



64 /128 Kbps MODEM



Introduction

UTL-64 is synchronous asynchronous high-speed modem operating in full duplex mode over twisted pair unconditioned telephone lines. It has a range of 6KM at 64KBPS and operates at 64/128kbps rates.

The modem uses 2B1Q line coding, which enables efficient transmission over poor quality lines. Transmit timing is provided internally, or derived externally from the DTE or recovered from the receive signal.

The UTL-64 features diagnostic capabilities complying with the V.54 standard to perform local and remote loop backs. One characteristic feature inbuilt in the modem, which enables all the loop back options from remote end.

Modem supports interface options such as : V.11/V.24/RS232/V.35/G.703codirectional 64kbps. UTL-64 is available as stand alone type with one port per unit and rack mountable type with 8 ports per card.

Applications:

- The low cost feature of this modem makes it an Ideal solution for business applications that require Office-to-office interconnectivity.
It widely used in the network applications for interconnecting different node sectors such as WAN networks.

System Features

- Easy management with LCD and keypad.
Remote monitoring with Network Management system interface (NMS).
Proxy for HP-open view NMS.
Field up gradable plug and play interface.
Supports voice data and Internet
Sync/Async
Interfaces: V.11/V.35/V.24/G.703
LED indicators
Transmission controls
Diagnostics in compliance with ITU V.54.
Cross talk Minimization through isolation transformers
D-type 25 pin connector, 34-pin connector, 37-pin connector for V.35 interface.
Terminal block type connector and RJ45 type connector for G.703 interface
The unit has K-20 protection and Line protection against lightning and power surges.

Optional features:

Modems can be connected to computer through RS-232 port.

Ordering information: UTL-64 -P X -I Y
UTL36 -P X -IY

Table with 2 columns: Feature Code and Description. Rows include Power supply (48V, 230V) and Interface (G703, V35, V11, V24).



Technical specification:

Coding- 2B1Q.

ITU-T: G.703.

ITU-T: V.35.

Interfaces

64KBPS Line Interface:

- Compliance: ITU-T REC.
- Signal format : 2B1Q
- Line Bit Rate : 2.048 kbps
- Line impedance : 135 ohms.
- Line type : unloaded twisted pair.
- Return loss : 18dB minimum,
 - 10khz – 100khz @135 ohms.
- Range : 6Kms for 26AWG (0.5mm)
- Connector : RJ-45 for line.
- Overhead Bit function: 6 overhead bits, function as per ETSI
- Start up procedure : As per Clause 5.6 in ETSI draft

G.703 Interface

- Standards: ITU-T G.703.
- Data rate: 64kbps.
- Line code: AMI
- Line impedance: 120 ohms
- Connector: RJ-45.

Supervisory:

- Interface: RS-232.
- Connector: 9 pin D-type.

Operating environment

- Temp : 0-50°C
- Humidity : 95%

Physical Dimension

- L*W*H 188*248*50 (mm)
- **Weight : < 100Gms**

Indicators:

- Carrier detection
- Transmit data
- Receive data
- Transmit clock
- Receive clock
- Sync
- Local loop
- Remote loop
- Error
- Power

Transmission Timing

- External Clock
- Internal oscillator

Data rates:

- 64 Kbps /128 kbps

Diagnostics

- Local loop on CPE.
- Remote loop on CPE.
- Local loop on network.
- Remote loop on network.

Transmission mode:

- Full duplex

Transmission Line:

- 2 wire

Power supply:

- AC :85vac-295vac/50 or 60hz
- DC :36 – 72vdc