

SDH-930/E Synchronous Digital Hierarchy System



DESCRIPTION

SDH-930 is a new generation of the SDH system with capability of transferring data and TDM traffic simultaneously

over the STM-4 signal with a bit rate of 622Mbps.

Benefitting from the four STM-4 interfaces, SDH-930 can be used in different structures e.g. combiner terminal, combiner with add/drop facility, and regenerator as well as various network structures such as linear, ring and mesh.

Due to different types of protection methods like SNCP, MSP, and hardware protection, this system is operated in transmission networks as a reliable system. In addition, variety of traffic interfaces, modularity, and cross connection facility in high and low levels cause considerable flexibility of network planning by the operator. SDH- 930 can provide up to 32 Ethernet interfaces for data network traffic. Ethernet traffic can be written by separation of VC-3, VC-12, and VC-4 using different methods such as LAPS, GFP, LAPF, and PPP in STM-4 frame. In addition, for allocating variable bandwidth the LCAS could be used along with VCAT. Scheduling of the system can be extracted from different sources including the SDH interfaces, E1 interfaces, and BITS time reference in 2MHz or 2Mbps frames. In case of lacking external schedulers, this system can be operated in Holdover and Free-run statuses as well as using it as scheduler of other



communication systems via BITS output. SDH-930 includes an auxiliary card for making the EOW connection between different network elements. In addition, external alarms and one 64Kbps data channel is supported by this card.

Technical specifications	
Network topology	linear, ring
Secondary interfaces	up to 252 E1 interfaces
	up to 32 Ethernet interfaces
	up to 8 STM-1 interfaces (optical/electrical)
	L2 switch card
System configuration	combiner terminal (TM)
	combiner with add/drop facility (ADM)
	regenerator
Management interface	10 Base T Ethernet
Protection type	Combiner Section Protection (MSP)
	Sub-network Connection Protection (SNCP)
AUX interfaces	Orderwire
	External alarms
	64Kbps interface
Synchronization references	BITS/2Mbps/2MHz external
	SDH interfaces
	E1 interfaces
	Internal oscillators and Hold-Over
System management via	Configuration Management
the PNodeXplore software	Alarm Management
	Performance Monitoring
Main interface	maximum four STM-4 optical interface
Supply	-38 V -48V DC to -72V