

COMPANY PROFILE

Activities

1. BNN Communication Engineers Private Ltd is a wireless and Electro Magnetic Compatibility (EMC) services and products organization with following activities: -

(a) NABL accredited onsite chamber certification (Upto 40 GHz), includes following tests and associated standards: -

- Shielding Effectiveness Mil Std 188-125-1, IEEE 299, EN50147-1, IEC 61000-5-7, IEEE 299.1, Mil Std 188-125-2 (Onsite/In Lab: for testing samples like honeycombs, screens, glass windows etc)
- EMC Gaskets Shielding Effectiveness, Mil Std 83528G *(In Lab)
- Ambient Noise Mil Std 461G *, CISPR *(Onsite)
- Free-space voltage standing wave ratio IEEE 149 *(Onsite)
- Normalized Site Attenuation (NSA) CISPR 16-1-4, ANSI 63.4, ANSI 63.25.2*(Onsite)
- Site Voltage Standing Wave Ratio (SVSWR), CISPR 16-1-4(Onsite)
- Time Domain Site Voltage Standing Wave Ratio (TDSVSWR), ANSI 63.25.1 *(Onsite)
- Setup Table Influences CISPR 16-1-4(Onsite)
- Field Uniformity IEC 61000-4-3, IEC 61000-4-21 *(Onsite)
- ALSE Long Wire Method CISPR 25(Onsite)
- Normalized Site Insertion Loss CISPR 16-1-4(Onsite)
- Reverberation Chamber Validation ISO 11452-11, IEC 61000-4-21 *(Onsite)
- Absorber Reflectivity RCS Measurement Method, IEEE AMTA, 2016 *(Onsite)
- Absorber Reflectivity NRL Arch Method, IEEE 1128-1998 *(In Lab)
- Free Space Transmission Loss (FSTL), 18-40GHz *(Onsite)

(b) NABL accredited calibration and testing of following instruments: -

- Electric field calibration up-to 18 GHz (V/m) , 18-40 GHz, IEEE 1309, IEC 61000-4-3 **
-EMC Probes & Sensors (In Lab)
-EM Hazard meters (In Lab)
- Antenna calibration up-to 18 GHz (AF, 1/m) , 18-40 GHz, ANSI 63.5, CISPR 16-1-6 **
-EMC Antennae (In Lab)
-Monopole, loop, bi-conical, LPDA, hybrid, horn (In Lab)
- RF Equipment Calibration , 18-40 GHz **
-EMC Receivers (CISPR 16-1-1), Spectrum Analyzers Multi-Band scanners, receivers (On Site/ In Lab)
-Signal Generators, power sensors, LISN. (On Site/ In Lab)
-Passive devices (Couplers, attenuators, cables, splitters etc.) (On Site/ In Lab)
- EM Near Field Measurements*
-From electronic/electrical equipment (In Lab)
-DASY8 NEO Robot scanning system, measurements up to 110 GHz (In Lab)
-Dielectric properties measurements up-to 40 GHz (In Lab)
- SAR Measurements
-Head and Body SAR Measurements for Mobile Phones, PDA's, Laptops (In Lab)
-Equipped with DASY8 and cSAR3D Fast SAR system (In Lab)

* Not in Accredited Scope, test undertaken using traceable instruments

** Not in Accredited Scope, test undertaken using traceable instruments, accreditation likely by end 2025

2. Radio Interference Detection and Source Hunting up to 8GHz using latest spectrum hunting instruments
3. Frequency Band clearing services for an existing as well as Green Field assignment.
4. RF and Transmission planning for Mobile networks including CW testing.
5. EMF measurement for Mobile Towers as per TEC standards.
6. Supply installation and Commissioning of SAR Lab.
7. Supply installation and commissioning of Dielectric Assessment Kits (DAK) up to 60GHz).
8. Supply installation and Commissioning of SAR measurement setup for educational institutions.
9. Supply of EM Phantoms for various applications in SAR, Telecom and Medical Applications
10. Manufacturing and Supply of Precision Antennae up to 40GHz for EMC applications including design, simulation, prototype development and manufacture specific to customer request.
11. Repair testing and calibration of Antennae up to 40GHz (recently added).

Future Plans

12. The company plans to Geographically expand its operations to South East Asia, Gulf and Europe in respect of Chamber Certification and Antenna Supplies.

Advantages of Working with BNN

13. Well established and unmatched Quality of service for all its activities
14. Qualified, Skilled and experienced team of engineers with latest and updated knowledge base.
15. Fast and timely delivery of all services as per customer schedule.