

## TSM-60-1001



### INTRODUCTION :

TSM-60 1001 is Intelligence gathering type bridge base on the large capacity Ethernet line access requirements, It can achieve 63groups E1 to Ethernet converge. It's newly-developed optical fiber transmission equipment based on SDH technology. It can design as a STM-1/STM-4 level optical terminal with two 155Mb/s or 622Mbit/s optical interfaces to provide an ultra-compact, cost-effective and flexible multi-service platform. PT-60 1001 can be used not only as a add-drop multiplexer (ADM), but also as a termination multiplexer(TM).

The equipment is standard 19 inch 1U height.

### FEATURES :

- 1U-height compact-size design.
- Provides 256x256 VC12 level,12x12 VC4 level non-blocking cross connection, supports flexible add/drop business, bi-directional and broadcasting capacity.
- Provides sub-network connection protection, 1+1 redundancy protection, etc.
- Provides variety of network configurations: point-to-point, link and multi-ring.
- Provides E1, 10M/100/1000M business interfaces.
- Provides up to 16 E1 interfaces; 4x10/100/1000 BASE-T Ethernet interfaces; 2 STM-1 optical interfaces or 2 STM-4 optical interfaces, up to 16 channels FXO/FXS/4WEM. .
- Allows configuring STM-1 system to/from STM-4 system only by replacing interface modules; simply upgrading.
- Provides order wire interface (2-wire interface), with the functions of group calling and selected calling.
- Provides timing synchronization interface. Provides STM-1 and STM-4 line-rate timing source. Supports the SSM function.
- Provides DCC channel of D1 to D3;Using TCP/IP communication protocol.
- Provides F (Ethernet), f (RS232) network management interfaces for configuration, alarm, performance, maintenance and security functions of ITU-T definition.
- Provides equipment software download, with the ability of software remote upgrade.
- Supports online upgrade function.
- Provides access to remote modem network management, supports remote monitoring.
- Supports Super Long-distance ( $\leq 80\text{Km}$ ), Long-distance( $\leq 50\text{Km}$ ), Short distance ( $\leq 30\text{Km}$ )fiber transmission.
- Provides fans to disperse heat forcibly, or allows natural heat dispersion without using fans as well; provides the fans controlling temperature and inspecting their own status to guarantee the equipment running stably.
- Flexible structure designing: allows the front access or the rear access by the method of mounting shelves.

## Technical Specification

- Ethernet interface  
Comply with IEEE 802.3 relative standards.  
Reference GB YD/T 1061-2000.  
Ensure the point to point transparent transmission of Ethernet business, including ---transparent transmission of Ethernet MAC frame and VLAN tag.
- E1 interface  
Bit rate(Kb/s):2048  
Bit rate error tolerance:  $\pm 50$ ppm  
Code type:HDB3
- Order wire telephone  
Signaling mode: dual tone multi frequency mode (DTMF)  
Signal tone  
Busy tone: 0.4 second interruption  
Ringing mode: Buzzer sounds  
Ringing tone: Same with the ring back tone
- Frequency: 450Hz
- Dial tone: Long legato
- Ring back tone: 1second on, 4 seconds off
- Power supply  
Input voltage: Standard value -48VDC and 220VAC  
Voltage range: -36VDC ~ -72VDC, 176VAC ~ 264VAC  
Power consumption:  $\leq 50$ w
- Working environment  
Working temperature:  $-10^{\circ}\text{C} \sim +50^{\circ}\text{C}$   
Working humidity:  $\leq 90\%$  (no condensation)

## Application

