

# YM609 T1/E1 Protection Switch Rackmount



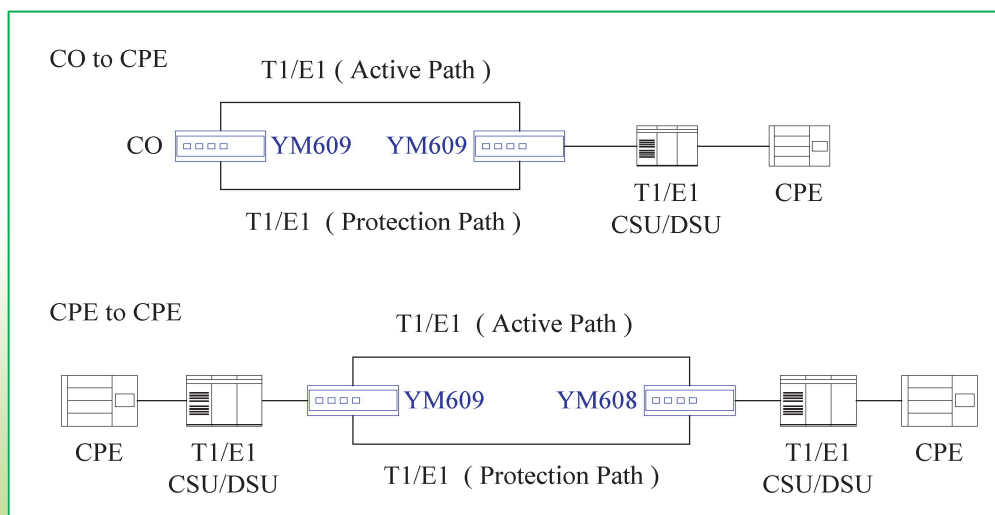
## Overview

YM609 T1/E1 Protection Switch provides cost effective self-healing network in the event of out of frame, excessive bit error rate or loss of signal for any reason, including cable cuts, equipment failures or signal degradation. It is an T1/E1 circuit monitor, control and switching solution. It also offers the ability to activate backup circuit automatically to ensure the continuity of service.

## Features

- ◆ T1 or E1 interface selectable.
- ◆ Support up to 15 T1 or E1 Path per shelf.
- ◆ 1+1 and 1:1 Automatic switching.
- ◆ Availability to pre-set alarm threshold and switching activation thresholds.
- ◆ Allows user to input parameters and display error status via front panel or RS-232 console port.
- ◆ Both active and standby line status monitoring.
- ◆ T1/E1 circuitry alarm output.
- ◆ Local and remote control of switching capabilities ( 1:1 setting ).
- ◆ End to end or end to C.O. auto-switching capability.
- ◆ Hot Swap circuit boards.
- ◆ SNMP Agent.

## Typical Application



## Specifications



- ◆ **T1 Interface**
  - Bit Rate : 1.544 M b/s
  - Line Code : AMI , B8ZS
  - Frame Format : SF , ESF , Unframed
  - Impedance : 100 Ohms , Resistive , Balanced
  - Input Level : 0 ~ -36 dB
  - Output Level : 6V p-p
  - Line Build Out : 0 ~ 655 feet
- ◆ **E1 Interface**
  - Bit Rate : 2.048 M b/s
  - Line Code : AMI , HDB3
  - Frame Format : CCS , CAS , CCS+CRC , CAS+CRC , Unframed
  - Impedance : 120 Ohms Resistive , Balanced
  - Input Level : 0 ~ -43 dB
  - Output Level : 6V p-p
- ◆ **LED Status Display** : RUN , Master , T1 or E1 , Line 1 and Line 2 Active , Failure , LOS ( Network )  
( working / protection path ) , OOF ( Network ) , AIS , Loopback , Error
- ◆ **Automatic Switching Parameter ( Programmable )**
  - CRC Error :  $10^{-1} \sim 10^{-5}$
  - Frame Error :  $10^{-1} \sim 10^{-5}$
  - BPV Violation :  $10^{-3} \sim 10^{-7}$
  - Loss of Signal ( Loss of signal , Out of Frame or Loss of Frame , AIS )
- ◆ **Recovery Parameter**
  - CRC Error :  $10^{-3} \sim 10^{-7}$
  - Frame Error :  $10^{-3} \sim 10^{-7}$
  - BPV Violation :  $10^{-5} \sim 10^{-9}$
- ◆ **Selectable Fault persisting Interval** : 500 ms , 1000 ms , 1500 ms , 2000 ms
- ◆ **Selectable Recovery Interval** : 0 ~ 98 Minutes
- ◆ **Console Port** : RS-232 ( VT-100 )
- ◆ **Power** : -48V  $\pm$  5V DC
- ◆ **Weight** : 1.1 KG
- ◆ **Dimension** : 448 mm ( W )  $\times$  177 mm ( H )  $\times$  285 mm ( D )
- ◆ **Operating Temperature** : 0°C ~ 60°C
- ◆ **Relative Humidity** : 5% ~ 90% , Non-condensing
- ◆ **Regulatory Compliance** : FCC Part 15 Class A
- ◆ **Reliability** : MTBF > 5 years
- ◆ **Network Mangement Interface** : 10 / 100 Base-Tx Interface , SNMP Agent , Standard MIB documentation

Specification is subject to change without notice



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