

# E1/T1 ETU/TTU Interface Modules

## Various Interface modules for E1/T1 Access Units

When purchasing one of our single port access units or multi-port multiplexers, our ETU/TTU Interface modules provide the total solution to your data interface needs. In addition to standard datacom interfaces, Ethernet modules are also available for bridging or routing of Ethernet over E1 or T1 network.



### Data Port Interface Module Options

Type	Photo	Description
RS-530		Connector: RS-530/DB25F Speed: Fractional E1 (N64/N56) Model: ETU/TTU-530
RS-449		Connection: RS-530/DB25F /RS-449M(F) additional Cable Speed: Fractional E1 (N64/N56) Model: ETU/TTU-449
G.703/64		Connector: DB15F G.703/64Kbps Codirectional Speed: 64Kbps Model: ETU/TTU-G64
ET100		Connection: RJ-45 10Base-T/100Base-Tx (Ethernet Bridge) Speed: Fractional E1 Model: ETU/TTU-ET100
ET100R		Connection: RJ-45 10/100Base-T/Tx (Ethernet Routing) Speed: Fractional E1 Model: ETU/TTU-ET100R

Type	Photo	Description
V.35		Connector: V.35/MB34F Speed: Fractional E1 (N64/N56) Model: ETU/TTU-V35
X.21		Connector: X.21/DB15F Speed: Fractional E1 (N64/N56) Model: ETU/TTU-X21
RS-232		Connector: RS-232/DB25F RS232 Sync(Async) Speed: 128Kbps (19.2Kbps) Model: ETU/TTU-232
NRZ		Connector: BNC(x4) NRZ Speed: Fractional E1 Model: ETU/TTU-NRZ



ETU01-A Rear

## E1/T1 ET100R



### E1/T1 to Ethernet Router

When the E1/T1 standalone access units are installed with an ET100R Interface, the unit is not only an access unit for E1 or T1 but also becomes a high performance WAN Router for 10/100BASE-T Ethernet extension. The ET100R Ethernet Router interface module for CTC Union's ETU/TTU Series DSU/CSU Access Units, is design based upon the engine of the IPR 1600 synchronous IP router. The ET100R may be accessed via the RS-232 asynchronous communication port, a serial crossover cable (provided) and text based terminal emulation software (Hyper Terminal TM). Once an IP address has been established for the subnet, the ET100R may also be accessed via Telnet. The serial port and Telnet configuration menus are identical and may include password protection.

### Features

- DHCP function/ NAT function
- Flash Upgrade (via TFTP)
- IP Mapping/ Client Filtering
- RIP I, RIP II, Send or Receive on Ethernet or WAN
- Router Ethernet port IP Address/ subnet mask
- Router Name/ Password
- Routing Table (manually set up to 16 entries)
- WAN PPP or HDLC Encapsulation
- WAN port IP address/ subnet mask

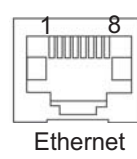
### Specifications

Hardware	Samsung ARM9 integrated communications 166MHz processor, 8MB Flash, and 32MB pipeline RAM for code, data and buffers	
Connection	1 x Ethernet LAN port (10/100)	
WAN Speed	Synchronous Port N56/N64 up to 2048Kbps	
LAN Speed	Ethernet LAN port 10/100 Mbps	
Function	Proxy Routing, IP Routing, Static Routing, Dynamic Routing, DHCP Client/ DHCP Server, IP Mapping, Packet Filtering	
Protocols	PPP, NAT, RIP 1/2, TCP/IP	
Security	PAP/CHAP, NAT, Filter	
LED	Link/ACT	On=link ; Flash=Activity
	100	On=100Base ; Off=10Base

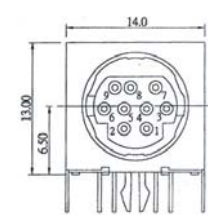
The physical interfaces for the ET100R are an RJ-45 connector and mini DIN9 connector with the pin assignments as follows :

### Mini DIN9 Pin Assignment

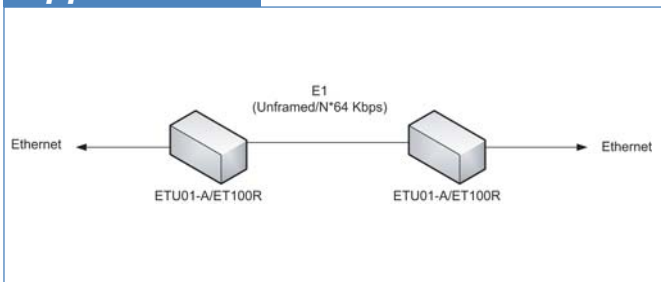
Pin	Circuit	Direction	Description
1	NC		
2	RD	Output	Receive Data
3	TD	Input	Transmit Data
4	DTR	Input	
5	GND	--	Signal Ground
6	DSR	Output	
7	RTS	Input	Request to Send
8	CTS	Output	Clear to Send
9	NC		



Normal	
1.	Tx+
2.	Tx-
3.	Rx+
6.	Rx-



### Application



### Ordering Info

The Following Models Can be Ordered with Router Module

ETU01	Single port fractional E1 access unit
ETU01-A	Single port fractional E1 access unit
ETU01-U	Single port E1 access unit
ETU02-MUX	4 port E1 multiplexer
TTU01	Single port fractional T1 access unit
TTU02-MUX	4 port T1 multiplexer