

RC1201-2FEE1T1 TDMoverIP Access Gateway

RC1201-2FEE1T1 is a TDMoverIP access gateway device for enterprises and mobile operators, offering TDM lease line extension or TDM traffic backhaul over a packet switched network. It provides a legacy over Ethernet/IP solution supporting transmission of E1/T1 streams over IP and Ethernet-based networks.

can be configured from 2 10/100BaseT and 1 1000BaseX port. It converts data streams from its E1/T1 ports into packets for transmission over the packet switching network such as MPLS and Ethernet network. RC1201 TDMoverIP devices are working in pairs.

RC1201-2FEE1T1 is integrated with one E1/T1 and 2 local Ethernet traffic ports which



RC1201-2FEE1T1
TDMoverIP Access Gateway

Feature

Ethernet interface	3 Ethernet ports, 2 for user side and one for network side Transparent Ethernet bridging User bandwidth profile by rate-limiting and VLAN filtering VLAN tagging and stacking (Q-in-Q)
TDM interface	1 E1 or T1 port E1 balanced and unbalanced or T1 options G.703 unframed and G.704 framed modes CAS and CRC generation for E1 circuit
TDM payload type	CESoPSN, SAToP, HDLC, AAL1
TDMoverIP for Pseudowire Emulation	E1/T1 communication over Packet Switching Network Support both framed and unframed E1/T1 Configurable buffer compensation for network packet jitter Dedicated external clock injection port QoS support by ToS and VLAN per 802.1p and 802.1Q
TDMoverIP timing	Adaptive: the clock is recovered from the Ethernet network side interface Internal: the master clock source for the TDM circuit is provided by internal crystal oscillator External: an external clock injection is provided for synchronization Loopback: the transmit clock is derived from the E1/T1 receiving clock
Ethernet switching functions	VLAN creation, deletion and configuration 4 port modes: access, tunnel, trunk and hybrid Port isolation configuration Link aggregation configuration Port mirroring configuration Per port bandwidth profile and rate limiting MAC address table management Up to 4 output queues QoS policy based on CoS and DSCP Ethernet port loopback detection ACL configuration based on MAC
SFP module function	SFP module basic information (module type, media type, connector, manufacturer information, speed, wavelength, etc) SFP information retrieve (existing, speed, LOS and fault stats) Digital Diagnostic (Tx power, received optical power, temperature, supply voltage, Tx bias current, etc) Alarm indication
Management options	Local management through console port Remote management through SNMP and Telnet

Specification

E1 interface	1 port Data rate: 2.048Mbps Line code: HDB3 Framing: unframed or framed with or without CRC-4 Signaling: CAS and transparent CCS Line impedance: 120/75 Ohm Jitter: per ITU-T G.823 Connector: RJ45 balanced and BNC unbalanced
T1 interface	1 ports Bit Rate: 1.544Mbps Line code: B8ZS/AMI Comply with Bellcore GR-499-CORE, ANSI T1.403, Jitter: per ITU-T G.824 Connector: 100Ω balanced, RJ-45
Ethernet interface	1 network port & 2 user ports Data rate: 2 x 10/100Mbps 1 x 1000Mbps
Bundles	Up to 64 bundles Payload: CESoPSN, SAToP, HDLC, AAL1 PSN: UDP/IP, MPLS, MEF TDM Bytes: 1-1500 Jitter buffer size: 0-250ms Destination bundle configure Clock recovery: configurable VLAN: untag, tag & double tag Active VLAN: 4K TPID: configurable VLAN priority: 0-7 Dest IP address: configurable

Typical Application



Point-to-point E1/T1 and LAN extension over Packet Switching Network

Ordering Information

Part Number	Description
RC1201-2FEE1T1-AC	1U 19" standalone, 1 E1/T1 interfaces, 2 10/100BaseT interfaces, 1 1000BaseX (SFP) interface, AC power supplies
RC1201-2FEE1T1-DC	1U 19" standalone, 1 E1/T1 interfaces, 10/100BaseT interfaces, 1 1000BaseX (SFP) interface, DC power supplies

Timing	Internal, external, loopback and adaptive
Loopback	E1/T1 local and remote loopback
Statistics	E1/T1 per G.826 & RFC2495 Ethernet per RFC2819 Receive buffer indication SFP Digital Diagnostic
Dimension	260(W)*44(H)*175(D) mm
Weight	< 1.5KG
Power supply	AC: 180~260V, 50Hz DC: -36 ~ -72V
Power consumption	≤ 10W (at max load)
Working environment	Temp: -5 ~ 50 Celsius RH: < 90% non-condensing
Safety compliance	CE certification

Compliance

Standards & protocols	For TDM interface: ITU-T G.703 ITU-T G.704 ITU-T G.706 ITU-T G.732 ITU-T G.823
	For Ethernet port: IEEE802.3x full duplex on 10BaseT and 100BaseTX IEEE802.3 10BaseT IEEE802.3u 100BaseTX IEEE802.1p IEEE802.1Q SNMPv1/v2c/v3

RC1201-2FEV35 TDMoverIP Access Gateway

RC1201-2FEV35 is a TDMoverIP access gateway device for enterprises and mobile operators, offering TDM lease line extension or TDM traffic backhaul over a packet switched network. It provides a legacy over Ethernet/IP solution supporting transmission of V.35 streams over IP and Ethernet-based networks.

be configured from 2 10/100BaseT and 1 1000BaseX port. It converts data streams from its V.35 port into packets for transmission over the packet switching network such as MPLS and Ethernet network. RC1201 TDMoverIP devices are working in pairs.

RC1201-2FEV35 is integrated with V.35 and 2 local Ethernet traffic ports which can



Feature

Ethernet interface	3 Ethernet ports, 2 for user side and one for network side Transparent Ethernet bridging User bandwidth profile by rate-limiting and VLAN filtering VLAN tagging and stacking (Q-in-Q)
TDM interface	1 V.35 port Conforms ITU-T V.35 Phase:normal,invert Clock mode:system,terminal,adaptive
TDM payload type	CESoPSN, SAToP, HDLC, AAL1
TDMoverIP for Pseudowire Emulation	V.35 communication over Packet Switching Network Support both DTE and DCE interface Configurable buffer compensation for network packet jitter Dedicated external clock injection port QoS support by ToS and VLAN per 802.1p and 802.1Q
TDMoverIP timing	Adaptive: the clock is recovered from the Ethernet network side interface Internal: the master clock source for the TDM circuit is provided by internal crystal oscillator External: an external clock injection is provided for synchronization Loopback: the transmit clock is derived from the V.35 receiving clock
Ethernet switching functions	VLAN creation, deletion and configuration 4 port modes: access, tunnel, trunk and hybrid Port isolation configuration Link aggregation configuration Port mirroring configuration Per port bandwidth profile and rate limiting MAC address table management Up to 4 output queues QoS policy based on CoS and DSCP Ethernet port loopback detection ACL configuration based on MAC
SFP module function	SFP module basic information (module type, media type, connector, manufacturer information, speed, wavelength, etc) SFP information retrieve (existing, speed, LOS and fault stats) Digital Diagnostic (Tx power, received optical power, temperature, supply voltage, Tx bias current, etc) Alarm indication
Management options	Local management through console port Remote management through SNMP and Telnet

Specification

V.35 interface	1 port Data rate: 2.048Mbps N*64kbps(N=1~32) Clock mode: system,terminal,adaptive Phase:normal,invert Work mode:DCE/DTE Connector: ISO2593(M34)female
T1 interface	1 ports Bit Rate: 1.544Mbps Line code: B8ZS/AMI Comply with Bellcore GR-499-CORE, ANSI T1.403, Jitter: per ITU-T G.824 Connector: 100Ω balanced, RJ-45
Ethernet interface	1 network port & 2 user ports Data rate: 2 x 10/100Mbps 1 x 1000Mbps
Bundles	Up to 64 bundles Payload: CESoPSN, SAToP, HDLC, AAL1 PSN: UDP/IP, MPLS, MEF TDM Bytes: 1-1500 Jitter buffer size: 0-250ms Destination bundle configure Clock recovery: configurable VLAN:untag, tag & double tag Active VLAN: 4K TPID: configurable VLAN priority: 0-7 Dest IP address: configurable
Timing	Internal, external, loopback and adaptive

Typical Application



Point-to-point V.35 and LAN extension over Packet Switching Network

Ordering Information

Part Number	Description
RC1201-2FEV35-AC	1U 19" standalone, 1 V.35 interface, 2 10/100BaseT interfaces, 1 1000BaseX (SFP) interface, AC power supplies
RC1201-2FEV35-DC	1U 19" standalone, 1 V.35 interface, 2 10/100BaseT interfaces, 1 1000BaseX (SFP) interface, DC power supplies

Loopback	V.35 local,remote,two-way loopback
Statistics	Ethernet per RFC2819 Receive buffer indication SFP Digital Diagnostic
Dimension	260(W)*44(H)*175(D) mm
Weight	< 1.5KG
Power supply	AC: 180~260V, 50Hz DC: -36 ~ -72V
Power consumption	≤ 10W (at max load)
Working environment	Temp: -5 ~ 50 Celsius RH: < 90% non-condensing
Safety compliance	CE certification

Compliance

Standards & protocols	For TDM interface: ITU-T G.703 ITU-T G.704 ITU-T G.706 ITU-T G.732 ITU-T G.823 For Ethernet port: IEEE802.3x full duplex on 10BaseT and 100BaseTX IEEE802.3 10BaseT IEEE802.3u 100BaseTX IEEE802.1p IEEE802.1Q SNMPv1/v2c/v3
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