the device itself does not cause harmful interference to other electrical or electronic equipment.

SGS capabilities in product safety testing and certification, combined with our global accreditations allow us to offer to manufacturers, the most appropriate safety marks for their customers and a comprehensive array of international approvals for their destination market(s) worldwide.

COVERAGE ACROSS PRODUCT CATEGORIES

SGS EMC testing capabilities covers the following range of consumer products:

- Radio and telecommunication equipment,
- IT equipment
- Household products, electric tools and products
- Electrical toys and recreational products
- Residential, commercial and light-industrial electrical products
- Industrial electrical products
- Luminaires/lighting
- Electrical lighting products
- Medical electrical products
- Health, fitness and beauty products
- Railway electrical products
- Electrical products for measurement, control and laboratory use.

The laboratory facilities can also be used for pre-compliance as well as development testing by local product design engineers and developers. SGS offers global experience and expert advice to companies at every step of the product launch process, from design, development to preparing for market access. We help to ensure compliance to regulations before and during production.

With its vast global network of laboratories and experts and over 100 years of collective experience in EMC testing, SGS brings you the technical expertise, capacity, proximity and engineering expertise to streamline your EMC compliance testing requirements for your products ranging from consumer electronics, wireless & IoT to industrial controls.

EMC TESTING SERVICES

SGS offers EMC Testing services covering the two broad categories:

- Immunity Tests
- Emission Tests

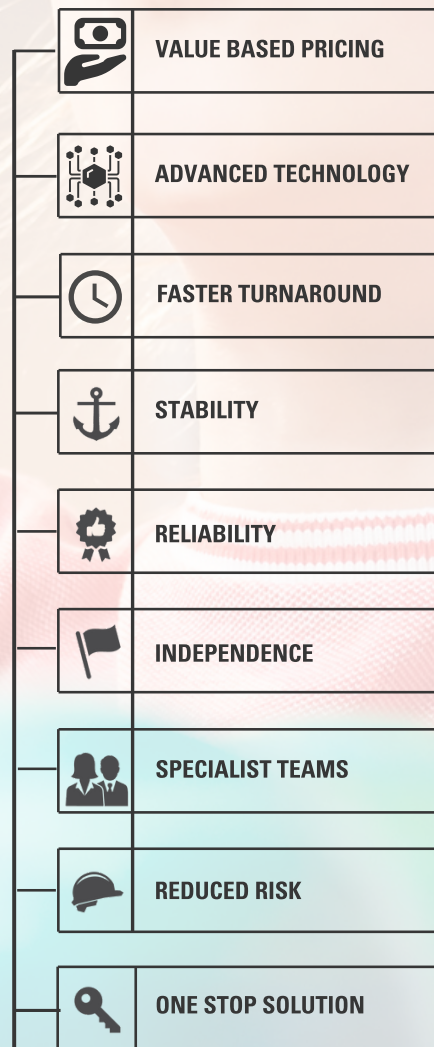
Immunity tests measure how a device will react when exposed to electromagnetic noise and other disturbances. The purpose of these tests is to gain a reasonable assurance that the device will operate as intended when used within its expected operating environment.

- Electro Static Discharge (ESD)
- Fast transient
- Surge
- Ring-wave
- Conducted RF
- Power Frequency Magnetic Field
- Impulse Magnetic Field
- Voltage Dips & Short Interruption

Emissions tests measure the amount of electromagnetic noise generated by a device during normal operation. The purpose of these tests is to ensure that any emissions from the device are below the relevant limits defined for that type of device. This, in turn, provides a reasonable assurance that the device will not cause harmful interference to other devices operating within its expected operating environment.

Under Emissions Tests, we offer-

- Harmonics Current Emission
- Voltage Flicker & Fluctuations,
- Conducted Emission
- Disturbance Power
- Click-rate Analysis Test



ABOUT SGS

SGS is the world's leading inspection, verification, testing and certification company. Recognised as the global benchmark for quality and integrity, we employ over 89 000 people and operate a network of more than 2 600 offices and laboratories around the world. We are constantly looking beyond customers' and society's expectations in order to deliver market leading services wherever they are needed.

With a presence in every single region around the globe, our people understand the local markets and regulations and are able to deliver customized services tailored to the requirements.

Our global network of offices and laboratories, alongside our dedicated team, allows us to respond to your needs, when and where they occur. Our reputation for independence, excellence and innovation has established us as the market leader in providing services that improve efficiency, reduce risk and deliver competitive advantage for you.

Wherever you are in the world, you can rely on our international teams of experts to provide specialized solutions to make your business faster, simpler and more efficient

FOR MORE INFORMATION CONTACT
CRS.INDIA@SGS.COM OR VISIT
WWW.SGSGROUP.IN

WHY SGS?

**PARTNER WITH SGS:
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WHEN YOU NEED TO BE SURE

