



**EMTAC**  
COMPETENCE · INTEGRITY · SERVICE  
A Wholly Owned Subsidiary of Vimta Labs Ltd

# Electrical & Electronics Product Qualification



# What We Do

- EMI/EMC Testing
- Wireless / RF Testing
- Safety Testing
- Environmental Testing
- Reliability Testing
- Testing on Safes and Lockers

## ACCREDITATIONS

- ISO/IEC 17025 Accreditation by National Accreditation Board for Testing and Calibration Laboratories (NABL, India)
- ISO/IEC 17065 Accredited by National Accreditation Board for Certification Bodies (NABCB)
- Approval by Telecom Engineering Center (TEC, India)
- ISO/IEC 17025 Accreditation by American Association for Laboratory Accreditation (A2LA)
- Approval by Bureau of Indian Standards (BIS, India)



## Engagement Models

### Pre-compliance Testing

Lab-on-hire model with infinite number of iterations within the hired duration

Handy for early assessment of product compliance margins and debugging

### Compliance Testing

Complete and independent assessment of the product compliance target

Formal test report at the end of assessment

### Global Market Access / Certification

Testing and certification enablement using in-house and partner ecosystem

Turnkey solution for market access to multiple countries

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## Top Of The Line Infrastructure

Fully Compliant EMI/EMC Chamber from Albatross-Projects, Germany

Instrumentation from Ametek, Amplifier Research, ETS Lindgren, EMC Partner, EM Test, Keysight, Schwarzbeck, TESEQ

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## Certification Partners

Data acceptance program with global Notified Bodies, Telecommunication Certification Bodies for Certification

Network of Domestic and International labs to mutually cross leverage in-country testing requirements and customer geography

# Industry Verticals

## IT, Multimedia

Pre-compliance and compliance testing for wireless and non-wireless products

Design Verification Testing

Product Safety and Reliability Testing

Qualification as per TEC requirements for India

## Consumer Electronics

Pre-compliance to market access services

Assistance for international markings such as FCC, CE, UKCA, etc

Life testing

## Medical Devices

Pre-compliance and compliance testing

FDA, MDR approval assistance through partner ecosystem

## Industrial Products

FDA, MDR approval assistance through partner ecosystem

Compliance testing

Accelerated life testing

Assessment as per machinery directive and approval through Notified Body partners

## Automotive Products

Testing at Electronic Sub-Assembly

Testing at Vehicle level (2-wheelers)

EMI/EMC and Environmental testing

## Avionics Products

Pre-compliance and compliance testing as per RTCA DO-160 Standard

Full coverage on many sections of RTCA DO-160

## Military Products

Pre-compliance and compliance testing as per MIL-STD-461, MIL-STD-704, JSS 55555

Support witness by designated quality agencies

# Our Infrastructure

## EMI/EMC Lab

Radiated Emission	30 Hz to 40 GHz
Conducted Emission	30 Hz to 108 MHz
Radiated Immunity	10 kHz to 18 GHz, Up to 100V/m @ 1m
Radiated Immunity	80 MHz to 18 GHz, Up to 20V/m @ 3m
Conducted Immunity	4 kHz to 400 MHz, Up to 300 mA
Conducted Immunity	150 kHz to 230 MHz, Up to 20 Vrms
Electrical Fast Transients	Up to +/- 5.5 kV
ElectroStatic Discharge	Up to +/- 30 kV
Ring wave	Up to +/- 7 kV
Surge	Up to +/- 7 kV
Power Frequency Magnetic Field	Up to 300 A/m
Pulsed Magnetic Field	Up to 1100 A/m
DC Magnetic Field	Up to 1200 A/m
Voltage Dips & Interruption	Up to 400V (L-N); Up to 690V (L-L); 63 A/Phase
Harmonic Emission	Up to 400V (L-N); Up to 690V (L-L); 63 A/Phase
Flicker Emission	Up to 400V (L-N); Up to 690V (L-L); 63 A/Phase

## Key Highlights

AC Supply:	DC Supply:
Up to 400V (L-N)	Up to 750 V
Up to 690V (L-L)	Up to 295 A
Up to 63 A / Phase	

Semi-Anechoic Chamber NSA: +/- 3.5 dB EUT weight of up to: 2000 Kg

## Standards

- IEC • EN • ETSI • TEC • SAE • AIS
- CISPR • ISO • FCC • ITU • IS • MIL
- DO-160

## Wireless Lab

- Intentional radiators covered from 9 kHz to 5.8 GHz
- Support for ETSI, FCC & ICES Standards
- Coverage for popular Unlicensed bands
- Analysis bandwidths of up to 160 MHz
- Spectrum Analysis up to 40 GHz
- Integrated thermal chamber
- Future ready for Wireless 6
- Support for DFS

## Environmental Lab at Emtac

- Thermal Chambers:
- Temperature: -40 to 180°C
- Humidity: Up to 95% RH
- Ramp rate: Up to 5 deg/min
- Test Volume: 1000 X 1000 X 950 mm
- Walk-in Chamber:
- Temperature: Ambient to 60°C
- Humidity: Up to 95% RH
- Test Volume: 1900 X 3000 X 2000 mm
- Vibration Test Machine:
- Force: 600 Kgf Peak sine
- Frequency: 5 to 3000 Hz
- Force: 420 Kgf in Random
- Payload: Up to 80 Kg
- Force: 1200 Kgf in Shock

## Safety Lab at Emtac

- Leakage current: Up to 200 mA
- Earth bond tester: Up to 100 A
- 10/700µs Impulse test: Up to 6.5 kV
- 25/50µs impulse test: Up to 12 kV
- Surge test: Up to 10 kV
- Temperature rise: -20 °C to 1200 °C
- Touch current: 5µA to 100 mA
- Power measurements: Up to 8 kW
- Mechanical force: 1 - 10 KN (Pull & Push)
- Air velocity measurement: 0.2 - 20 m/s
- Dielectric strength tester: Up to 5KV AC/DC
- Insulation resistance test: 10, 100, 250, 500, 1000V; Up to 2 GΩ
- Needle flame test: Flame height 8mm; up to 800 °C
- Humidity chamber: Ambient to 60 °C & 40-95 %RH
- AC Load: Up to 10 kVA
- DC Load: Up to 7 kW
- Glow wire test: 100 - 960 °C
- RPM Measurement: 1 - 99999 RPM
- Torque screw driver: 10 - 400 Nm
- Oven: Ambient to 250 °C
- Impact hammer: 0.4 - 2 J
- Lux Meter: 10 - 50000 Lux

## About Vimta

Making a positive impact on the wellbeing of human lives has inspired every aspect of our work. Whether it is diagnostic testing or helping launch new drugs or testing their safety and efficacy, testing quality of food products or environment testing, offering new information through data or ensuring safety of devices, we are an organization that is driven by quality and inspired by science.

The groups we serve include biopharmaceutical companies, governmental agencies, food business operators, physicians and other healthcare providers, hospitals, patients, consumers and a wide spectrum of industries. Our loyal customers who are spread globally and our reputation for quality and integrity reflect the trust that Vimta has earned over its ~40 years journey.

Our acquisition of EMTAC Laboratories in March 2020 to become a wholly owned subsidiary of Vimta Labs Limited aims to cater to the growing needs of Electronics System Design and Manufacturing (ESDM) sector for precision testing. With an unwavering commitment to quality and integrity; we have been pioneers in adopting cutting edge technologies and to offer superior services to our customers, and are trusted by our business partners for our knowledge and scientific acumen.

Vimta Labs, Est. in 1984, with headquarters in Hyderabad, is listed on Indian stock exchanges\_BSE & NSE under the ticker symbol VIMTALABS.



## CONTACT US

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## 01 One Stop Shop



## 02 Customer Centricity



## 03 Ease of Engagement



## 04 Quality Consciousness