

ETU01-A Standalone/Rack

Single Port Fractional E1 Access Unit



The **ETU01-A** provides an economic digital access solution for E1 and Fractional E1 network services. ADTE device may be linked to an **ETU01-A** at data rates of 56Kbps to 2048Kbps. The **ETU01-A** features user replaceable dataport modules for a number of interface standards including V.35, X.21, RS-530, RS-449, and RS-232. The **ETU01-A** supports local control and diagnostics via LCD display, keypad and LED status indicators located on the front panel as well as via an RS-232 console port in conjunction with a standard terminal. These features enable users to easily configure the unit, execute the in-service diagnostics and monitor the network status. The **ETU01-A** provides optional SNMP (Simple Network Management Protocol), which allow the user to remotely control, diagnose and monitor the system.

Features

- Integrates High Speed Data and E1 link with an intelligent E1/ Fractional E1 Access Unit.
- Data Interface: V.35, RS-530, X.21, RS-449, RS-232, G.703 64 codirectional, 10/100Base-T Ethernet, voice, and NRZ/ BNC.
- Selectable data rates: Nx64Kbps, Nx56Kbps (N=1~31)
- Setup and Control via front Panel with LCD display or ASCII terminal.
- Supports SNMP Network Management System (optional).
- Complies with ITU G.703, G.704, G.706, G.736, G.823.
- IDLE Code:00-FF by user setting
- N56K every seven bits followed by one (1)
- In-band Control

E1 Network Interface

- **Framing** Unframe/ Frame
CCS(PCM31)/ CAS(PCM30)
CRC4 ON/OFF
- **Line rate** 2048Kbps \pm 50 ppm
- **Line Code** AMI / HDB3
- **Line impedance** 75 ohm / 120 ohm
- **Relative receive level** 0 to -43dB
- **Transmit level**
 - **Pulse amplitude** Nominal 2.37V \pm 10% for 75 ohm
Nominal 3.00V \pm 10% for 120 ohm
 - **Zero amplitude** \pm 0.1V
- **Transmit frequency tracking**
 - **Internal timing** \pm 30 ppm
 - **Loopback timing** \pm 50 ppm
 - **External timing** \pm 100 ppm
- **Jitter performance** According to ITU-T G.823
- **Complies with** ITU-T G.703, G.704, G.706
G.736, ETSI ETS 300 420 and G.732
- **Interface connectors** 15 pin, D-type female
BNC x 2, RJ48C
- **Return loss** 12dB for 51-102K HZ
18dB for 102-2048K HZ
14dB for 2048-3072K HZ
- **Surge Protection** DC Sparkover Voltage: 230 \pm 20%
Impulse Sparkover Voltage:
650 V max(1kv/ μ s)

User Data Channels

- **Data Rate** N x 56Kbps or N x 64Kbps
Where N equal 1 to 31 in CCS
And N equal to 30 in CAS
- **Control signals** CTS constantly ON
DSR constantly ON, except during test loops
DCD constantly ON, except during signal loss
- **Time slot allocation** User defined

Data Port Interface Module Options

Type	Interface	Connector
V35	V.35 interface	MB 34F
X21	X.21 interface	DB15F
530	RS-530 interface	DB25F
449	RS-449 interface	DB25F to DB37 cable
232	RS-232 interface	DB25F
G703	G.703/ 64K	DB25F
ET10/100	10/100Base-T Bridge	RJ-45
ET100R	10/100Base-T Routing	RJ-45
NRZ	NRZ/ BNC	(4) BNC (female)

Front Panel

- **Key PAD** 4 operation keys
- **LCD display** 16 x 2 characters
- **LED status display** 8 status LEDs
(Power, Sig Loss, SYNC Loss, Alarm, TD, RD, Error and Test)

Diagnostic Tests

- **Alarm LED** Sync Loss, Signal Loss, Alarm
(AIS, MRAI, RAI), TD, RD, Error, Test.
- **Loopback** Line loopback; Payload loopback
Local loopback;DTE loopback
- **BERT Test patterns** 511, 2047, 2e15-1, 2e20-1, QRSS, 2e23-1, All 1, All 0, Alt, 0011, 3 in 24, 1 in 16, 1 in 8, 1 in 4 test patterns

Environment

- **Power** AC : 90 ~ 250 VAC (auto detect)
DC : 36 to 75 (-36 to -75VDC)
47 to 63 Hz for AC power
- **Temp** 0°C to 50°C/ 32°F to 122°F
- **Humidity** 0 to 90 % non-condensing

Ordering Information

- **ETU01A/XX-AC** XX=type from above table
- **ETU01A/V35-AC** V.35 type, AC(100-240)
- **ETU01A/530-48** RS-530 type, DC(48)
- **ETU01A/X21-24** X.21 type, DC(+24)

Application

