IP-Pipe G4620/G1620

TDM over IP

4/1 x E1/T1 + LAN over IP Networks



Advantages

- ♦ 4/1 x E1/T1 TDM over IP Network
- ♦ Integrated voice (E1/T1) and data (LAN)
- Support Structured and Unstructured modes for E1/T1 Interfaces
- Point-to-Point and Point-to-Multipoint (star) topologies
- Support up to max 10 Fractional Emulated Circuits
- ♦ IETF PWE3, MEF-8 Compliant
- Optimized for 802.11b/g/a wireless IP packet switched infrastructures

Features

- ♦ 4/1 x E1/T1 plus LAN Gateway over IP Networks
- ♦ ITU-T G.703, G.704 Compliant
- Built-in Bit Error Rate (BER) Tester
- ♦ ITU-T G.823/G.824 clock jitter and wander standards
- Auto Negotiations for 10/100M & Half/Full Duplex
- Auto MDIX for Ethernet Tx/Rx Auto Swap
- ♦ QOS for E1/T1 (voice) over LAN Ethernet (data)
- Configurable Bandwidth Limit
- VLAN function for LAN Ethernet
- ♦ SNMP Agent for Remote Network Management
- ♦ DB-9 Console for system configurations

Network Applications

- Cellular E1/T1 Based Station backhaul
- Broadband wireless voice/data access
- Branch and campus PBX/LAN connectivity (Mountain & Island Resort)
- Voice and data services over cable networks and xDSL

Descriptions

Featuring 4/1 x E1/T1 ports, one LAN Ethernet port, and one WAN Ethernet port, the IP-Pipe G4620/G1620 allows to transport 4/1 x E1/T1 leased lines over Ethernet, IP-based or MPLS network. G4620 may operate for point-to-point or point-to-multipoint (star) topologies and support up to maximum 10 fractional emulated TDM circuits to ensure seamless connectivity for physical E1/T1 interfaces such as PBX, Cellular base stations, SS7 signaling equipment and voice mail systems.

The IP-Pipe G4620/G1620 supports precise E1/T1 clock transmission and recovery over packet networks, and complies with ITU-T G.823 and G.824 timing standards while ensuring uncompressed toll voice quality. The G4620/G1620 implements the emerging Metro Ethernet Forum/IETF Pseudo-Wire Emulation Edge to Edge (PWE3) standard.



4/1 x E1/T1 + LAN over IP Networks

Specifications

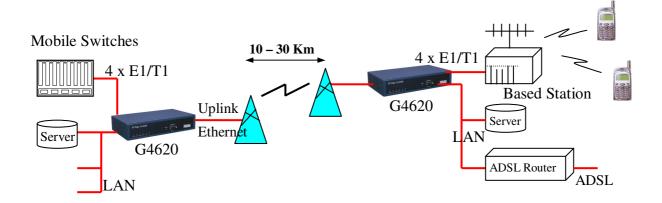
E1/T1 Transmission	Protocols	Triple mode: MEF-8, SAToP; CESoPSN – configurable	
	End to end delay	0.7 msec plus network delay jitter	
	Packet size	1500 bytes max, configurable	
	Signaling relay	Transparent or CAS relay per CES standard	
Clock Distribution	Clocking options	Adaptive, Internal, Loopback;	
	Clock recovery algorithm	IEEE 1588	
	Clock recovery performance	G.823, G.824 Jitter & wander compliant	
	PDV compensation	1-200 msec, configurable	
Ethernet Traffic Processing	Rate limiting	0-100 Mbps, configurable	
	VLAN tagging and QoS	802.1p, 802.1q	
	Filtering/forwarding	1,000 MAC address bridging table	
IP traffic processing	Internet protocol support	Telnet, HTTP, TFTP, SNMP, TCP, UDP, RTP, ARP, ICMP	
E1/T1 Interfaces		4 x E1	4 x T1
	Connectors	RJ48	RJ48
	Standards	ITU-T Rec. G.703, G.704, G.706, G.732, G.823	AT&T TR-62411, ITU-T Rec. G.703, G.704, ANSI T1.403, G.824
	Framing	Unframed, CRC4 MF, CAS MF	Unframed, SF, ESF, D4
	Data rate (per port)	2.048 Mbps	1.544 Mbps
	Line code	HDB3, AMI	B8ZS, AMI
	Jitter/wander performance	ITU-T G.823	AT&T TR-62411
	Receive level	0 to -43 dB; 0 to -15 dB	0 to -36 dB; 0 to -15 dB
	Line impedance	120/75 Ohm (balance/Unbal.)	100 Ohm (balanced)
Uplink Interface (Ethernet)	Port/connector	Auto-negotiating 10/100 Mbps / RJ45 8-pin Ethernet	
	Standards	IEEE 802.3, 802.3u with Auto MDIX	
	Range	Up to 100m on UTP CAT5	
Local management interface	Port	DB-9 RS232 COM Port: 115.2kbps	
	User client	CLI client	
Remote SNMP management interface	Port	Network or user Ethernet port	
	User client	Telnet to CLI	
Environmental Conditions		Operating temperature 0-50°C/32-112°F	
		Humidity 0-95% non-condensing	
Power Supply		90~220VAC, -48VDC	
Enclosure Dimensions		26 cm x 15 cm x 4.5 cm	
Weight		2.5kgs	

All specifications are subject to change without notice



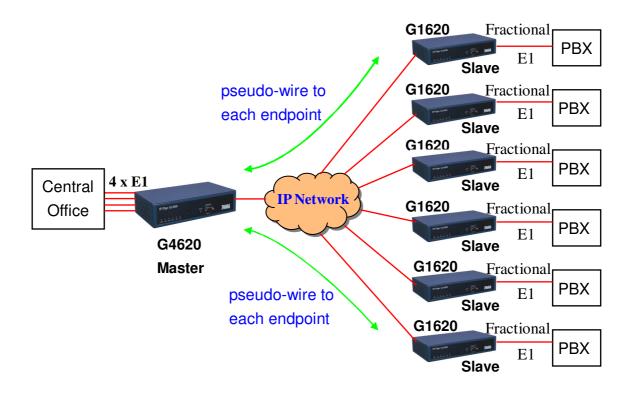
Application Examples:

G4620 4 x E1/T1 Point-to-Point Applications



Wireless 802.11 b/g/a Outdoor Bridge

G4620/G1620 4/1 x E1/T1 Point-to-Multipoint Applications



Headquarter/Branches PBX Connections

