

अनिवार्य आवश्यकताएँ

संख्या :TECXXXXXXXX

**Essential Requirements  
No. TECXXXXXXXX**

## NTP Server

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दूरसंचार अभियांत्रिकी केंद्र

भारत सरकार

खुशीद लाल भवन, जनपथ, नई दिल्ली - 110001, भारत

Telecommunication Engineering Centre

Government of India

Khurshid Lal Bhawan, Janpath, New Delhi-

110001, INDIA

## Essential Requirements for: **NTP Server**

This ER covers all types of NTP Server Equipment.

### 1. Variant 1: NTP Server

#### 1.1 Parameters Linked with Product Variant:

S.No.	Parameter Name	Standard Name (Name of Standard RFC/ Functional Test)
1.1.1	Conducted And Radiated Emission - Class A	TEC EMI EMC Standard CISPR 32 EN550 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 Disturbance	TEC EMI EMC Standard EN/IEC:61000-4-6. 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/Netconf/Yang	RFC 3410 or RFC 3416 or RFC 6241 or RFC 6020 Test No. 38 or 39 or 68 Annex P11
1.1.11	IPv4 Parameters	RFC 791, Annex-P11
1.1.12	IPv6 as per RFC 8200	RFC 8200, Annex-P11
1.1.13	NTP Protocol (Server Mode)	RFC 5905, Annex-P11
1.1.14	NTP Clock Discipline & Source Selection	RFC 5905, Annex-P11

1.1.15	NTP Stratum & Reference Handling	RFC 5905, Annex-P11
1.1.16	Secure NTP (Network Time Security – NTS )	RFC 8915, Annex-P11

### 1.2 Interface 1 : 10 100 BASE-T Ethernet

S.No.	Parameter Name	Standard Name
1.2.1	Link Speed and Auto negotiation Test FE	IEEE 802.3 Annex-H

### 1.3 Interface 2 : 10 100 1000 BASE-T Ethernet

S.No.	Parameter Name	Standard Name
<b>1.3.1</b>	<b>Link Speed and Auto negotiation Test GE</b>	<b>IEEE 802.3. Annex-H</b>

### 1.4 Interface 3 : 1 G Optical Ethernet

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

### 1.5 Interface 4 : 10 G Optical Ethernet

S.No.	Parameter Name	Standard Name
1.5.1	Average Launch power for 10 GE Opt	IEEE 802.3ae Cl. 52. Annex-H
1.5.2	Receiver Sensitivity 10 GE Opt	IEEE 802.3ae Cl. 52. Annex-H
1.5.3	Wavelength for 10 GE Opt	IEEE 802.3ae Cl. 52. Annex-H

## ANNEXURE- I

Comments on draft for new Standard for Essential Requirements (ER) of "NTP Server"

Name of Manufacturer/Stakeholder:

Organization:

Contact details:

**TABLE-A:** Inputs/ Comments on the technical test parameters for the NTP Server

Clause No./ Sr. No.	Technical Parameter Name Description	Comments	Justification/ Remarks

**TABLE-B:** Inputs/ Comments for the Suggested Applicable Interfaces for the NTP Server

Sr. No.	Interface Name

**Note:** The comments on the ER of NTP Server may be provided in the above format vide Email to [adic1.tec@gov.in](mailto:adic1.tec@gov.in) and [diri.tec@nic.in](mailto:diri.tec@nic.in).