



सत्यमेव जयते



GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

CERTIFICATE OF DESIGNATION

M/s TATA ADVANCED SYSTEMS LIMITED, BENGALURU
has been assessed and designated as Conformity Assessment Body (CAB)
for its facilities at

42-43, Electronic City, Phase-1, Hosur Road, Bengaluru-560 100

In the field of Testing

Certificate No. TEC/MRA/CAB/IND-D/15-I

Issue Date: 21/07/2022

Valid Until: 20/07/2025

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 (MTCTE)
For Designating Authority
TEC

Certificate No: TEC/MRA/CAB/IND-D/15-I dated 21/07/2022 issued to
M/s TATA ADVANCED SYSTEMS LIMITED, BENGALURU
42-43, Electronic City, Phase-1, Hosur Road,
Bengaluru-560 100



Validity: - 21/07/2022 to 20/07/2025

Terms & Conditions

This certificate is issued as per the terms and conditions stipulated in the TEC SCHEME FOR DESIGNATING DOMESTIC CONFORMITY ASSESEMENT BODIES AND CERTIFICATION BODIES FOR CONFORMITY ASSESEMENT 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 on 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

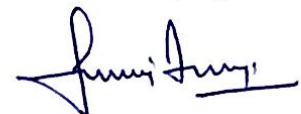
As and when required, DA shall conduct surveillance assessments and other non-routine assessments on the Designated CABs to ensure that standards of practices are maintained as well as to investigate complaints made against them.

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.



SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s TATA ADVANCED SYSTEMS LIMITED, BENGALURU
42-43, Electronic City, Phase-1, Hosur Road,
Bengaluru-560 100

Certificate Number: TEC/MRA/CAB/IND-D/15-1

Page 1 of 5

Validity: 21/07/2022 to 20/07/2025

Last Amended on: ____

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
1.	EMI/EMC Testing of Telecommunication Equipment's	Conducted Emission Test CISPR 11 CISPR 32:2015+A1(Edition 2.1) CISPR 14-1(Edition 7.0) CISPR 25 (Edition 4.0)	TEC/SD/DD/EMC-221/05/OCT-16
		Radiated Emission Test CISPR11 CISPR 32:2015+A1(Edition 2.1) CISPR 14-1(Edition 7.0) CISPR 25 (Edition 4.0)	TEC/SD/DD/EMC-221/05/OCT-16
		Voltage dips, short interruptions and voltage variations on d.c. input power port immunity tests IEC 61000-4-29	TEC/SD/DD/EMC-221/05/OCT-16
2.	Equipment operating in 2.4 GHz & 5 GHz Frequency bands	RF Output Power Clause- 4.3.1.2 and 4.3.2.2	ETSI EN 300 328 v 2.1.1
		Power Spectral Density Clause- 4.3.2.3	ETSI EN 300 328 v 2.1.1



Director (CA), TEC

*The validity of Certificate is up to 20/07/2025 or the continued validity of NABL Accreditation, whichever is earlier.



AD (CA), TEC

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s TATA ADVANCED SYSTEMS LIMITED, BENGALURU
42-43, Electronic City, Phase-1, Hosur Road,
Bengaluru-560 100

Certificate Number: TEC/MRA/CAB/IND-D/15-I

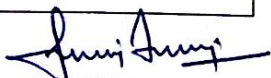
Page 2 of 5

Validity: 21/07/2022 to 20/07/2025

Last Amended on: ____

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Equipment operating in 2.4 GHz & 5 GHz Frequency bands	Duty cycle, Tx-Sequence, Tx-gap Clause- 4.3.1.3 or 4.3.2.4	ETSI EN 300 328 v 2.1.1
		Accumulated Transmit Time, Frequency occupation & Hopping Sequence Clause- 5.4.4	ETSI EN 300 328 v 2.1.1
		Hopping Frequency Separation Clause- 5.4.5	ETSI EN 300 328 v 2.1.1
		Adaptivity Clause- 5.4.6	ETSI EN 300 328 v 2.1.1
		Occupied Channel Bandwidth Clause- 4.3.1.8 and 4.3.2.7	ETSI EN 300 328 v 2.1.1
		Transmitter unwanted emissions in the out-of-band domain Clause- 4.3.1.9 and 4.3.2.8	ETSI EN 300 328 v 2.1.1
		Transmitter unwanted emissions in the Spurious domain	ETSI EN 300 328 v 2.1.1


Director (CA), TEC


AD (CA), TEC

***The validity of Certificate is up to 20/07/2025 or the continued validity of NABL Accreditation, whichever is earlier.**

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s TATA ADVANCED SYSTEMS LIMITED, BENGALURU
42-43, Electronic City, Phase-1, Hosur Road,
Bengaluru-560 100

Certificate Number: TEC/MRA/CAB/IND-D/15-I

Page 3 of 5

Validity: 21/07/2022 to 20/07/2025

Last Amended on: ___

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Equipment operating in 2.4 GHz & 5 GHz Frequency bands	Clause- 4.3.1.10 and 4.3.2.9	
		Receiver Spurious Emissions Clause- 4.3.1.11 and 4.3.2.10	ETSI EN 300 328 v 2.1.1
		Receiver Blocking Clause- 4.3.1.12 and 4.3.2.11	ETSI EN 300 328 v 2.1.1
		Geo-location capability Cl.4.3.1.13 and 4.3.2.12	ETSI EN 300 328 v 2.1.1
		Medium Utilization Clause- 4.3.1.6 and 4.3.2.5	ETSI EN 300 328 v 2.1.1
		Designation of Centre Frequencies and Frequency Error Clause- 4.2.1	ETSI EN 301 893 v2.1.1
		Occupied Channel Bandwidth Clause- 4.2.2	ETSI EN 301 893 v2.1.1
		RF Output Power Clause- 4.2.3	ETSI EN 301 893 v2.1.1



Director (CA), TEC

***The validity of Certificate is up to 20/07/2025 or the continued validity of NABL Accreditation, whichever is earlier.**



AD (CA), TEC

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s TATA ADVANCED SYSTEMS LIMITED, BENGALURU
42-43, Electronic City, Phase-1, Hosur Road,
Bengaluru-560 100

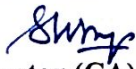
Certificate Number: TEC/MRA/CAB/IND-D/15-I

Page 4 of 5

Validity: 21/07/2022 to 20/07/2025

Last Amended on: ____

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing	Standard/ Specification
	Equipment operating in 2.4 GHz & 5 GHz Frequency bands	Transmit Power Control (TPC) Clause- 4.2.3	ETSI EN 301 893 v2.1.1
		Power Density Clause- 4.2.3	ETSI EN 301 893 v2.1.1
		Adaptivity (Channel access mechanism) both Conducted and Radiated Clause- 4.2.7	ETSI EN 301 893 v2.1.1
		Receiver Blocking Clause- 4.2.8	ETSI EN 301 893 v2.1.1
		Geo-location Capability Clause- 4.2.10	ETSI EN 301 893 v2.1.1
		Transmitter Unwanted Emissions outside the 5 GHz RLAN bands Clause- 4.2.4.1	ETSI EN 301 893 v2.1.1
		Transmitter unwanted emissions within the 5 GHz RLAN bands Clause- 4.2.4.2	ETSI EN 301 893 v2.1.1
		Dynamic Frequency Selection Clause- 4.2.6	ETSI EN 301 893 v2.1.1


Director (CA), TEC

*The validity of Certificate is up to 20/07/2025 or the continued validity of NABL Accreditation, whichever is earlier.


AD (CA), TEC

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s TATA ADVANCED SYSTEMS LIMITED, BENGALURU
42-43, Electronic City, Phase-1, Hosur Road,
Bengaluru-560 100


Certificate Number: TEC/MRA/CAB/IND-D/15-1

Page 5 of 5

Validity: 21/07/2022 to 20/07/2025

Last Amended on: ____

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Equipment operating in 2.4 GHz & 5 GHz Frequency bands	Receiver Spurious Emissions Clause- 4.2.5	ETSI EN 301 893 v2.1.1
		Designation of Centre Frequencies and Frequency error Clause- 4.2.1	ETSI EN 302 502 v2.1.1
		RF Output Power, Maximum Effective Radiated Power Spectral density Clause- 4.2.2	ETSI EN 302 502 v2.1.1
		Transmitter unwanted emissions Clause- 4.2.3	ETSI EN 302 502 v2.1.1
		Transmitter Power Control Clause- 4.2.4	ETSI EN 302 502 v2.1.1
		Receiver Spurious Emissions Clause- 4.2.5	ETSI EN 302 502 v2.1.1
		Dynamic Frequency Selection (DFS) Clause- 4.2.6	ETSI EN 302 502 v2.1.1
		Receiver Blocking Clause- 4.2.7	ETSI EN 302 502 v2.1.1


Director (CA), TEC


AD (CA), TEC

*The validity of Certificate is up to 20/07/2025 or the continued validity of NABL Accreditation, whichever is earlier.