SS7 Over IP Signalling

The IPTube-SS7-SIG-DI-T1 transports SS7 messages over IP networks. SS7 signaling network elements such as local and tandem switches, Mobile Switching Centers, Signal Transfer Points and Home Location Registers that are interconnected to remote network elements by IPTube-SS7-SIG-DI-T1s are able to transmit their signalling messages over cost effective and flexible IP networks.

The IPTube-SS7-SIG-DI-T1 has two T1 interfaces with an integrated Drop and Insert Multiplexer. One T1 connects to the SS7 equipment's T1 link and the other connects to the T1 line. The T1 Drop and Insert provides for direct inline connection to the SS7 communication channel.

Reduced Transport Costs
Carriers significantly reduce SS7 transport costs by replacing expensive long-haul dedicated signaling links with very competitively priced IP connectivity between network elements. Service providers cut costs with SS7 Over IP by offloading data traffic from SS7 networks onto IP networks.

New Revenue Opportunities
The demand for data-centric services such as Short Message Service and Unified Messaging has created an opportunity for carriers to capitalize on new revenue generating opportunities. Cost-effective IP transport technology and service-rich SS7 applications enables carriers to quickly integrate enhanced services and capture new revenue.

Legacy Investment Protection
Establishing an SS7 network with IPTube-SS7-SIGs does not require expensive forklift replacements or costly software upgrades for existing end nodes.

Deployment Flexibility
Widely available commercial and private IP networks provide the SS7 network designer with competitive options for interconnecting the signaling points.
Industry Standard SS7 Framer
The IPTube™ SS7·SIG·DI·T1 uses an industry standard SS7 Framer to receive and transmit SS7 messages. Minimal IP bandwidth is required to deliver SS7 since only the message data is encapsulated into IP packets.

Management of the IPTube™ SS7·SIG·DI·T1 is accomplished with a Command Line Interface that is accessed through a Console or Telnet connection. Templates of the most common configuration provide for an Edit and Paste configuration. Built-in support for SNMP MIB 1 & 2.

Technical Specifications

LAN Network Interface:
- 10BaseT Ethernet

LAN Network Protocols Supported:
- IP, TCP, UDP, ICMP, BOOTP

LAN Network Protocols Supported:
- IP, TCP, UDP, ICMP, BOOTP

SS7 Over IP Protocol:
- SS7 Frame UDP encapsulation

T1/Fractional T1 Specifications:
- Framing - ESF or D4
- Coding - B8ZS or AMI
- Supports DS0 assignments from 1 to 24

Regulatory:
- Safety - IEC60950
- EMC - CFR 47 Part 15 Sub Part B:2002
- EN55022:1994+A1&A2
- EN55024, ICES-003:1997
- CISPR 22 Level A
- Telecom - Part68
- CE

Quality of Service Support:
- IP Type of Service (TOS) CLI configurable
- IANA Registered UDP Port 3175

TFTP Online Upgrade Capable (FLASH ROMs)
- IPTube is fully operational during upgrade

Management:
- Telnet support with Edit and Paste Template Files
- Console Port for Out of Band Management
- SNMP support (MIB I, MIB II)
- Remote configuration, monitoring, & reset

Power:
- 12-36 VDC 1.0A
- Optional -48V 0.25 Amp

International Adapters Available

Dimensions:
- 9” (L) x 7.3” (W) x 1.50”

DC Back Panel

Telco1: T1 Telecom Circuit Interface RJ48S
Telco2: T1 Connection to SS7 Signalling Node

24 to 36 Volts DC Model
-36 to -72 Volts DC Model

Console Port Connector
- RJ 45 to DB 9 Male Adapter provided

Four Port 10BaseT Ethernet Hub

Engage Communication • 9565 Soquel Drive, Aptos, CA 95003
Tel: (831) 688-1021 • Fax: (831) 688-1421 • www.engagecom.com