

अनिवार्य आवश्यकताएँ

संख्या : TEC37871911

Essential Requirements

ER No. : TEC37871911

Precision Timing Protocol(PTP) Grand Master(GM) Equipment

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Essential Requirements for:

Precision Timing Protocol(PTP) Grand Master(GM) Equipment

Certification Scheme: **GCS**

Product Fee Group: **C**

Precision Timing Protocol(PTP) Grand Master(GM) Equipment

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. Precision Timing Protocol(PTP) Grand Master(GM) Equipment

1. Variant 1 : Precision Timing Protocol(PTP) Grand Master(GM) Equipment

1.1 Parameters Linked with Product Variant

S.No.	Parameter Name	Standard Name
1.1.1	Conducted And Radiated Emission - Class A	TEC EMI EMC Standard CISPR 22/32 EN55022/32. Annex-B
1.1.2	Immunity to AC Voltage Dips and Short Interruptions	TEC EMI EMC Standard EN/IEC:61000-4-11. Annex-B
1.1.3	Immunity to DC Voltage Dips and Short Interruptions	EN/IEC:61000-4-29. Annex-B
1.1.4	Immunity to Electrostatic Discharge	TEC EMI EMC Standard EN/IEC:61000-4-2. Annex-B
1.1.5	Immunity to Fast Transients (Burst)	TEC EMI EMC Standard EN/IEC:61000-4-4. Annex-B
1.1.6	Immunity to Radiated RF	TEC EMI EMC Standard EN/IEC:61000-4-3. Annex-B
1.1.7	Immunity to RF Field Induced Conducted	TEC EMI EMC Standard EN/IEC:61000-4-6.

	Disturbance	Annex-B
1.1.8	Immunity to Surges	TEC EMI EMC Standard EN/IEC:61000-4-5. Annex-B
1.1.9	IT Equipment Safety	IS 13252-1 or IEC:60950-1 or IEC 62368-1. Annex-A1
1.1.10	Manageability SNMP V2 or V3	RFC 3410 3416 Annex-P18
1.1.11	Max Peak Voltage for 10 MHz Interface	G.703 Annex-I
1.1.12	Min Peak Voltage for 10 MHz Interface	G.703 Annex-I
1.1.13	Profile for frequency synchronisation	Annex-P11
1.1.14	Profile for time and phase synchronisation with full timing support	Annex-P11
1.1.15	Profile for time and phase synchronisation with partial timing support	Annex-P11
1.1.16	Pulse Shape for 10 MHz Interface	G.703 Annex-I
1.1.17	Pulse Width for 1 PPS Interface	G.703 Annex-I
1.1.18	Rise Time for 1 PPS Interface	G.703 Annex-I

1.2 Interface 1 : 1 G Optical Ethernet

S.No.	Parameter Name	Standard Name
1.2.1	Average Launch power for 1 GE Opt	IEEE 802.3z Cl. 38. Annex-H
1.2.2	Receiver Sensitivity 1 GE Opt	IEEE 802.3z Cl. 38. Annex-H
1.2.3	Wavelength for 1 GE Opt	IEEE 802.3z Cl. 38. Annex-H

1.3 Interface 2 : 10 100 1000 BASE-T Ethernet

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

1.4 Interface 3 : 2 Mbps - E1

S.No.	Parameter Name	Standard Name
1.4.1	Nominal Bit Rate with Tolerance for 2 Mbps Int	ITU-T G.703 / ETSI TBR-4 Cl. 9.2.3. Annex-I
1.4.2	Input Jitter Tolerance for 2 Mbps Int	ITU-T G.823 / ETSI TBR-4. Annex-I
1.4.3	Input Return Loss for 2 Mbps Int	ITU-T G.703 / ETSI TBR-4 Cl. 9.3.1. Annex-I

1.4.4	Output Jitter for 2 Mbps Int	ITU-T G.823 / ETSI TBR-4. Annex-I
1.4.5	Pulse Mask for 2 Mbps Int	ITU-T G.703 / ETSI TBR-4 Cl. 9.2.1. Annex-I