



GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi-110001

CERTIFICATE OF DESIGNATION

M/s Alpha Test House, Bahadurgarh, Haryana
has been assessed and designated as Conformity Assessment Body (CAB)

for its facilities at

198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana
In the field of Testing

Certificate No. TEC/MRA/CAB/IND-D/69

Issue Date: 15/03/2021

Valid Until: 14/03/2024

This Certificate remains valid for the Scope of Designation as specified in the Annexure subject to the continued validity of NABL Accreditation and satisfied compliance to the Standards/Specifications against which lab has been designated and strict compliance to the relevant terms and conditions of TEC CAB Designation Scheme.

(To see the scope of designation of this laboratory, you may also visit TEC website www.tec.gov.in)

Signed for and on behalf of TEC

Prasanth Kumar
Deputy Director General (MRA)
For Designating Authority
TEC

**Certificate No: TEC/MRA/CAB/IND-D/69 dated 15/03/2021 issued to
M/s Alpha Test House, 198-199, M.I.E., Phase-I, Bhadurgarh-124507, Haryana**

Terms & Conditions

This certificate is issued as per the terms and conditions stipulated in the TEC scheme for Designating Domestic Conformity Assessment Bodies and Certification Bodies for Conformity Assessment and Certification of Telecommunication Equipment Issue 2 No. TEC/DES-01/02.DEC.2017.

Some of the conditions are reiterated as under:

A. Obligations of the Designated CAB.

1. It shall ensure that it maintains its accreditation status from any recognised Indian accreditation body like NABL during validity period of certificate.
2. It shall follow the stipulated procedures, rules and policies laid down by Designating Authority (DA) or Mutual Recognition Agreement (MRA)* partner for testing and evaluation.
3. In respect of tests for which it is seeking designation, it shall have no interest whatsoever in any business to carry out testing in an unfair or biased manner.
4. It shall fully indemnify DA from and against all liabilities, damages, claims, costs, and expenses incurred or sustained by DA as a result of any action taken or omitted by DA relating to the process of designation.
5. It shall comply with DA's or MRA partner's terms and conditions for designation and recognition as modified from time to time.
6. It shall be under obligation to participate in the online process prescribed by TEC for test and certification against TEC's GR/IR/ER and standards.
7. It shall have a record system which shall have a retention period of at least 5 years for documents related to the equipment testing. It shall maintain all the relevant documents including list of products submitted for testing, product-wise testing and evaluation reports. These documents shall be produced before the DA within seven days, as and when required.
8. It shall ensure the Intellectual Property Rights of the customers in the course of testing by maintaining professional ethics, secrecy and keeping all the product related information confidential.

*Applicable only if recognized by MRA (Mutual Recognition Agreement) partner.



9. It shall notify the DA in writing of occurrence of any of the following incident(s) within 2 weeks of its occurrence
 - a) Cessation of its business of conformity assessment for which it is Designated or accredited
 - b) Changes in its legal, commercial, or Organisational status
 - c) Changes, which may affect continuing compliance with any of the criteria or requirement specified by DA or MRA partner.
 - d) Change of premises

B. REFERENCE TO DESIGNATION STATUS

1. Designated CABs may advertise their designation status with regard to standards or parts thereof which are included in the scope of designation.
2. The advertisement should not imply, or otherwise suggest that DA or MRA Partner has endorsed the product or imply that the designated CAB is an agent or representative of DA or MRA Partner.
3. CABs whose designations have been suspended or withdrawn for any reason, shall discontinue advertisement of their designated status and not make any misleading statements regarding their designation status.

C. POST-DESIGNATION SURVEILLANCE

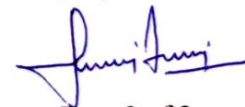
As and when required, DA shall conduct surveillance assessments and other non-routine assessments on the Designated CABs to ensure that standards of practices are maintained as well as to investigate complaints made against them.

D. SUSPENSION OR WITHDRAWAL OF DESIGNATION

1. DA shall suspend or withdraw the designation of a CAB if
 - a. Its accreditation is withdrawn.
 - b. it is found that the CAB is not complying with the stipulated criteria or requirements.
 - c. it is guilty of any offence involving fraud or dishonesty.
 - d. DA concludes that there is a just cause for withdrawing the designation.
2. A CAB whose designation, and recognition in case of MRA, has been suspended or withdrawn shall be removed from the list of designated CABs, in case it fails to take corrective measures.
3. DA shall keep the designation of a Designated CAB under suspension, until the completion of formal review process.

E. AMENDMENT TO THE SCHEME

DA reserves the rights to amend the scheme, as and when required, for the purpose of streamlining designation process.



Page 2 of 2

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Alpha Test House
198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana

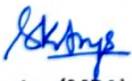
Certificate Number: TEC/MRA/CAB/IND-D/69

Page 1 of 20

Validity: 15/03/2021 to 14/03/2024

Last Amended on: ----

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
1.	Information Technology Equipment- Safety Requirement	Verification of Components Clause- 1.5 except 1.5.3, 1.5.6, 1.5.9.1	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Power Interface Clause- 1.6	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Verification of Markings and instructions Clause- 1.7	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Protection from hazards (Electric shock & Energy Hazard) Clause- 2.1	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		SELV Circuits Clause- 2.2	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		TNV Circuit Clause- 2.3	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Limited current circuit Clause- 2.4	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Limited Power sources Clause- 2.5	IEC 60950-1 : 2005 +A1 :2009 +A2:2013



Director (MRA), TEC



AD (MRA), TEC

***The validity of Certificate is upto 14/03/2024 or the continued validity of NABL Accreditation, whichever is earlier.**

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Alpha Test House
198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana

Certificate Number: TEC/MRA/CAB/IND-D/69

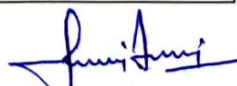
Page 2 of 20

Validity: 15/03/2021 to 14/03/2024

Last Amended on: ----

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Information Technology Equipment- Safety Requirement	Provisions for earthing and bonding Clause- 2.6	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Over current and earth fault protection in primary circuits Clause- 2.7	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Safety Interlocks Clause- 2.8 except 2.8.5, 2.8.7	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Electrical Insulation Clause- 2.9	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Clearances and Creepage distances and distance through insulation Clause- 2.10 except 2.10.5.4	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Wiring, connections and supply Clause- 3.1	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Connections to main supply Clause- 3.2	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Disconnection from main supply Clause- 3.4	IEC 60950-1 : 2005 +A1 :2009 +A2:2013


Director (MRA), TEC


AD (MRA), TEC

*The validity of Certificate is upto 14/03/2024 or the continued validity of NABL Accreditation, whichever is earlier.

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Alpha Test House
198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana

Certificate Number: TEC/MRA/CAB/IND-D/69

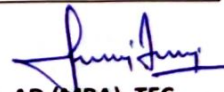
Page 3 of 20

Validity: 15/03/2021 to 14/03/2024

Last Amended on: ----

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Information Technology Equipment- Safety Requirement	Interconnection of equipment Clause- 3.5	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Physical requirements stability Clause- 4.1	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Mechanical strength Clause- 4.2 except 4.2.8	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Verification of design and construction Clause- 4.3 except 4.3.13.2, 4.3.13.3, 4.3.13.4, 4.3.13.5	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Protection against hazardous moving parts Clause- 4.4	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Thermal Requirements Clause- 4.5	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Opening in enclosure Clause- 4.6	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Resistance to fire Clause- 4.7	IEC 60950-1 : 2005 +A1 :2009 +A2:2013


Director (MRA), TEC


AD (MRA), TEC

*The validity of Certificate is upto 14/03/2024 or the continued validity of NABL Accreditation, whichever is earlier.

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Alpha Test House
198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana

Certificate Number: TEC/MRA/CAB/IND-D/69

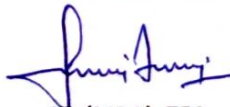
Page 4 of 20

Validity: 15/03/2021 to 14/03/2024

Last Amended on: ---

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Information Technology Equipment- Safety Requirement	Electrical requirements & simulated abnormal conditions, Touch current and protective conductor current Clause- 5.1	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Electric strength Clause- 5.2	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Abnormal operating and fault conditions Clause- 5.3	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Connection to telecommunication network Clause- 6.0	IEC 60950-1 : 2005 +A1 :2009 +A2:2013
		Connection to cable distribution networks Clause- 7.0	IEC 60950-1 : 2005 +A1 :2009 +A2:2013


Director (MRA), TEC


AD (MRA), TEC

***The validity of Certificate is upto 14/03/2024 or the continued validity of NABL Accreditation, whichever is earlier.**

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Alpha Test House
198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana

Certificate Number: TEC/MRA/CAB/IND-D/69


Page 5 of 20

Validity: 15/03/2021 to 14/03/2024

Last Amended on: ----

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
2.	Audio/video, information and communication technology equipment-Safety requirements	Energy source classification Clause- 4.2	IEC-62368-1: 2018 (Ed.3.0)
		Protection against Energy Sources Clause- 4.3	IEC-62368-1: 2018 (Ed.3.0)
		Safeguards Clause- 4.4	IEC-62368-1: 2018 (Ed.3.0)
		Fixing of Conductors Clause- 4.6	IEC-62368-1: 2018 (Ed.3.0)
		Equipment for direct insertion into mains socket-outlets Clause- 4.7	IEC-62368-1: 2018 (Ed.3.0)
		Stress relief test Clause- 4.8.4.2	IEC-62368-1: 2018 (Ed.3.0)
		Battery replacement test Clause- 4.8.4.3	IEC-62368-1: 2018 (Ed.3.0)
		Drop test Clause- 4.8.4.4	IEC-62368-1: 2018 (Ed.3.0)
		Impact test Clause- 4.8.4.5	IEC-62368-1: 2018 (Ed.3.0)


Director (MRA), TEC


AD (MRA), TEC

*The validity of Certificate is upto 14/03/2024 or the continued validity of NABL Accreditation, whichever is earlier.

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Alpha Test House
198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana

Certificate Number: TEC/MRA/CAB/IND-D/69


Page 6 of 20

Validity: 15/03/2021 to 14/03/2024

Last Amended on: ----

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Audio/video, information and communication technology equipment-Safety requirements	Crush test Clause- 4.8.4.6	IEC-62368-1: 2018 (Ed.3.0)
		Compliance Criteria (Force test) Clause- 4.8.5	IEC-62368-1: 2018 (Ed.3.0)
		Likelihood of fire or shock due to entry of conductive object Clause- 4.9	IEC-62368-1: 2018 (Ed.3.0)
		Components Requirements Clause- 4.10	IEC-62368-1: 2018 (Ed.3.0)
		Steady-state voltage and current limits Clause- 5.2.2.2	IEC-62368-1: 2018 (Ed.3.0)
		Accessibility to electrical energy sources and safeguards Clause- 5.3.2	IEC-62368-1: 2018 (Ed.3.0)
		Maximum operating temperature (Temperature measurement) Clause- 5.4.1.4	IEC-62368-1: 2018 (Ed.3.0)


Director (MRA), TEC


AD (MRA), TEC

***The validity of Certificate is upto 14/03/2024 or the continued validity of NABL Accreditation, whichever is earlier.**

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Alpha Test House
198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana

Certificate Number: TEC/MRA/CAB/IND-D/69

Page 7 of 20

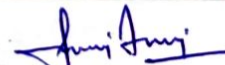
Validity: 15/03/2021 to 14/03/2024

Last Amended on: ----

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Audio/video, information and communication technology equipment-Safety requirements	RMS working voltage/Peak working voltage (working voltage) Clause- 5.4.1.8.2/5.4.1.8.3	IEC-62368-1: 2018 (Ed.3.0)
		Insulating surfaces Clause- 5.4.1.9	IEC-62368-1: 2018 (Ed.3.0)
		Vicat softening test Clause- 5.4.1.10.2	IEC-62368-1: 2018 (Ed.3.0)
		Ball pressure test Clause- 5.4.1.10.3	IEC-62368-1: 2018 (Ed.3.0)
		Clearance, creepage Clause- 5.4.2, 5.4.3, 5.4.4	IEC-62368-1: 2018 (Ed.3.0)
		Solid insulation Clause- 5.4.4	IEC-62368-1: 2018 (Ed.3.0)
		Antenna Terminal Insulation Clause- 5.4.5	IEC-62368-1: 2018 (Ed.3.0)
		Insulation of internal wire Clause- 5.4.6	IEC-62368-1: 2018 (Ed.3.0)
		Humidity conditioning Clause- 5.4.8	IEC-62368-1: 2018 (Ed.3.0)



Director (MRA), TEC



AD (MRA), TEC

*The validity of Certificate is upto 14/03/2024 or the continued validity of NABL Accreditation, whichever is earlier.

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Alpha Test House
198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana


Certificate Number: TEC/MRA/CAB/IND-D/69

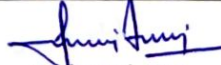
Page 8 of 20

Validity: 15/03/2021 to 14/03/2024

Last Amended on: ----

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Audio/video, information and communication technology equipment-Safety requirements	Electric strength test Clause- 5.4.9	IEC-62368-1: 2018 (Ed.3.0)
		Impulse test Clause- 5.4.10.2.2	IEC-62368-1: 2018 (Ed.3.0)
		Steady state test (electric strength test) Clause- 5.4.10.2.3	IEC-62368-1: 2018 (Ed.3.0)
		Separation between external circuits and earth Clause-5.4.11	IEC-62368-1: 2018 (Ed.3.0)
		Components as safeguards Clause- 5.5	IEC-62368-1: 2018 (Ed.3.0)
		Corrosion Clause- 5.6.5.2	IEC-62368-1: 2018 (Ed.3.0)
		Resistance of the protective Bonding system (Earth bond test) Clause- 5.6.6	IEC-62368-1: 2018 (Ed.3.0)
		Prospective touch voltage, touch current and protective conductor current Clause- 5.7	IEC-62368-1: 2018 (Ed.3.0)


Director (MRA), TEC


AD (MRA), TEC

***The validity of Certificate is upto 14/03/2024 or the continued validity of NABL Accreditation, whichever is earlier.**

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Alpha Test House
198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana

Certificate Number: TEC/MRA/CAB/IND-D/69


Page 9 of 20

Validity: 15/03/2021 to 14/03/2024

Last Amended on: ----

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Audio/video, information and communication technology equipment-Safety requirements	Power source circuit classification Clause- 6.2.2.2	IEC-62368-1: 2018 (Ed.3.0)
		Classification of potential ignition source Clause 6.2.3	IEC-62368-1: 2018 (Ed.3.0)
		Safeguards against fire under normal operating conditions and abnormal operating conditions Clause- 6.3	IEC-62368-1: 2018 (Ed.3.0)
		Safeguards against fire under single fault conditions Clause- 6.4	IEC-62368-1: 2018 (Ed.3.0)
		Fire enclosures and fire batteries Clause- 6.4.8	IEC-62368-1: 2018 (Ed.3.0)
		Top opening and top opening properties Clause- 6.4.8.3.3	IEC-62368-1: 2018 (Ed.3.0)
		Internal and external wiring Clause- 6.5	IEC-62368-1: 2018 (Ed.3.0)


Director (MRA), TEC


AD (MRA), TEC

***The validity of Certificate is upto 14/03/2024 or the continued validity of NABL Accreditation, whichever is earlier.**

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Alpha Test House
198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana

Certificate Number: TEC/MRA/CAB/IND-D/69

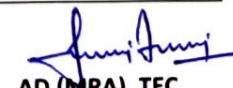
Page 10 of 20

Validity: 15/03/2021 to 14/03/2024

Last Amended on: ----

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Audio/video, information and communication technology equipment-Safety requirements	Safeguards against fire due to the connection of additional equipment Clause- 6.6	IEC-62368-1: 2018 (Ed.3.0)
		Mechanical energy source classification Clause-8.2	IEC-62368-1: 2018 (Ed.3.0)
		Safeguards Against Parts with sharp Edges and corners Clause- 8.4	IEC-62368-1: 2018 (Ed.3.0)
		Safeguards against moving parts Clause- 8.5.1, 8.5.2, 8.5.3	IEC-62368-1: 2018 (Ed.3.0)
		Special categories of equipment containing moving parts Clause- 8.5.4	IEC-62368-1: 2018 (Ed.3.0)
		Stability of equipment Clause- 8.6	IEC-62368-1: 2018 (Ed.3.0)
		Glass side test Clause-8.6.4	IEC-62368-1: 2018 (Ed.3.0)
		Horizontal force test Clause- 8.6.5	IEC-62368-1: 2018 (Ed.3.0)


Director (MRA), TEC


AD (MRA), TEC

***The validity of Certificate is upto 14/03/2024 or the continued validity of NABL Accreditation, whichever is earlier.**

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Alpha Test House
198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana

Certificate Number: TEC/MRA/CAB/IND-D/69

Page 11 of 20

Validity: 15/03/2021 to 14/03/2024

Last Amended on: ----

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Audio/video, information and communication technology equipment-Safety requirements	Equipment mounted to a wall or ceiling Clause- 8.7	IEC-62368-1: 2018 (Ed.3.0)
		Handle strength Clause- 8.8	IEC-62368-1: 2018 (Ed.3.0)
		Wheels or casters attachment requirements Clause- 8.9	IEC-62368-1: 2018 (Ed.3.0)
		Cart, stand or carrier loading test Clause- 8.10.3	IEC-62368-1: 2018 (Ed.3.0)
		Mounted means for rack mounted equipment Clause- 8.11	IEC-62368-1: 2018 (Ed.3.0)
		Telescoping or rod antennas Clause- 8.12 (Annex T.11)	IEC-62368-1: 2018 (Ed.3.0)
		Touch Temperature limit Clause-9.3	IEC-62368-1: 2018 (Ed.3.0)


Director (MRA), TEC


AD (MRA), TEC

*The validity of Certificate is upto 14/03/2024 or the continued validity of NABL Accreditation, whichever is earlier.

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Alpha Test House
198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana

Certificate Number: TEC/MRA/CAB/IND-D/69

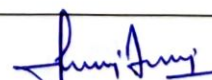
Page 12 of 20

Validity: 15/03/2021 to 14/03/2024

Last Amended on: ----

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Audio/video, information and communication technology equipment-Safety requirements	Safeguards against Thermal Energy sources Clause- 9.4	IEC-62368-1: 2018 (Ed.3.0)
		Requirements for safeguards Clause- 9.5	IEC-62368-1: 2018 (Ed.3.0)
		Requirements for wireless power transmitters Clause- 9.6	IEC-62368-1: 2018 (Ed.3.0)
		Input test (Annex B.2.5)	IEC-62368-1: 2018 (Ed.3.0)
		Test conditions for equipment contain audio amplifiers (Annex E)	IEC-62368-1: 2018 (Ed.3.0)
		Equipment markings, instructions and instructional safeguards (Annex F)	IEC-62368-1: 2018 (Ed.3.0)
		Criteria for telephone ringing signals (TNV circuit test) Annex H	IEC-62368-1: 2018 (Ed.3.0)


Director (MRA), TEC


AD (MRA), TEC

*The validity of Certificate is upto 14/03/2024 or the continued validity of NABL Accreditation, whichever is earlier.

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Alpha Test House
198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana

Certificate Number: TEC/MRA/CAB/IND-D/69

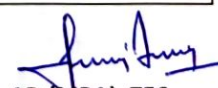
Page 13 of 20

Validity: 15/03/2021 to 14/03/2024

Last Amended on: ----

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
3.	Safety Requirement for Electrical Equipment for measurement, control and laboratory use	Marking and documentation Clause- 5	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Determination of Accessible parts Clause- 6.2	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Limit values for accessible parts Clause- 6.3	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Primary means of protection Clause- 6.4	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Additional means of protection in case of single fault conditions Clause- 6.5	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Connection to external circuit Clause- 6.6	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Insulation requirements (clearance & creepage distances) Clause- 6.7	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Procedure for voltage test Clause- 6.8	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Constructional requirements for protection against electric shock Clause- 6.9	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016


Director (MRA), TEC


AD (MRA), TEC

*The validity of Certificate is upto 14/03/2024 or the continued validity of NABL Accreditation, whichever is earlier.

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Alpha Test House
198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana

Certificate Number: TEC/MRA/CAB/IND-D/69

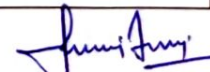
Page 14 of 20

Validity: 15/03/2021 to 14/03/2024

Last Amended on: ----

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Safety Requirement for Electrical Equipment for measurement, control and laboratory use	Connection to the mains supply source and connection between parts of equipment Cord entry test Clause- 6.10	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Disconnection of main supply Clause- 6.11	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Sharp edges Clause- 7.2	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Moving parts Clause- 7.3	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Stability Clause- 7.4	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Provision for lifting and carrying Clause- 7.5	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Wall mounting Clause- 7.6	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Expelled parts Clause- 7.7	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Enclosure rigidity tests Clause- 8.2	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016


Director (MRA), TEC


AD (MRA), TEC

***The validity of Certificate is upto 14/03/2024 or the continued validity of NABL Accreditation, whichever is earlier.**

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Alpha Test House
198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana

Certificate Number: TEC/MRA/CAB/IND-D/69

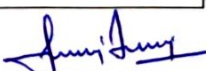
Page 15 of 20

Validity: 15/03/2021 to 14/03/2024

Last Amended on: ----

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Safety Requirement for Electrical Equipment for measurement, control and laboratory use	Drop test Clause- 8.3	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Elimination or reducing the source of ignition within the equipment Clause- 9.2	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Contamination of fire within equipment Clause- 9.3	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Limited energy circuit Clause- 9.4	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Requirements for equipment containing or using Flammable liquids Clause- 9.5	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Over current protection Clause- 9.6	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Equipment temperature limits and resistance to heat Clause- 10	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Components and sub-assemblies Clause- 14	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016


Director (MRA), TEC


AD (MRA), TEC

*The validity of Certificate is upto 14/03/2024 or the continued validity of NABL Accreditation, whichever is earlier.

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Alpha Test House
198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana

Certificate Number: TEC/MRA/CAB/IND-D/69


Page 16 of 20

Validity: 15/03/2021 to 14/03/2024

Last Amended on: ----

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Safety Requirement for Electrical Equipment for measurement, control and laboratory use	Protection by interlocks Clause- 15	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Hazards resulting from application Clause- 16	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
		Risk assessment Clause- 17	IEC 61010-1 (Ed 3.1): 2010 + A1: 2016
4.	EMI/EMC Testing for Telecom Equipment	Electrostatic discharge immunity test IEC 61000-4-2: 2008	TEC/SD/DD/EMC- 221/05/OCT-16
		Radiated , radio-frequency, electromagnetic field immunity test IEC 61000-4-3: 2010	TEC/SD/DD/EMC- 221/05/OCT-16
		Electrical fast transient/burst immunity test IEC 61000-4-4: 2012	TEC/SD/DD/EMC- 221/05/OCT-16
		Surge immunity test IEC 61000-4-5: 2017	TEC/SD/DD/EMC- 221/05/OCT-16
		Immunity to conducted disturbances, induced by radio-frequency fields IEC 61000-4-6:2013	TEC/SD/DD/EMC- 221/05/OCT-16


Director (MRA), TEC


AD (MRA), TEC

***The validity of Certificate is upto 14/03/2024 or the continued validity of NABL Accreditation, whichever is earlier.**

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Alpha Test House
198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana

Certificate Number: TEC/MRA/CAB/IND-D/69


Page 17 of 20

Validity: 15/03/2021 to 14/03/2024

Last Amended on: ----

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	EMI/EMC Testing for Telecom Equipment	Voltage dips, short interruption and voltage variations immunity tests IEC 61000-4-11: 2017	TEC/SD/DD/EMC-221/05/OCT-16
		Voltage dips short interruption & Voltage variations Immunity Test on DC input power port immunity tests IEC 61000-4-29: 2000	TEC/SD/DD/EMC-221/05/OCT-16
		Conducted Emission CISPR 32:2015, CISPR 11:2015+A1:2016 +A2:2019, CISPR 22:2008, CISPR 14-1:2016	TEC/SD/DD/EMC-221/05/OCT-16
		Radiated Emission CISPR 32:2015, CISPR 11:2015+A1:2016+A2:2019, CISPR 22:2008, CISPR 14-1:2016	TEC/SD/DD/EMC-221/05/OCT-16
5.	Equipment operating in 2.4 GHz, 5GHz frequency bands	Accumulated Transmit Time, Frequency occupation and Hopping sequence Clause- 4.3.1.4 & 5.3.4	ETSI EN 300 328 V1.9.1 (2015-02)


Director (MRA), TEC


AD (MRA), TEC

***The validity of Certificate is upto 14/03/2024 or the continued validity of NABL Accreditation, whichever is earlier.**

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Alpha Test House
198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana

Certificate Number: TEC/MRA/CAB/IND-D/69

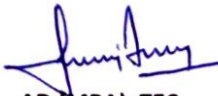
Page 18 of 20

Validity: 15/03/2021 to 14/03/2024

Last Amended on: ----

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Equipment operating in 2.4 GHz, 5GHz frequency bands	Adaptivity Clause- 4.3.1.7 or 4.3.2.6 & 5.3.7	ETSI EN 300 328 V1.9.1 (2015-02)
		Duty Cycle, Tx sequence, Tx-gap Clause- 4.3.1.3, 4.3.2.4 & 5.3.2	ETSI EN 300 328 V1.9.1 (2015-02)
		Hopping Frequency Separation Clause- 4.3.1.5 & 5.3.5	ETSI EN 300 328 V1.9.1 (2015-02)
		Medium Utilization Clause- 4.3.1.6, 4.3.2.5 & 5.3.2	ETSI EN 300 328 V1.9.1 (2015-02)
		Occupied channel bandwidth Clause- 4.3.1.8, 4.3.2.7 & 5.3.8	ETSI EN 300 328 V1.9.1 (2015-02)
		Power spectral density (Conductive only) Clause- 4.3.2 & 5.3.3	ETSI EN 300 328 V1.9.1 (2015-02)
		Receiver Blocking Clause- 4.3.1.12 , 4.3.2.11 & 5.3.7	ETSI EN 300 328 V1.9.1 (2015-02)
		Receiver spurious Emission Clause- 4.3.1.11, 4.3.2.10 & 5.3.11	ETSI EN 300 328 V1.9.1 (2015-02)


Director (MRA), TEC


AD (MRA), TEC

***The validity of Certificate is upto 14/03/2024 or the continued validity of NABL Accreditation, whichever is earlier.**

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Alpha Test House
198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana

Certificate Number: TEC/MRA/CAB/IND-D/69

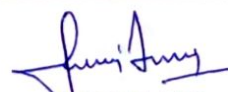
Page 19 of 20

Validity: 15/03/2021 to 14/03/2024

Last Amended on: ----

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Equipment operating in 2.4 GHz, 5GHz frequency bands	RF output Power (Conductive only) Clause- 4.3.1.2 & 4.3.2.2, 5.3.2	ETSI EN 300 328 V1.9.1 (2015-02)
		Transmitter unwanted Emission in Spurious Domain Clause- 4.3.1.10, 4.3.2.9 & 5.3.10	ETSI EN 300 328 V1.9.1 (2015-02)
		Transmitter unwanted Emission in OOB Domain Clause- 4.3.1.9, 4.3.2.8 & 5.3.9	ETSI EN 300 328 V1.9.1 (2015-02)
		RF Power output, Transmit Power control (TPC), Power Density Clause- 4.2.3	ETSI EN 301 893 V 2.1.1 (2017-05)
		Adpativity Clause- 4.2.7	ETSI EN 301 893 V 2.1.1 (2017-05)
		Carrier frequencies Clause- 4.2.1	ETSI EN 301 893 V 2.1.1 (2017-05)
		Dynamic Frequency Selection (DFS) Clause- 4.2.6.2	ETSI EN 301 893 V 2.1.1 (2017-05)
		Nominal and occupied channel bandwidth Clause- 4.2.2	ETSI EN 301 893 V 2.1.1 (2017-05)


Director (MRA), TEC


AB (MRA), TEC

*The validity of Certificate is upto 14/03/2024 or the continued validity of NABL Accreditation, whichever is earlier.

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Alpha Test House
198-199, M.I.E., Phase-I, Bahadurgarh-124507, Haryana

Certificate Number: TEC/MRA/CAB/IND-D/69


Page 20 of 20

Validity: 15/03/2021 to 14/03/2024

Last Amended on: ----

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Equipment operating in 2.4 GHz, 5GHz frequency bands	Receiver Blocking Clause- 4.2.8	ETSI EN 301 893 V 2.1.1 (2017-05)
		Receiver spurious emission Clause- 4.2.5	ETSI EN 301 893 V 2.1.1 (2017-05)
		Transmitter unwanted emissions outside the 5GHz RLAN bands Clause- 4.2.4.1	ETSI EN 301 893 V 2.1.1 (2017-05)
		Transmitter unwanted emissions within the 5GHz RLAN bands Clause- 4.2.4.2	ETSI EN 301 893 V 2.1.1 (2017-05)
		Designation of centre Frequencies and frequency error Clause- 4.1	ETSI EN 302 502 V 1.2.1 (2008-07)
		Dynamic Frequency selection (DFS) Clause- 4.6	ETSI EN 302 502 V 1.2.1 (2008-07)
		Transmitter Power control Clause- 4.4	ETSI EN 302 502 V 1.2.1 (2008-07)
		Transmitter RF Output Power, EIRP and EIRP Spectral Density Clause- 4.2	ETSI EN 302 502 V 1.2.1 (2008-07)


Director (MRA), TEC


AD (MRA), TEC

***The validity of Certificate is upto 14/03/2024 or the continued validity of NABL Accreditation, whichever is earlier.**