

Service Aggregation Switch

CX2600/200 Series

For hub-site
traffic aggregation

FE/GbE

T1/E1ch TDM

STM-1ch TDM

T1/E1 IMA ATM

STM-1 ATM

TDM

ATM

Ethernet

MPLS

PWE3

Smart and safe mobile backhaul evolution with CX2600

The CX2600/200 series brings patented intelligence to the core of a carriers' backhaul network. Providing traffic aggregation, separation and encapsulation for multi-service traffic without compromising on latency or resiliency.

The NEC CX2600/200 Multi-service Aggregation Switch provides 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
- Providing high capacity, trunk quality transport for mobile and fixed backhaul traffic
- Delivering SLA assurance through advanced QoS capabilities such as guaranteed bandwidth
- Business flexibility through support for backhaul unbundling, convergence, sharing and leasing



CX2600/220



CX2600/210



CX2600/202

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

- The CX2600 features **Hybrid Switching** functionality in a single switching card, providing both effective packet switching for MPLS/Ethernet/ATM traffic and low-latency circuit switching for TDM traffic simultaneously.
- A range of **Multi-service** interfaces for TDM, ATM and Ethernet links can be accommodated onto 3 types of common platform chassis with various configuration. Carriers can easily expand or reconfigure their service on a module by module basis.
- The CX2600 provides **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 CX2600 supports the ITU-T Y.1731/IEEE 802.1ag **Ethernet OAM** functions, which minimize operational costs and improves service availability, whilst providing comprehensive management functions for TDM / ATM.
- Ethernet fault management functions offer **automatic fault detection and localization**. A performance monitoring function enables on-demand performance measurements such as delay and jitter.

Intelligent per-flow QoS for a business commitment aware backhaul network

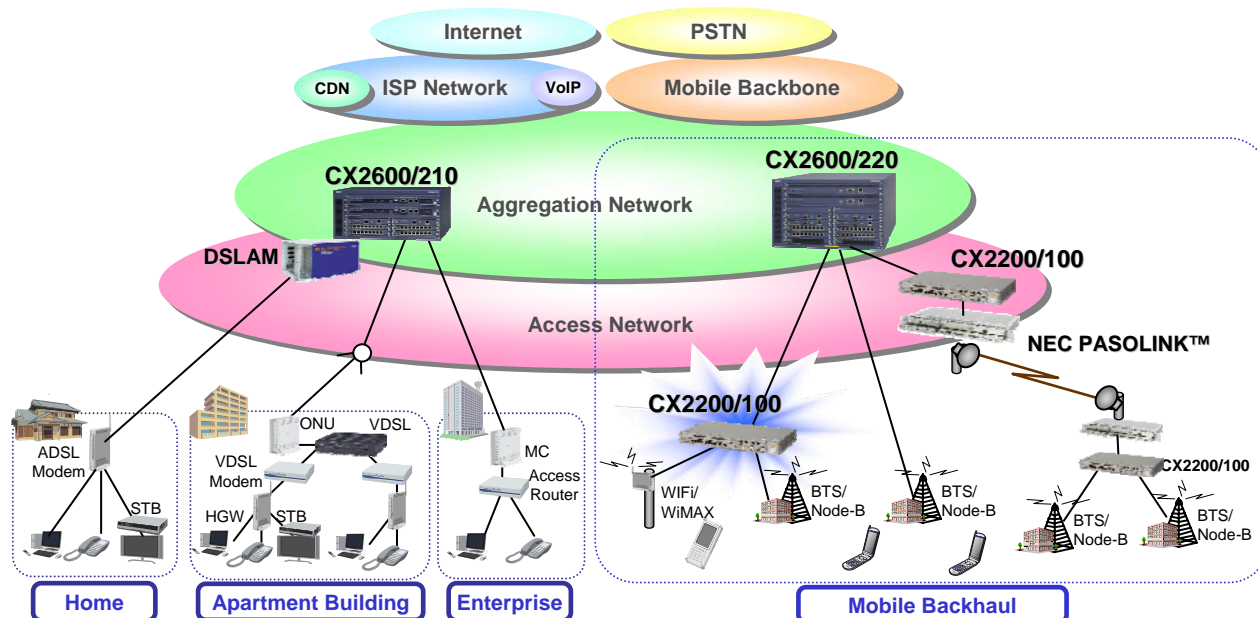
- The CX2600's **Intelligent QoS** function for packet traffic provides traffic control functions such as **maximum rate limitation, minimum rate guarantee and fair rate sharing** providing smooth delivery of latency and jitter sensitive data.
- NEC's patent-pending **per-flow QoS** technology manages thousands of traffic flows simultaneously with ultra-low delay and jitter. Carriers can designate bandwidth for multiple services while guaranteeing fair usage for each subscriber despite an over-subscribed configuration.
- The CX2600 delivers **ATM Aggregation** based on an internal packetizing architecture, and **DS0 (64kbps) fine-granular TDM Multiplexing**. Both functions significantly reduce the scale and cost of upstream bandwidth and the number of line interfaces required.

Reliable and flexible high availability

- The CX2600 implements a **Redundant Configuration** architecture for the common functional modules (switch modules and power supply modules) and the line interface modules. These redundant modules provide fast and hit-less switchover to protect and maintain performance, should a failure occur.
- The CX2600 offers various **fast Protection Switching** features for interface modules, such as Ethernet Link Aggregation, Ethernet APS, ATM IMA and SDH STM-1 APS.

CX2600/200 Series

Application examples



Specifications

Items		CX2600/202	CX2600/210	CX2600/220
Line modules	Ethernet interfaces	10BASE-T/100BASE-TX x8 (RJ-45)		
		100BASE-FX x8 (Single-Fiber SC)		
		1000BASE-T/1000BASE-X x1 (RJ-45 or SFP)		
		1000BASE-T x8 (RJ-45)		
	ATM interfaces	1000BASE-X x8 (SFP)		
		T1/E1 x8 (RJ-45)		
		STM-1/OC-3c x1 (SFP)		
TDM interfaces	Channelized T1/E1 x8 (RJ-45)			
Number of card slots	2	6	12	
Switch modules	Maximum switching capacity	24Gbps		
	Management interfaces	10BASE-T/100BASE-TX x1 (RJ-45)		
		RS-232C x1 (DB9 Male)		
Number of card slots	1	2	2	
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), STM-1 APS (G.841)			
ATM	IMA (I.761), F4/F5 OAM (I.610), STM-1 APS (G.841)			
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			
Hardware redundancy	Power module	Line module, Switch module, Power module		
Power supply	-40.5 to -57V DC		-40.5 to -57V DC, 100 to 240V AC	
Input Current	-48V DC / 5.4A	-48V DC / 11A	-48V DC / 13A, 100V AC / 8.8A, 240V AC / 3.7A	
Operating temperature	-5 to 45°C			
Relative humidity	10 to 90% (non condensing)			
Dimensions (WxDxH)	440 x470 x87mm	440 x470 x176mm	440 x470 x265mm	
Weight (with maximum installation)	15kg	25kg	40kg	



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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