

Multi-service Transport Gateway

CX2200/100

For cell-side deployment	Fast Ethernet	Gigabit Ethernet	T1/E1ch TDM	T1/E1 IMA ATM	STM-1 ATM
	TDM	ATM	Ethernet	MPLS	PWE3

IP to the edge with the compact CX2200

The CX2200/100 is a multi-service transport gateway for TDM, ATM and Ethernet backhaul, specially optimized for cell-side deployment. Paired with the CX2600 series, they ensure seamless migration from existing PDH/SDH to next-generation hybrid and all-IP on mobile backhaul networks.

The NEC CX2200/100 Multi-service Transport Gateway performs a critical role in:

- Lowering OPEX by routing circuit based traffic over lower cost packet networks
- Optimizing backhaul utilization by aggregating traffic from multiple access technologies
- Delivering SLA assurance through advanced QoS capabilities such as guaranteed bandwidth
- Business flexibility through support for backhaul unbundling, convergence, sharing and leasing



Maximum flexibility for seamless migration from TDM / ATM to Packet Transport

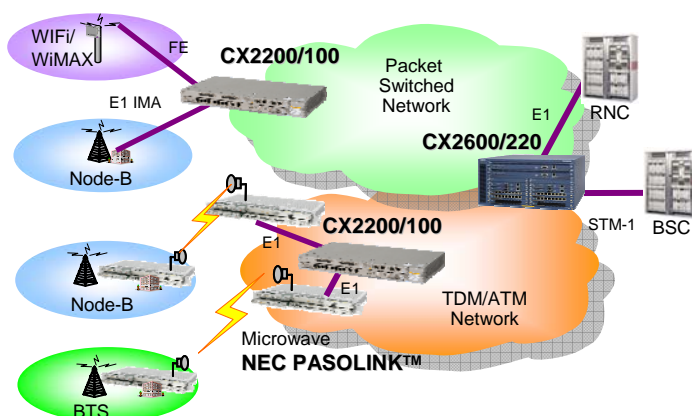
- The CX2200/100 inherits the intelligent switching functions of NEC's CX2600 series **multi-service aggregation switch**. Designed as in ultra compact form factor, it can fit into constrained spaces such as remote base-station sites. Furthermore, the interchangeable modular architecture provides future-proof flexibility so that carriers can configure as the needs for each link grow and evolve.
- The **Hybrid Switching** capability simultaneously provides both effective packet switching for MPLS/Ethernet/ATM traffic and ultra-low latency circuit switching for TDM traffic. Carriers can seamlessly and cost-effectively migrate from their current TDM networks to hybrid or all-IP backhaul networks
- The CX2200/100 features **Pseudo Wire Emulation** as well as **MPLS and Ethernet-based packet transport** functions. These technologies allow carriers to migrate rapidly growing circuit-based traffic to more bandwidth-effective IP networks.

Advanced OAM for Ethernet and TDM / ATM transport

- The CX2200/100 supports improved service availability and lower operational costs through the **Ethernet OAM** function (conforming to ITU-T Y.1731/IEEE 802.1ag), while providing comprehensive functions on TDM/ATM.
- Ethernet fault management functions offer **automatic fault detection and localization**. A performance monitoring function enables on-demand performance measurements such as those for delay and jitter.

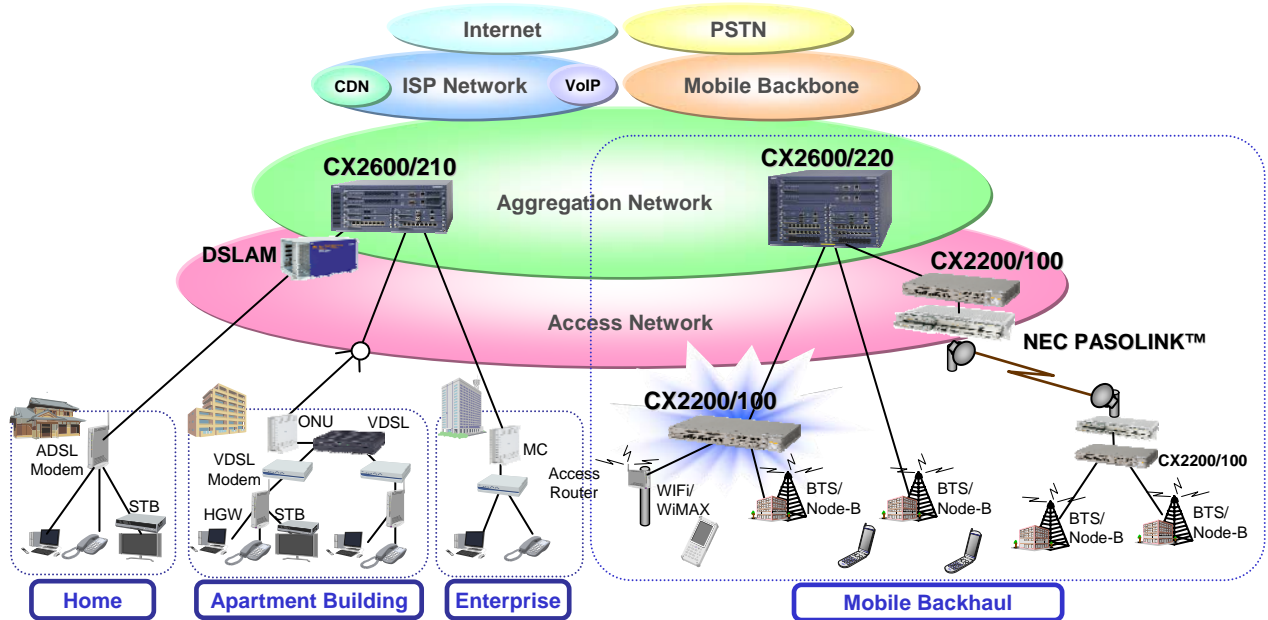
TDM / ATM Pseudo-wire and advanced clock recovery technology

- Protocol support for SAToP (RFC4553), CESoPSN (RFC5086), ATMoP (RFC4717) and related standards enables transport of current TDM/ATM services through the IP/MPLS/Ethernet based packet switched networks.
- NEC's packet based **clock recovery mechanisms** attain high-precision synchronization performance in addition to recovery from local T1/E1 lines. It is suitable for the mobile base stations that require mobile network based synchronization.
- The integral **QoS-aware intelligent packet switching** function guarantees the quality of emulated TDM/ATM services despite overload situations due to unexpected changes in link capacity or data volumes.



CX2200/100

Application examples



Specifications

Items		CX2200/100
Line Interfaces	Ethernet	10BASE-T/100BASE-TX x8 (RJ-45)
		1000BASE-T/1000BASE-X x2 (RJ-45 or SFP)
	ATM	T1/E1 IMA x16 (Dsub37)
		STM-1/OC-3c x1 (SFP)
TDM	Channelized T1/E1 x16 (Dsub37)	
Management Interfaces		10BASE-T/100BASE-TX x1 (RJ-45)
		RS-232C x1 (RJ-45)
Switching Capacity		9.6Gbps
Ethernet		VLAN (802.1Q/ad), LAG (802.3ad), STP (802.1D/w), Ethernet OAM (Y.1731/802.1ag)
MPLS		RSVP-TE (RFC3209), LDP (RFC3036/4447), OSPF-TE (RFC3630)
Pseudo Wire Emulation		SAToP (RFC4553), CESoPSN (RFC5086) ATMoP (RFC4717)
TDM		T1 (I.431), E1 (G.703), STM-1 (G.707)
ATM		IMA (I.761), F4/F5 OAM (I.610)
Network Management		SNMPv1/v2c (RFC1157/1902), MIB-II (RFC1213), RMON MIB (RFC1757), syslog (RFC3164)
Operation and Maintenance		CLI, TELNET (RFC854), FTP (RFC959), SNTpv3 (RFC2030), remote file update
Power supply		-40.5 to -57V DC
Input Current		-48V DC / 2A
Operating temperature		-5 to 45°C
Relative humidity		10 to 90% (non condensing)
Dimensions (WxDxH)		430 x240 x44mm
Weight (with maximum installation)		5kg

**Caution!**

Before installing, connecting or using this product, you must read and observe the caution and prohibitions provided in the instruction manual.

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