

अनिवार्य आवश्यकताएँ

संख्या : TEC40012408

Essential Requirements

ER No. : TEC40012408

Cellular Customer Premises Equipment

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MTCTE के तहत जारी:

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Essential Requirements for:

Cellular Customer Premises Equipment

Certification Scheme: **GCS**

Product Fee Group: **C**

This document lays down the ER under MTCTE notified by GoI vide Gazette Notification No. G.S.R. 113 (E) dated 05-09-2017 for Cellular Customer Premises Equipment to be used in Indian Telecom Network.

Note: Annexures referred to in this ER are Annexures as mentioned in "Annexures to ERs" No. TEC/SD/DD/TCP-222/02/June19 as updated from time to time and available on MTCTE portal.

This product has the following variants:

1. Cellular Customer Premises Equipment

1. Variant 1 : Cellular Customer Premises Equipment

1.1 Parameters Linked with Product Variant

S.No.	Parameter Name	Standard Name
1.1.1	Conducted And Radiated Emission - Class B	TEC EMI EMC Standard CISPR 32 EN55032. Annex-B
1.1.2	DHCP client v4/v6	RFC 7341 or RFC 8415 Annex.P-12
1.1.3	Dual IP Parameters	RFC 4213. Annex-P6
1.1.4	Immunity to AC Voltage Dips and Short Interruptions	TEC EMI EMC Standard EN/IEC:61000-4-11. Annex-B
1.1.5	Immunity to DC Voltage Dips and Short Interruptions	EN/IEC:61000-4-29. Annex-B
1.1.6	Immunity to Electrostatic Discharge	TEC EMI EMC Standard EN/IEC:61000-4-2. Annex-B
1.1.7	Immunity to Fast Transients (Burst)	TEC EMI EMC Standard EN/IEC:61000-4-4. Annex-B
1.1.8	Immunity to Radiated RF	TEC EMI EMC Standard EN/IEC:61000-4-3.

		Annex-B
1.1.9	Immunity to RF Field Induced Conducted Disturbance	TEC EMI EMC Standard EN/IEC:61000-4-6. Annex-B
1.1.10	Immunity to Surges	TEC EMI EMC Standard EN/IEC:61000-4-5. Annex-B
1.1.11	IPV4 Parameters	RFC 791. Annex-P6
1.1.12	IPV6 Parameters	RFC 2460 / 8200. Annex-P7
1.1.13	IT Equipment Safety	IS 13252-1 or IEC:60950-1 or IEC 62368-1. Annex-A1

1.2 Interface 1 : 10 100 1000 BASE-T Ethernet

S.No.	Parameter Name	Standard Name
1.2.1	Link Speed and Autonegotiation Test GE	IEEE 802.3. Annex-H

1.3 Interface 2 : 2 Wire

S.No.	Parameter Name	Standard Name
1.3.1	Idle State Current for 2 wire Int	ETSI EN 300 001 ETSI TBR-21 Cl. 4.4.1. Annex-D
1.3.2	Insulation Test for 2 wire Int	ETSI EN 300 001. Annex-D
1.3.3	Longitudinal Conversion Loss for 2W Int	Q.552 Cl. 2.2.2. Annex-D
1.3.4	Maximum Loop Current for 2W Int	ETSI EN 300 001 ETSI TBR-21 Cl.4.4.3. Annex-D
1.3.5	Return Loss for 2W Int	Q.552 Cl. 2.2.1.2. Annex-D

1.4 Interface 3 : 5G NR (FR1)

S.No.	Parameter Name	Standard Name
1.4.1	Int Parameters for 5G NR (FR1)	3GPP TS 38.521-1. Annex-F14
1.4.2	Operating frequency for 5G NR (FR1)	NFAP. Annex-F

1.5 Interface 4 : 5G NR- FR1 and FR2 interworking with other Radios

S.No.	Parameter Name	Standard Name
1.5.1	Int Parameters for 5G NR-FR1 and FR2 interworking with other Radios	3GPP TS 38.521-3. Annex-F13

1.5.2	Operating frequency for 5G NR- FR1 and FR2 interworking with other Radios	NFAP. Annex-F
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1.6 Interface 5 : 5G NR (FR2)

S.No.	Parameter Name	Standard Name
1.6.1	Int Parameters for 5G NR (FR2)	3GPP TS 38.521-2. Annex-F15
1.6.2	Operating frequency for 5G NR (FR2)	NFAP. Annex-F

1.7 Interface 6 : Bluetooth Low Energy

S.No.	Parameter Name	Standard Name
1.7.1	EIRP for BLE Interface	WPC GSR 45(E). Annex-G4 (4.2)
1.7.2	Frequency of Operation for BLE Interface	Latest NFAP. Annex-G4(4.1)
1.7.3	Spurious Emission for BLE Interface	Annex G3

1.8 Interface 7 : Fast Ethernet Electrical

S.No.	Parameter Name	Standard Name
1.8.1	Link Speed and Autonegotiation Test FE	IEEE 802.3 Annex-H

1.9 Interface 8 : Gigabit Ethernet Electrical

S.No.	Parameter Name	Standard Name
1.9.1	Link Speed and Autonegotiation Test GE	IEEE 802.3. Annex-H

1.10 Interface 9 : LTE or LTE-A

S.No.	Parameter Name	Standard Name
1.10.1	Int Parameters for LTE or LTE-A	3GPP TS 36.521-1 or EN 301 908-13. Annex-F12
1.10.2	Operating Frequency for LTE or LTE-A Int	NFAP. Annex-F

1.11 Interface 10 : WCDMA or HSPA

S.No.	Parameter Name	Standard Name
1.11.1	Operating Frequency for WCDMA or HSPA Int	NFAP. Annex-F
1.11.2	WCDMA or HSPA Int Parameters	3GPP TS 34.121-1 or EN 301 908-2. Annex-

		F11
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1.12 Interface 11 : WiFi

S.No.	Parameter Name	Standard Name
1.12.1	2.4 GHz WiFi Radio Conformance	ETSI EN 300 328 or FCC CFR47 pt 15.247 or FCC CFR47 pt 15.249. Annex-G3
1.12.2	5 GHz WiFi Radio Conformance	ETSI EN 301 893 and or ETSI EN 302 502 or FCC CFR47 pt 15.407 or FCC CFR47 pt 15.249. Annex-G3
1.12.3	EIRP for Wifi Interface	Latest NFAP and GSRs issued by DoT WPC. Annex-G2
1.12.4	Frequency for WiFi equipments	DoT WPC GSR No. 45(E) 1048(E). Annex-G1