

HP E4480A Specifications

Frame Formats and Mappings:

SONET: STS-12/12c/3/3c, STS-1; DS3 and VT1.5 (async or byte sync) mappings

ATM: AAL0 and AAL1

DS3: M13, C-bit and unframed; DS1 and E1 structured

DS1/FT1: D4, ESF, SLC, MBLT and unframed

E1/FE1: TS0, TS0/16, TS0/CRC, TS0/16/CRC and unframed

Optical Interfaces: 622.08Mb/s (OC-12), 155.52Mb/s (OC-3), 51.84Mb/s (OC-1). 1310nm and 1550nm intermediate and long reach lasers and interchangeable connectors available. Receive optical power and frequency measurements.

Electrical Interfaces: 51.84Mb/s (STSX1/B3ZS), 44.763Mb/s (DSX3/B3ZS), 2.048Mb/s (E1/AMI/HDB3), 1.544Mb/s (DSX1/AMI/B8ZS). Receive peak electrical level and frequency measurements.

Payloads: STS-12c, STS-12c/ATM, STS-3c, STS-3c/ATM, DS3, DS3/ATM-HEC, DS3/ATM-PLCP, DS3/DS1/DS0, DS3/E1/TS and VT1.5/DS1/DS0

Drop and insert interfaces: STS-1, DS3, E1, DS1, DCC, V/F

Timing References: Internal Stratum 3, DS1 BITS, loop timing and external

Internally Generated Patterns: 2^{31-1} (STS-12c), 2^{23-1} , 2^{20-1} , 2^{15-1} , 2^{11-1} , 2^9-1 , 2^6-1 , QRSS, all 1's, all 0's, 3 in 24, 0/1, 55 octet and programmable user patterns

Jitter Measurements: STS-1 to GR-253, DS3/DS1 to GR-499, E1 to ITU-T G.823, measurement range 0.1-12UI peak-peak, resolution 0.1UI, accuracy $\pm 5\% \pm 0.05\text{UI}$, programmable hits threshold

Alarm Test:

SONET: LOS, LOF, LOCLK, AIS-L, RDI-L, LOP-P, AIS-P, RDI-P, AIS-V, LOP-V, RDI-V

ATM: LOS Cell sync, SCNR, LOPAT, VP AIS and RDI, VC AIS and RDI

DS3: LOS, FFM, OOF, LOP, AIS, CV

DS1: LOS, OOF, LOP, AIS, Yellow, COFA, Ones density, CDI (Idle)

Error Add and Monitor:

SONET: BPV, Frame, B1, B2, B3, REI-L, REI-P, Data, VT1.5 BIP and REI-V

ATM: HCS, Data, PLCP

DS3: BPV, Frame, Data, C1, C2, C3, X-bit, FEBE

DS1: BPV, Frame, CRC, Data

Overhead Test:

Section: A1, A2, C1, E1, F1 and D1-D3

Line: K1, K2, D4-12, Z1, Z2, E2

Path: B3, C2, G1, F2, Z3-Z5

VT: V4, V5

Pointer Monitoring: STS and VT Increment, decrement and new pointer

Physical characteristics:

Dimensions: H×W×D inches: 7.5×14.5×16.0, H×W×D mm: 190×370×405

Weight: 15lbs, 7kg

Power: <500W

Electrical: 100-220Vac 50/60Hz

Operating Temperature: +32°F to +113°F, 0°C to +45°C

Storage Temperature: -4°F to +158°F, -20°C to +70°C

Declarations of Conformity

This product adheres to European Regulations.