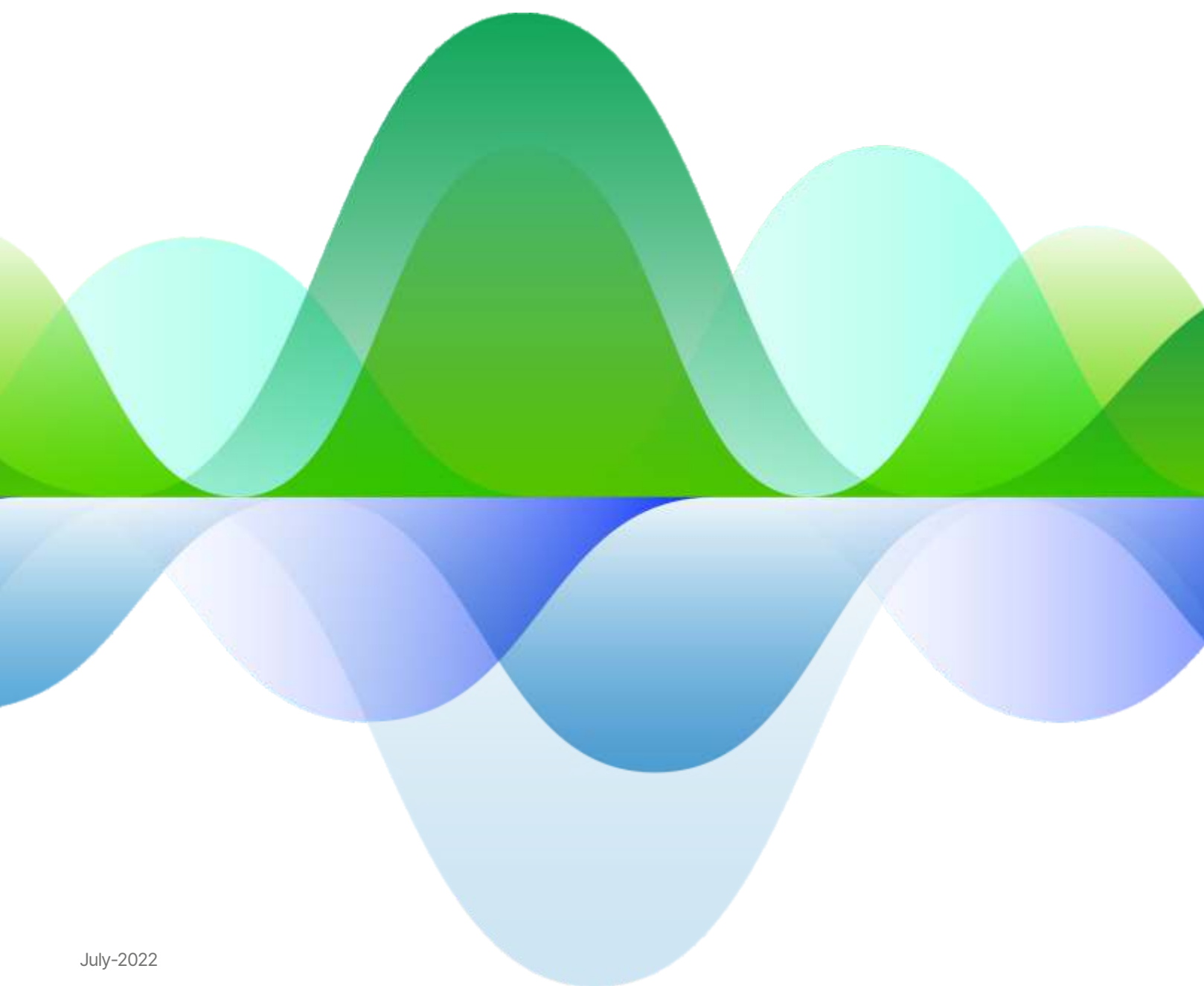




Cut the Noise.



Solving EMI challenges of the world, one at a time.

It gives me enormous pride to see how the brand we took under our wing just a few years ago is thriving and is on the way to become one of the most prominent and trusted names in the EMI solution industry.

EMIS, an engineering company with cutting edge technical expertise, was established to solve real world challenges of electromagnetic interference. We brought in management and operational expertise to rejuvenate the business. Our team of highly skilled and motivated employees, trustworthy supply partners and devoted investors collectively push forward the boundaries of growth and success story.

Our vision to deliver efficiency in the world through engineering expertise and resourcefulness has now become a collective guiding path, helping us continually exceed our clients' expectations.

Avinash Koorgailu
Managing Director

Footprints in the sand

April 1998

EMIS is established. In a journey spanning over 2 decades, EMIS has become a market leader for EMI/RFI solutions in India.

July 2001

EMIS starts the EMC test lab facility

April 2006

EMIS Commercial Filters gets the International Safety certification as per CSA/C-US. EMI Filters is the first brand manufactured in India with the CSA safety approvals

March 2000

EMIS becomes an ISO 9001 Certified company.

November 2002

Our EMC test lab got Accreditation as per ISO 17025

March 2008

EMIS develops Military grade Chamber filters with >100dB Suppression From 14KHz to 40GHz. Filters rated for 400Hz AC applications are also covered in this range.

May 2012

EMIS receives an additional international certification for the Filters "NEMKO" as per EN 60939 -1 and -2.

August 2014

EMIS develops power line feed through capacitors & feed through filters Up to 600 Amps for 250V AC application. Considering large export volumes, large investments are made on production and Test equipment.

February 2016

EMIS receives ISO 14001:2015 certification

May 2020



EMIS product spectrum is UL approved

July 2013

EMIS begins its association with Indian Military R&D in developing full range of Facility Filters. EMIS also successfully develops HEMP Filters up to 1500Amps as per MIL-STD – 188-125 and gets certification from the recognized test laboratory.

August 2015

Power line feedthrough Capacitors & Facility filters received the international safety certification as per CSA/C-US and UL 1283.

April 2019

KSI Group completes acquisition of EMI Solutions. KSI group product portfolio also includes KS Instruments and KWK resistors.

Making it Better.

Our core values encourage us to continuously work towards enhancing our processes, leaving things better than we found them.

01

Building Value

We acknowledge our ability to build from resources around us. We build value at every stage, leaving things better than we found them.

02

First Principles Approach

We avoid assumptions and baseless claims. Every problem statement that we undertake is broken down into its core truths and we build our solutions scientifically from there.

03

Profitability

Our focus on profitability keeps intact our winning spirit and resolve to build value.

04

Agility & Adaptability

We are agile and adaptable, finding the most optimized solutions for problems at hand.

A close-up photograph of a person's hand wearing a green knitted glove, holding a metal tool and working on a small metal component. Steam is rising from the work area, suggesting a hot process like soldering or welding. The background is blurred, showing other industrial equipment. The entire image has a green color overlay.

Delivering Efficiency, across the board

Our focus on delivering efficiency is not constrained to the product we sell. We incorporate this focus in all aspects of our management style. Stringent protocols are followed for optimal efficiency while delivering our products and services.

Requirement

Following the first principles approach, our specialized team engages with the client representatives to identify the needs. They follow an extensive process to determine the context within which the need is placed, the variables that affect the output, the materials used and so forth. They use this information to create a suitability and feasibility analysis; post which the customer is either directed towards the standard product catalog or a conversation for customized solution.

Design and Development

The extensive feasibility and analysis reports act as a detailed input for the engineering scientists who scientifically craft the product solution. The design inputs are evaluated through stringent ISO standards to produce an elaborate design output. In the case of a customized solution being offered, the customer team is brought on as co-creators. The teams collectively take decisions on the product output for the best possible solution.

Inspection and Validation

The EMI components design and integrated product solution is then validated by an auditing team of experts thoroughly, to meet customer requirements. The solutions are tested in-house, in our state of the art R&D and testing facility in accordance with the desired quality standards for a quick turnaround time.

Manufacture and Assembly

Our flexible and efficient state-of-the-art in house manufacturing facility helps us be with the partners all the way. Complete control over the manufacturing and component assembly process can be tuned to support even low volumes or short lead times.

Packaging and Documentation

Our component deliveries are supported with detailed, methodical packaging and elaborate product documentation. These processes help us ensure that our partners can easily install and deploy the solutions at the customer site. The product brochures and support documentation is available on request in multiple languages for the ease of the customer.

Delivery

EMIS ensures an end-to-end solution and arranges for customer product deliveries through its own forwarders or work with customer nominated forwarders. Our extensive footprints cover India, Turkey, Singapore, Germany, Sweden and the USA to deliver satisfaction till the last mile.

After Sales Support

Our relationship is beyond transactional with our client partners. Post delivery of the solution, we are in touch with the client representative teams for technical support, feedback and progress of the project. A continuous communication channel allows us to foster a valuable relationship and enhance our products and services.

Built today, for the future

At EMIS, we understand the pace of technology and innovation in the world. We understand that to build sustainable solutions, they need to be relevant and adaptable to the evolving requirements and environments. All our processes and scientific infrastructure systems come together to ensure that our products are built to stay.





Power Quality Products

Power quality products provide uninterrupted power supply and manage EMI, maintaining consistent power quality. Our superior range of Line and Load Reactors and Harmonic filters ensure reliable and efficient quality power for industrial and home needs.

EMI/EMC Products

EMI can cause service interruption, data loss, permanent damage to equipment and failure when left unattended. Our sophisticated EMI/EMC products use high quality, grade A raw materials in an exhaustive range of specifications that meet customers' varied requirements.

Feedthrough Components

Electromagnetic Feedthrough is one of the key sources of electrical noise in signal transmission. Specifically seen as a challenge in Si/ZnO Surface Acoustic Wave (SAW) devices, our Feedthrough Components (filters and capacitors) attenuate the EM/RF noise by carrying high frequency /voltage electrical signals through PCBs or enclosures.

Military Grade Filters

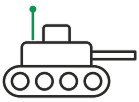
Military standards are much more stringent when compared to commercial applications because of negligible room for error. Military Grade Filters are especially used for Point of Entry (POE) protection. They are broadly categorized as Power Line, Data Line and Signal line filters covering the power supply and telecommunication equipment in defence applications.

Surge Protectors

Lightning and power system faults can cause high voltage surges subsequently causing enormous damage to electrical equipment. Our surge suppression and spark quencher solutions handle short duration over-voltages and protect electrical equipment from damage.

Precision, across the Spectrum

Industries we support



Defence & Aerospace

In the aerospace and defense industry, absolute precision with assurance is the keystone. The equipment brave harsh and unpredictable weather conditions and the allowance for margin of error is close to negligible. EMIS, as a trusted player in the segment, ensures highest precision for the design, verification and test of electronic systems.



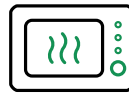
Medical & Healthcare

Medical instruments in hospitals, labs and diagnostic centers are prone to high levels of electromagnetic interference, which can be life threatening. Electro-magnetic compatibility is therefore crucial for a trouble-free operation. EMIS appreciates the criticality of its solutions and leads the way with the highest international standards of conducted and radiated emission tests to meet the Medical Standards IEC 60601-1-2.



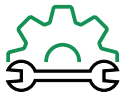
Automotive & Transit

Consisting of several electro-mechanical components and sub-assemblies; the automotives segment tackles both broadband and narrowband EMI. We offer an exhaustive range of single phase EMI filters, 3 phase filters, harmonic filters, AC line reactors, output ferrite chokes for on-board communication units among other shielding, coupling and grounding solutions.



Consumer Appliances

Increase in both the number of consumer appliances in a household and their electronic complexity is causing high degrees of EMI that interferes with their seamless, high-quality performance. Known for an uncompromising technical compliance to standards - CE Marking for Europe, FCC for North America, EMIS holds a pre-eminent position in providing comprehensive EMI/EMC solutions to consumer and home appliances.



Industrial

EMI in industrial machinery can be caused by intermittent events like sparking on motor brushes, power circuit switches or circuit breaks; which can slowly degrade the equipment over time. EMIS delivers sophisticated solutions that control the electromagnetic noise, increasing the lifespan and the efficiency of the industrial equipment.



Power & Energy Management

Specifically designed for the challenges of renewable energy systems - supporting high contact reliability with shock proof terminals and providing good attenuation from incoming interference; EMIS offers CE marked, custom designed and manufactured solutions that are cost effective, compact size, and come with multiple mounting options.



Building Technology

Nuanced BIM and green buildings require reliable electromagnetic compliance solutions so that the buildings can seamlessly transmit data back and forth. EMIS understands the complexities of interconnectivity among sensors and systems and provides holistic solutions that help buildings to be safer, smarter and more efficient.



Telecommunication

Management of EMI emissions from an ever increasing pool of new telecommunication devices is a colossal challenge for the industry. Our wide range of input filters reduce conducted and radiated EMI across the entire frequency spectrum and also offer associated products for grounding, shielding and cabling to manage the radiated emissions.



Building Exactitude

Efficiency is not a milestone. It is a continuous process, evolving as per the requirements and the dynamic environments. We too, do not stop once a great product is created. We constantly test and build more products for the ever-changing world.

EMIS houses sophisticated and fully equipped testing facilities for EMI/EMC testing in Bangalore, India. Our state of the art testing facility is accredited by the National Accreditation Board for Testing and Calibration Laboratories (A Constituent Board of Quality Council of India) in accordance with the standard ISO/IEC 17025:2017 and is recognised by DSIR (Department of Scientific and Industrial Research, Government of India).

Our laboratory is a thriving hotspot for constant innovation and scientific rigor. Due to this, we are able to also support on-site testing in compliance with international standards.

Our wide array for testing capabilities services many industry sectors like consumer electronics, aviation, defense, medical electronics and telecommunication.



01 Test Facilities as per Commercial Specifications

Conducted Emission

Single phase up to 16A Three phase up to 63A

This test measures the amount of electromagnetic energy that is conducted by the Product Under Test onto the power supply cords. These energy levels have to be within the prescribed limits set by the standard agencies applicable for that appropriate geographic region. This test is intended to ensure that the product under test-

- Does not pollute the power supply lines
- Nearby electrical devices are not affected by the device under test

Test Standard	Test Description	Range of Testing / Limits of Detection
CISPR 11/BS EN55011	Emission requirement for Industrial, Scientific & Medical Radio Frequency equipments	150KHz to 30MHz
CISPR 14-1/BS EN 55014-1	Emission requirement for Household Appliances, Electrical tools and similar Electrical apparatus	150KHz to 30MHz
CISPR 35 / BS EN 55035	Emission requirement for multimedia equipments	150KHz to 30MHz
IEC 61000-6-3 IEC 61000-6-4	Generic standards. Emission requirement for residential, commercial and light-industrial equipments	150KHz to 30MHz

Conducted Immunity

Single phase up to 16A
Three phase up to 32A

External EMI could come in any one of the following types - Conducted or radiated, Transient or continuous. Immunity tests are intended to qualify and quantify how immune and resilient the device under test is to external EMI. Care has to be taken by the manufacturers that their equipment has built-in features to protect itself from external EMI.

Test Standard	Test Description	Range of Testing / Limits of Detection
IEC 61000-6-1 IEC 61000-4-2 IEC 61000-6-2 CISPR 14-2, CISPR 35	Electro Static Discharge (ESD) - Contact Discharge - Air Discharge	1kV to 8kV 1kV to 16kV
IEC 61000-6-1 IEC 61000-4-4 IEC 61000-6-2 CISPR 14-2, CISPR 35	Electrical Fast Transients (Burst) - Amplitude - Pulse duration	0.25kV to 6kV 15ms & 0.75ms
IEC 61000-6-1 IEC 61000-4-5 IEC 61000-6-2 CISPR 14-2, CISPR 35	High Energy Surge - Amplitude - Pulse duration Telecom Surge - Amplitude - Pulse duration	0.25kV to 4kV 1.2 / 50µs up to 6.6kV 10/ 700µs
IEC 61000-4-11 IEC 61000-6-1 IEC 61000-6-2 CISPR 14-2, CISPR 35	Power Fail (Line Voltage Dips & Short Interruption)	230 Vrms / 415 Vrms at 50Hz / 60Hz 0% of Uin 80% of Uin 70% of Uin 40% of Uin ½ Cycle to 250 Cycles
IEC 61000-4-6 IEC 61000-6-1 IEC 61000-6-2 CISPR 35	Conducted susceptibility on Power and Signal Lines	100KHz to 400MHz

Radiated Emission

Open Area Test Site - 3M

This test involves measuring the electro-magnetic field strength of the emissions that are generated by any electrical product or equipment. These emissions have to be within the limit prescribed by the standards that are prevalent in that country/region.

Open Area Test Site (OATS - 3M) is the most common test to measure the EMI generated by a product under open area conditions.

Test Standard	Test Description	Range of Testing / Limits of Detection
CISPR 11/ BS EN 55011 IEC 61000-6-3 IEC 61000-6-4	Emission requirement for Industrial, Scientific & Medical Radio Frequency equipments	30MHz to 1GHz

Harmonic Emission

This test involves measuring the harmonic currents drawn by the electrical equipments and so maintain the mains voltage quality. The harmonic current has to be within the limit prescribed by the standards.

Test Standard	Test Description	Range of Testing / Limits of Detection
IEC 61000-3-2	Harmonics Current Emission requirements for the equipments	Single phase up to 16A

Flicker Emission

This test involves measuring the voltage fluctuations and flicker impressed on the public low-voltage system from the device under test. Voltage fluctuations and flicker have to be within the limit prescribed by the standards.

Test Standard	Test Description	Range of Testing / Limits of Detection
IEC 61000-3-3	Voltage Fluctuation and Flicker requirements for the equipments	Single phase under 16A

Power Frequency Magnetic Field (PFMF)

This test is performed for evaluating the performance of electrical and electronic equipment when subjected to magnetic fields at power frequency.

Test Standard	Test Description	Range of Testing / Limits of Detection
IEC 61000-4-8	Power Frequency Magnetic Field requirements for the equipments	Up to 160A/m

02 Test Facilities as per Military Specifications



Conducted Emission Test

Single phase & Three phase up to 50A

This test measures the amount of electromagnetic energy that is conducted by the Product Under Test onto the power supply cords. These energy levels have to be within the prescribed limits set by the standard agencies applicable for that appropriate geographic region. This test is intended to ensure that the product under test -

- Does not pollute the power supply lines
- Nearby electrical devices are not affected by the device under test

Test Standard	Test Description	Range of Testing / Limits of Detection
CE101–Power leads (As per MIL-STD-461 E/F/G)	Requirements for the control of Electromagnetic Interference Characteristics of Subsystems and equipment	30Hz to 10KHz
CE102–Power leads (As per MIL-STD-461E/F/G)	Requirements for the control of Electromagnetic Interference Characteristics of Subsystems and equipment	10KHz to 10MHz

03 EMI/EMC Compliance Testing



Overview

EMIS houses sophisticated and fully equipped testing facilities at our EMI/EMC testing laboratory in Bangalore, India. Our EMI Testing Facility is accredited by the National Accreditation Board for Testing and Calibration Laboratories (A Constituent Board of Quality Council of India) in accordance with the standard ISO/IEC 17025:2017. We also support on-site testing.

We provide industry-specific EMC testing services. Some of the industries we cater to include:

- Consumer Electronics
- Defence
- Medical electronics
- Telecommunication

Tests at DSIR recognised R&D Lab

Hi-Pot Test
LCR Measurements
DC Resistance Test
Insulation Resistance
Temperature Rise Test
Surge withstand Test
Leakage Current Test
Overload Test
Endurance Test
Insertion Loss Test

03 EMI/EMC Compliance Testing



Tests at our in-house EMI/EMC Lab

Test Name	Test Standard	Test Range
Conducted Emission	IEC 61000-6-3 IEC 61000-6-4 CISPR 11, 32, 14-1, 15	150KHz to 30MHz Up to 63A
Conducted Immunity	IEC 61000-4-6 IEC 61000-6-1 IEC 61000-6-2 CISPR 14-2, 35	100KHz to 400MHz
Electro Static Discharge	IEC 61000-4-2 IEC 61000-6-1 IEC 61000-6-2 CISPR 14-2,35	Contact Discharge: up to ±8kV Air Discharge: Up to ±15kV
Electrical Fast Transient	IEC 61000-4-4 IEC 61000-6-1 IEC 61000-6-2 CISPR 14-2,35	Up to ±6.6kV 3 Phase up to 32A Power & Signal lines
Surge Immunity	IEC 61000-4-5 IEC 61000-6-1 IEC 61000-6-2 CISPR 14-2,35	Up to ±4.4kV 3 Phase up to 32A Power line
Telecom Surge	IEC 61000-4-5	±6.6kV 10/700 µS Power & Signal lines
V-Dips & Interruption	IEC 61000-4-11,29 IEC 61000-6-1 IEC 61000-6-2 CISPR 14-2,35	3 phase up to 32A
Power Frequency Magnetic Field	IEC 61000-4-8 IEC 61000-6-1 IEC 61000-6-2 CISPR 14-2,35	3 phase up to 32A
Harmonics Emission	IEC 61000-3-2 CISPR 35	Single phase up to 16A
Flicker Test	IEC 61000-3-3 CISPR 35	Single phase up to 16A

04 EMI/EMC Consultancy Services

We offer a wide range of EMI/EMC services to customers to seamlessly take their products from concept to delivery. Our expert engineering and consulting team provide support to design, plan, execute, inspect and verify EMI compliant systems. EMIS can help customers with their products to meet International EMI/EMC standard compliance by providing suitable solutions within a short time span. Our EMI Consultancy Services include:

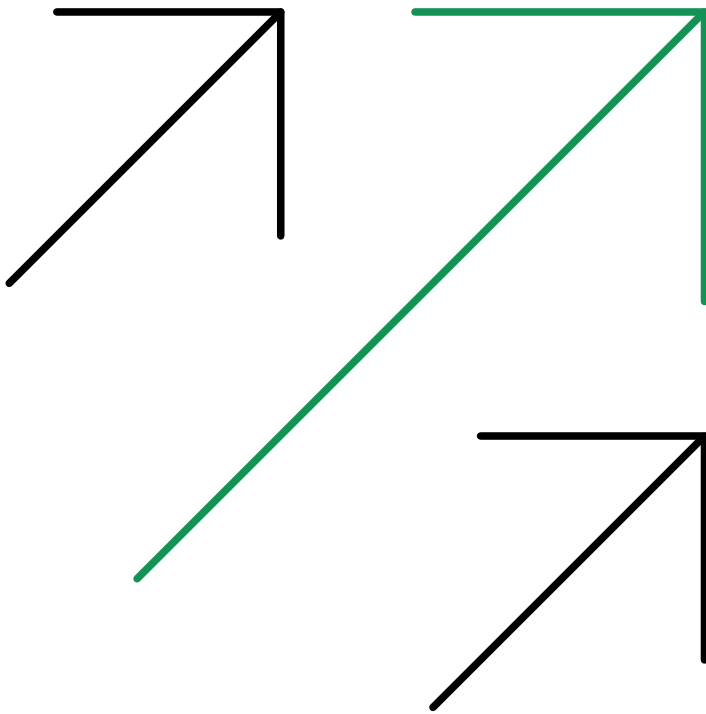
- Support and guidelines for selecting the appropriate filters for various applications
- EMC Control Planning EMI/EMC Product design review and compliance risk assessments
- Trouble-shooting and design mitigation
- Performance Requirements Definition and Flow Down Requirements
- Gap Analysis Risk
- Mitigation Plans Test Procedures
- EMI Test Plans and Procedures Development

05 Trading of Critical EMI parts

EMIs believes in delivering complete solutions to our customers. When a solution design involves components which we don't manufacture, we procure them from reliable external sources and integrate them with our EMI solutions. So that the customer can get a one-point interface for all their needs. Externally procured components include:

- EMI Suppressed circular connectors
- EMI Gasket, Windows, Honeycombs and Grounding contacts

Delivering Efficiency for World Leaders







Global Reach

3 Continents | 14 Countries

Asia

India, Indonesia, Israel, South Korea, Taiwan

Europe

France, Germany, Italy, Netherlands, Sweden
Spain, Switzerland, UK

America

USA



Building an
efficient future,
together.

We undertake effective steps to enable efficiency in the lives of those who have joined us in our vision of making the world a more efficient place.

Structured Professional Growth

One of the key reasons that our employees choose to grow with us is because of our open, transparent employee RnR systems. Our inclusive HR systems offer growth possibilities at each career stage - encouraging our team members to constantly push envelopes, learn and take on new challenges.

Payscale over the industry average

We value talent and commitment in our team. To attract and retain the best, our wage rates are above the industry standards, fostering a growth mindset and encouraging productivity. Higher employee retention helps move forward towards our goals at a faster pace, in turn providing growth to everyone.

Constant Learning

World class training seminars and upskilling is regularly for team members that allows them to keep up with the latest innovations in the engineering world, streamline their personal productivity and learn from global leaders.

Employee Family Welfare

We understand the huge responsibility that comes with being a parent. In addition to having parent-friendly policies, we also offer educational scholarships and comprehensive health care schemes.

#237-A5, Bommasandra Industrial Area, Hosur Road, Bengaluru 560 099
Tel : 0091-80-2960 1335 / 2783 6838
Fax : 0091-80-2783 6880

www.emisindia.com