



Loop-IP6700 TDMoEthernet

Description

Loop-IP6700 TDMoEthernet is designed to transport E1/T1/DTE/E3/DS3 signal with timing plus Ethernet traffic over IP network, electrical or optical. This is a cost effective way of migrating to IP network from existing voice and data network using existing TDM based equipment.

TDMoEthernet is a system that could be used to transport multiple E1, T1, DTE, E3, DS3, and 10/100BT Ethernet traffic through 10/100BT Ethernet. The number of E1/T1/DTE/DS3 interfaces can be factory optioned from 1 to 4 (4 T1/ 4 E1/ 2 DTEs / 1 E3 / 1 DS3 Max.). TDMoEthernet has built-in AC or DC power, console port, Ethernet port, and SNMP port with inband management for remote.

Features

- Support- E1 / T1 on the main board
 - E1 / T1 / V.35 / E3 / DS3 on the daughter board
- E1/T1 interfaces: 1 to 4 framed or unframed with BNC/RJ connectors
- LAN interface: one 10/100 BT Ethernet
- WAN interface: 10/100 Base-Tx UTP or standard open Fiber slot for SFP Transceiver
- Each port timing source can be chosen from:
 - (a) Internal
 - (b) External (for low speed card only)
 - (c) from its own or other's line/ WAN
- Alarm relay
- Console port, Ethernet, SNMP
- Inband management: through any time slot of the transported E1
- Support VLAN packet transparency i.e. up to Max 1536 bytes
- Multi-color LED indicators
- LCD/Keypad (future option)

**CERTIFIED
ISO-9001**

Ordering Information

To specify options, choose from list below:

Note: RoHS compliant units are identified by the letter **G** appearing immediately at the end of ordering code.

Model (non RoHS compliant)	Model (RoHS compliant)	Description
Loop-IP6700-EH-pp-add	Loop-IP6700-EH-pp-add-G	IP6700 with an electrical Ethernet uplink, a SNMP port, one DS3/E3 high speed interface and one LAN interface*
Loop-IP6700-EL-aa-bb-cc-dd-pp-add	Loop-IP6700-EL-aa-bb-cc-dd-pp-add-G	IP6700 with an electrical Ethernet uplink, a SNMP port, low speed interfaces described below and one LAN interface *
Loop-IP6700-OH-pp-add	Loop-IP6700-OH-pp-add-G	IP6700 with an optical FX uplink, a SNMP port, one DS3/E3 high speed interface and one LAN interface*. SFP optical module is not included.
Loop-IP6700-OL-aa-bb-cc-dd-pp-add	Loop-IP6700-OL-aa-bb-cc-dd-pp-add-G	IP6700 with an optical FX uplink, a SNMP port, low speed interfaces described below and one LAN interface*. SFP optical module is not included.
Accessories		
User's Manual (All User's Manuals are RoHS compliant)		
Loop-IP6700-UM	Loop-IP6700-UM	User's Manual (paper hard copy-optional). A CD version of the manual is already included as standard equipment.
Power Cord (All power cords are RoHS compliant)		
Loop-ACC-PC-USA	Loop-ACC-PC-USA	AC power cord for Taiwan/America
Loop-ACC-PC-EU	Loop-ACC-PC-EU	AC power cord for Europe
Loop-ACC-PC-UK	Loop-ACC-PC-UK	AC power cord for UK
Loop-ACC-PC-AUS	Loop-ACC-PC-AUS	AC power cord for Australia
Loop-ACC-PC-CH	Loop-ACC-PC-CH	AC power cord for China

- NOTE** 1. *High Speed for DS3 / E3 only (E3/DS3 software programmable)
2. *Low Speed for T1, E1 and DTE

Where aa, bb =

- select from list below or leave this area blank
- E75 for 75 ohm BNC E1 interface port
- E120 for 120 ohm Twisted Pair RJ48C E1 interface port
- T1 for T1 interface port

Where cc and dd are optional =

- select from list below or leave this area blank
- E75 for 75 ohm BNC E1 interface port
- E120 for 120 ohm Twisted Pair RJ48C E1 interface port
- T1 for T1 interface port
- 22 for V.35 DTE interface with DB25 connector
- 33 for EIA530 DTE interface with DB25 connector
- 44 for X.21 DTE interface via DB25P to DB15S (1-foot) conversion cable
- 66 for V.36 / RS449 DTE interface via DB25P to DB37S (1-foot) conversion cable
- 77 for RS422 / V.11 DTE interface with DB25 connector

pp =

- DC for 20-72 Vdc power source
- AC for 100-240 Vac power source (For AC choose an appropriate power cord)

add=

- LCD front panel / Keypad (future option)

Example:

Loop-IP6700-EL E75-E75-22-22-AC

is a unit with low speed Ethernet, two E75 ports, two V.35 DTE ports, and 100 -240 Vac power.

aa-bb-cc-dd

Where the 4 options, aa,bb,cc,dd can be equipped with 2 E1, or 2 DTE cards and the remainder all E1 or all T1

Loop-IP6700-EH-AC

is a unit with high speed Ethernet, DS3 and 100 -240 Vac power.

Loop-IP6700 TDMoEthernet Product Specification

Network Interface (E1):

Line rate	2.048 Mbps ± 50ppm	Input signal	ITU G.703
Framing	ITU G.704	Output signal	ITU G.703
Line code	AMI/HDB3	Jitter	ITU G.823
Connector	BNC and RJ48C	Electrical	75 ohm coax/120 ohm twisted pair

Network Line Interface (T1):

Line rate	1.544 Mbps ± 32 ppm	Input signal	DS-1 from 0 dB to -26 dB w/ALBO
Framing	D4/ ESF/ ESF&T1.403/ NONE (Clear Channel)	Output signal	DSX-1, DS-1
Line code	AMI / B8ZS	Surge Protection	FCC Part 68 Sub-Part D
Connector	RJ48C	Pulse Template	Per AT&T TR 62411

NOTE:

Large configurable jitter buffers, on a per bundle basis, that compensate for the delay variation introduced by the IP/MPLS network, with the following maximal depths:

For E1:	up to 256 ms	For framed T1:	up to 256 ms
For unframed T1:	up to 340 ms	For framed T1 with CAS:	up to 192 ms

Ethernet (WAN)

Connector	RJ45
Speed	10/100 Base T

Optical (WAN)

Connector	SFP 3.3V
Speed	10/100 Base-FX

DTE Interface (V.35)

Data Rate	n x 56 (n= 1 to 31)
Data Rate	64 Kbps (n= 1 to 32)
Connector	DB25S for V.35
Standard	

Ethernet (LAN)

Connector	RJ45
Speed	10/100 Base T

Alarm Relay

Alarm Relay	Fuse alarm, performance alarm
Connector	3 pin terminal block

External Clock

Input signal	ITU G.703
Connector	BNC

Input signal

Network Management

Console Port

Connector	DB9 at Front Panel
Electrical	RS232 interface
Protocol	Menu driven VT-100 terminal

SNMP Port

Connector	RJ45 at front panel
Protocol	Telnet (VT100) and Embedded SNMP

Inband Management

Any 64 Kbps DS0 can be assigned for management
HDLC Management Protocol

Performance monitor(T1,E1)

Performance store	The last 24 hours performance in 15-minute intervals
Monitor registers	Line, user and remote site
Performance reports	Date & Time, Error second, Degraded minutes, Unavailable second, Bursty error second, severe error second, controlled slip second, and loss of frame count
Alarm history	Date & time, alarm type(i.e. master clock loss, RAI, AIS, LOS, BPV, ES, CSS)
Threshold	Second, degrade minutes

Diagnostics test(T1, E1)

Loopback	Line loopback, payload loopback and local loopback
Remote loopback	Line loopback and payload loopback

Front Panel

Keypad / LCD (future option)

LED

Physical

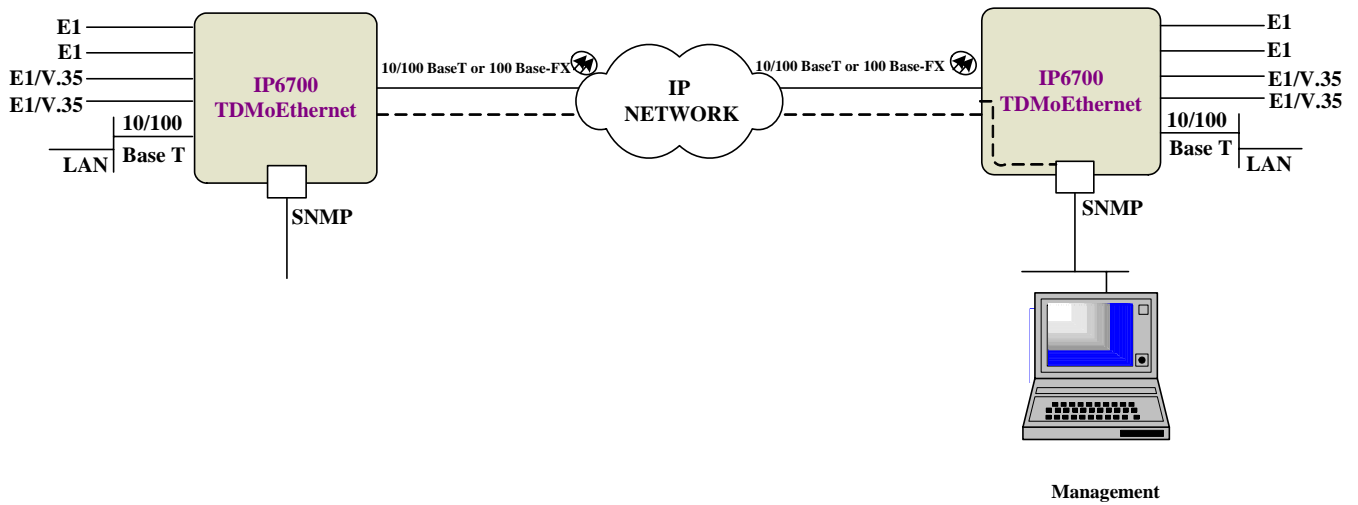
Dimensions	212.6 x 43.7 x 197 mm. (WxHxD)	Power	Single AC power or DC power.
Temperature	0 -50°C		DC: 20 to 72 Vdc
Humidity	0-95% RH (NON-CONDENSING)		AC: 100 to 240 Vac, 50/60Hz
Mounting	Desk-top stackable, wall mount		Power Consumption: 10W Max

Compliance Standard:

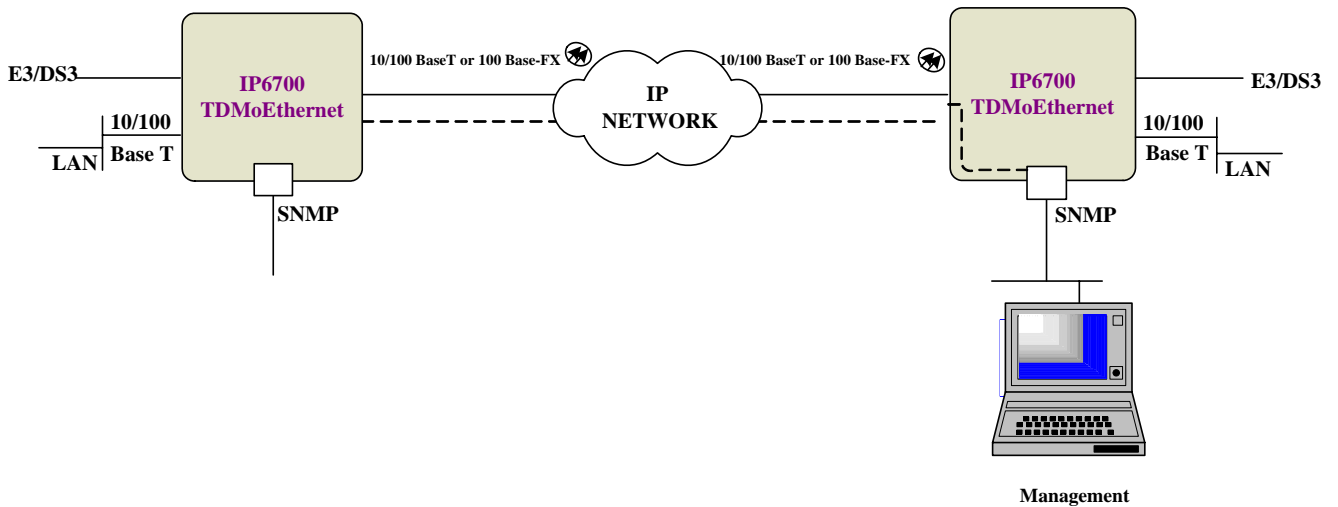
G.823/G.824, G.826, TDMoEthernet for structured traffic, SATOP for unstructured traffic

Application Illustration

For Low Speed



For High Speed



LOOP TELECOMMUNICATION INTERNATIONAL, INC.

Worldwide

8F, No. 8, Hsin Ann Road,
Science-Based Industrial Park
Hsinchu, Taiwan 300
Tel:+886-3-578-7696
Fax:+886-3-564-6272
www.LoopTelecom.com
sales@loop.com.tw

Taipei, Taiwan

2F, No. 40, Section 2,
Tuan-Hwa S. Road,
Taipei, Taiwan 106
Tel:+886-2-2784-4000
Fax:+886-2-2754-2325

North America

8 Carrick Road
Palm Beach Gardens
Florida 33418, U.S.A.
Tel:+1-561-627-7947
Fax:+1-561-627-6615
jimber561@aol.com

Suzhou China

Tel:+86-512-6252-0456
Fax:+86-512-6252-7641
Sales@looptech.com.cn

Tianjin China

Tel:+86-22-8789-2753
Fax:+86-22-8789-0344
Loop@loop-tj.com