

T1 NTU Series TTU01



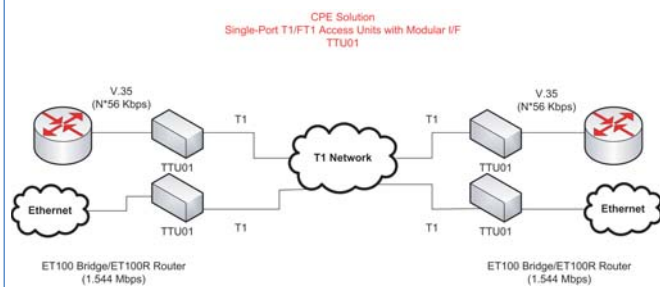
Single-Port Fractional Access Unit

The TTU01 is a single port access unit for DS1, Fractional DS1 or Fractional cascade DS1 service. The TTU01 data channels support user-selectable transmission rates, which are integral multiples of 56 or 64kbps, up to a maximum 1.536Mbps (64K x 24), 1544Mbps for unframed, for a line attenuation of up to 36 dB on two twisted pairs. The TTU01 packs the data channels into DS1 link time slots in user-selected time slots. The unused time slots can insert IDLE code (In frame mode) or insert the receive side time slots data (In cascade mode). The TTU01 has a number of different user-replaceable data channel modules available, which provide the desired interface: V35, X.21, RS-530, RS-232, Ethernet Bridge/Routing or G.703 64k codirectional.

Features

- Terminates Fractional T1 service
- User-replaceable data channel modules
- Multiple clock source selection
- Support user-selectable transmission rates
- V.54 diagnostic capabilities for performing local loopback and remote digital loopback.
- Supports rack mounting option

Application



Specifications

General Specifications	
Test switches/Diagnostics	Digital local loopback, Analog local loopback, Digital remote loopback, Test pattern
Data rate	Unframe, 1544Kbps, N x 56Kbps; N x 64Kbps where n = 1 to 24
Power	AC 90 — 250VAC
	DC 18 — 75VDC
Environment	Temperature 0 — 60°C (Operating); 0 — 70°C (Storage)
	Humidity 0 — 90% non condensing
Power Consumption	10W
LEDs	PWR, TD, RD, RTS, DCD, TxClk Loss, Red Alarm, Sync loss, Yellow Alarm, Err, Test
Dimensions(WxDxH)	195mm x 255mm x 45mm
Weight	1.5kg
Compliance	ANSI T1.403, AT&T TR-62411, ITU G.703, G.704, G.706 and G.733

DS1 (T1) Link Specification		
Connectors	15 pin, D-type Female/ Terminal Block/ RJ-45	
Framing	Unframed / Framed CCS(PCM31) / CAS(PCM30) / CRC4 on/off	
Bit rate	1.544Mbps ±50 ppm	
Line code	B8ZS/Am	
Line impedance	100 ohm (DB-15, RJ-45)	
Relative receive level	0 to -36dB	
Jitter performance	According to ITU-T G.824	
Transmit level	Pulse amplitude	Nominal 2.37V ±10% for 75ohm Nominal 3.00V ±10% for 100ohm
	Zero amplitude	±0.1V
	Transmit frequency tracking	Internal timing ±30 ppm Loopback timing ±50 ppm External timing ±100 ppm
Compliance	ITU-T G.703, G.704, G.706 and G.732 and Ansi T1.403	

Ordering Info

TTU01/AC	TTU01 & universal AC power Supply
TTU01/DC	TTU01 & universal DC power Supply

Interface Modules	
ETU/TTU-35	V.35 interface module
ETU/TTU-X21	X.21 interface module
ETU/TTU-530	RS-530 interface module
ETU/TTU-449	RS-530 interface module plus RS-449 cable adapter
ETU/TTU-232	RS-232 interface module
ETU/TTU-G64K-CO	G.703/64K Co-directional I/F
ETU/TTU-NRZ	NRZ/BNC interface module
ETU/TTU-ET100	10/100Base-Tx Ethernet Bridge
ETU/TTU-ET100R	10/100Base-Tx Ethernet Router