## Cisco HWIC-1DSU-T1 Datasheet



Cisco HWIC-1DSU-T1 1-Port T1/Fractional T1 DSU/CSU WAN Interface Card

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Cisco HWIC-1DSU-T1 1-Port T1/Fractional T1 DSU/CSU WAN Interface Card

The Cisco 1-Port T1/Fractional T1 DSU/CSU WAN Interface Card HWIC-1DSU-T1 provides highly flexible connections for Cisco1800, 1900, 2800, 2900, 3800, and 3900 Series Integrated Services Routers. These HWICs help customers enable applications such as WAN access, legacy protocol transport, console server, and dial access server. You can mix and match HWICs to tailor cost-effective solutions for common networking problems such as remote network management, external dial-modem access, low-density WAN aggregation, legacy protocol transport, and high-port-density support.

Cisco offers four new serial and asynchronous HWICs:

- Cisco 1-Port T1/Fractional T1 DSU/CSU WAN Interface Card (HWIC-1DSU-T1)
- Cisco 1-Port Serial WAN Interface Card (HWIC-1T)
- Cisco 2-Port Serial WAN Interface Card (HWIC-2T)
- Cisco 2-Port Asynchronous/Synchronous Serial WAN Interface Card (HWIC-2A/S)

## **Specifcations**

• Manufacturer: Cisco

• Part Number: HWIC-1DSU-T1

• Device Type: Expansion module

• Form factor: Plug-in module

- Synchronous Support: Yes
- Synchronous Maximum Speed (Per Port): 1.544 Mbps
- Asynchronous Support: No
- Bisync Support: No
- Network Clock Synchronization: Yes
- NEBS: Type 1/3
- TelecommPTT
  - o TIA 968 A
  - o Industry Canada CS -03 Part II
  - JATA Digital
  - o ID0002
  - o HK2017
  - NEBS
- Network Interface Specifications
  - Transmit bit rate: 1.544 Mbps +/- 50 bps
  - Receive bit rate: 1.544 Mbps +/- 100 bps
  - Line code: AMI, B8ZS
  - AMI ones density
  - Forced/bit robbing (N X56)
  - High-Level Data Link Control (HDLC) data inversion (N X64)
  - o Framing format: D4 (SF) and DSF
  - o Output level (LBO) 0, -7.5, or -15 dB, DSU 0-655 feet
  - o Input level: +1 dB0 to -24 dB0
- Recognized BERT Test Patterns: 1:2, 1:5, 1:8, 3:24, QRW, all 0s, all 1s, and user-programmable 24-bit patterns
- Safety Approvals: UL 60950, CAN/CSA 22.2, CSA60950, GB 4943, AS/NZS 60950, EN60950, IEC 60950
- Immunity: EN300386, CISPR24, EN55024, EN50082-1, 61000-4-2/3/4/5/6/8/11
- Emissions: FCC Part 15 Class A, ICES-003 Class A, EN55022 Class A, CISPR22 Class A, AS/NZSCISPR22 Class A,
  VCCI Class A, EN 300386, EN61000-3-2/3, CNS13438
- Physical Specifications
  - Singlewide HWIC, no slot restrictions
  - Dimensions (H x W x D) 0.8 x 3.1 x 5.6 in. (2.1 x 7.9 x 14.2 cm)
- Environmental Specifications
  - Operating temperature: 32 to 104°F (0 to 40°C)
  - NEBS short-term operating temperature: 32 to 131°F (0 to 50°C)
  - Storage temperature: -4 to 149°F (-20 to 65°C)
  - Relative humidity: 10 to 90%, noncondensing