

NetEngine 8000 X Series

All Scenarios Intelligent Routers



HUAWEI

Product Overview

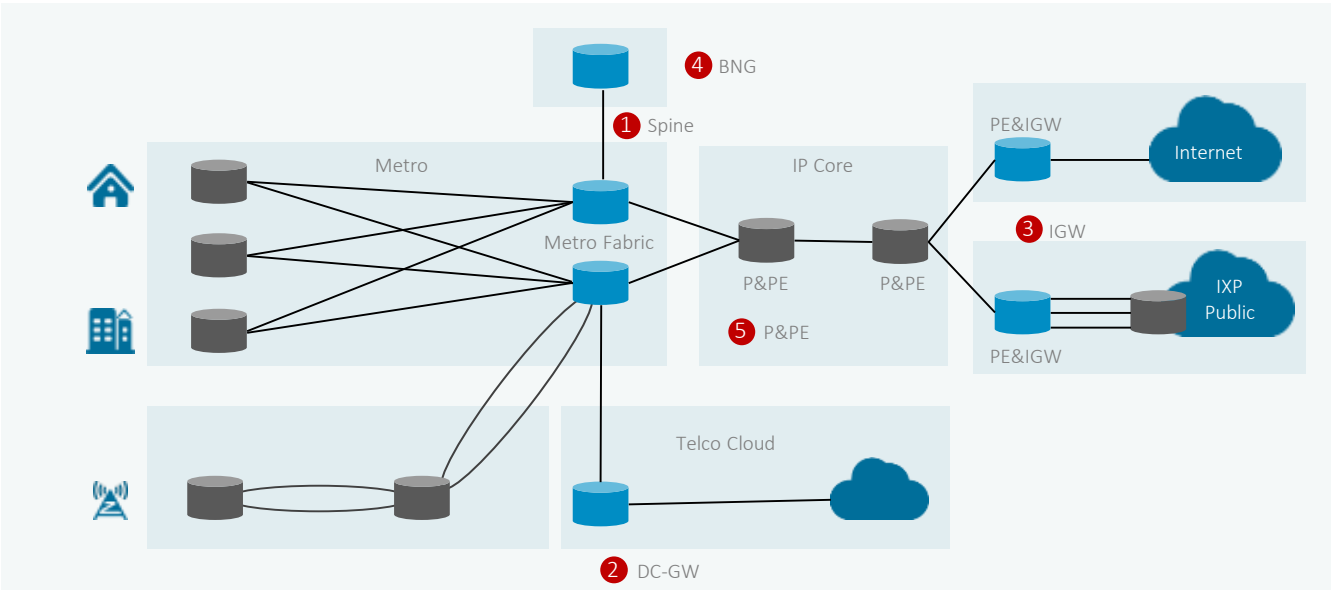
Huawei's NetEngine 8000 X series comprises the X4, X8, and X16, which are full-service intelligent metro routers designed to meet the requirements for new services and numerous connections in cloud era. The X series adopts a hardware architecture with provides a capacity of 4T per slot and it could be upgrade from 4T per slot to 14.4T per slot, and also supports SRv6 for end-to-end intelligent connections, and integrates AI-boosted intelligent O&M capabilities, helping carriers build simplified intelligent metro networks. The X series applies to metro core, aggregation, DC gateway, and international gateway scenarios.



Product Highlights

Highlights	Description
Large Capacity	• Large Capacity : 14.4T/slot • High density board : 36*400GE, 40*100GE, 72*25GE/10GE
Various Ports	• 400GE/100GE/50GE/40GE/25GE/10GE/GE/FE • Support Integrated Line Processing Unit and Flexible card
All Scenarios	• Support P/PE, SR, IGW, DC-GW and BNG

Application Scenarios



Product Specifications

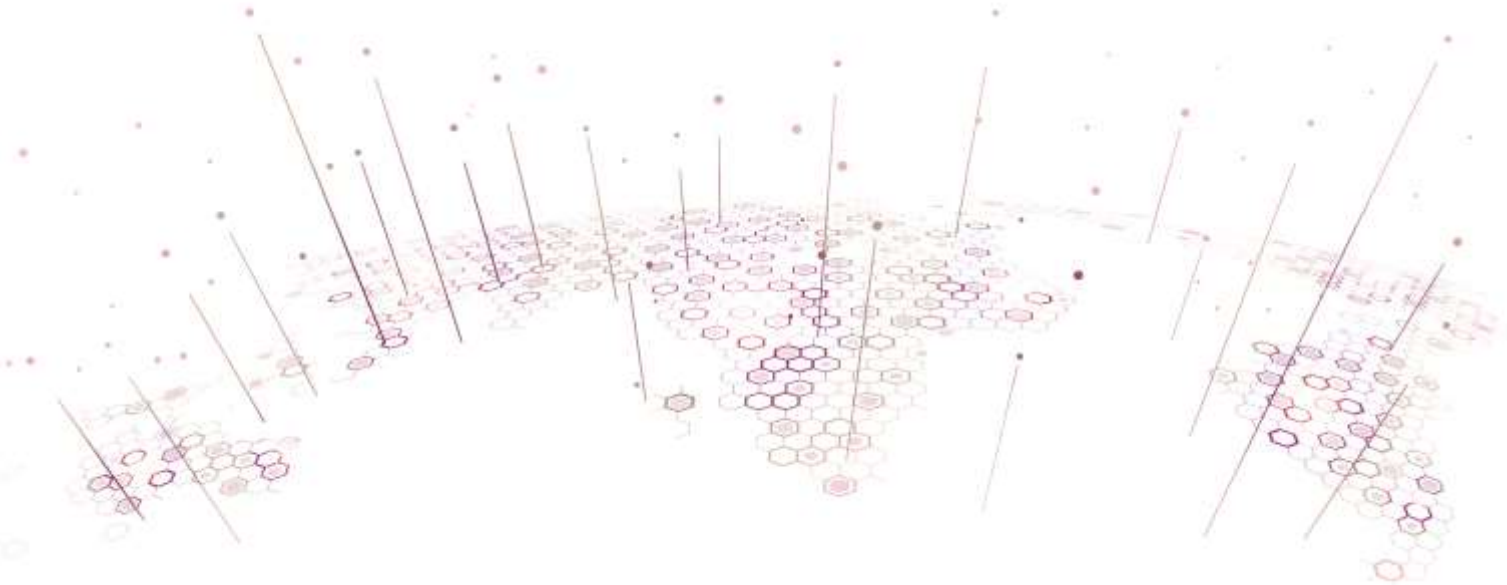
Parameter	NetEngine 8000 X16	NetEngine 8000 X8	NetEngine 8000 X4
Slot Capability	1T/2T/9.6T/14.4T per slot	1T/2T/4T/9.6T/14.4T per slot	1T/2T/4T/14.4T per slot
Service slots	16	8	4
Power consumption	22223W	11017W	5913W
Dimensions (WxDxH, mm)	442 x 1033 x 1436 (32.3U)	442 x 872 x 703 (15.8U)	442 x 872 x 437.4 (9.8U)

Product Features

Parameter	NetEngine 8000 X16	NetEngine 8000 X8	NetEngine 8000 X4
L2	IEEE 802.1q, IEEE 802.1p, IEEE 802.3ah, IEEE 802.1ag, STP/RSTP/MSTP, G.8032, LACP, VxLAN, VLAN and bridge domain		
L3	OSPF, OSPFv3, RIP, RIPng, IS-IS, IS-ISv6, BGP, BGP4+, ACL, ACL6, 6PE, 6VPE, Static routes, GRE,		
MPLS	LDP, RSVP-TE, VPLS, VPWS, L3VPN, Seamless MPLS		
SR MPLS	ISIS/OSPF/BGP for SR MPLS, SR MPLS BE, SR MPLS TE, SR MPLS TE Policy, SR-MPLS Flex-Algo, TI-LFA, Anycast FRR, SR-MPLS Microloop Avoidance, SR-MPLS OAM		
SRv6	ISIS/OSPFv3/BGP for SRv6, SRv6 BE, SRv6 policy, SRv6 Flex-Algo, BGP Policy, SRv6 SRH Compression, SRv6 TI-LFA FRR, Anycast FRR, SRv6 Microloop Avoidance, SRv6 OAM, SRv6 SFC, APN6		
EVPN	EVPN L3VPN, EVPN VPWS, EVPN VPLS		
Multicast	IGMP, MLD, Static Multicast Routing, PIM-SM/SSM, MSDP, MBGP, Rosen MVPN, MVPN, NG MVPN, Multicast NAT, BIER, BIERv6		
Slicing	FlexE, Channelized Sub-interface, Slice-ID		
QoS	5 Level HQoS		
Clock	1588v2, Synchronous Ethernet Clock, G.8275.1, G.8275.2, SMPTE-2059		
OAM	IFIT, Telemetry, NetStream, SNMP, NQA, TWAMP, RFC2544, Y.1564, BFD, SBFD, MPLS OAM, MPLS TP OAM, VRRP, Ethernet OAM, Y.1731		
BNG	PPPoE, IPoE, L2TP , 802.1x, EDSG		
Value add services	CGN, IPSEC, SA		

Support Boards

类型	规格	描述
Integrated Line Processing Unit	LPUI-1T3	
		10*100GE QSFP28 MACsec + 36*10GE(SFP+)/GE(SFP) MACsec
	LPUI-2T	72*25GE(SFP28)/10GE(SFP+)/GE(SFP)
		20*100GE QSFP28
		20*100GE QSFP28 MACsec
		10*100GE QSFP28+36*25GE(SFP28)/10GE(SFP+)/GE(SFP)
	LPUI-2T-E	72*25GE(SFP28)/10GE(SFP+)/GE(SFP)
		20*100GE QSFP28
		10*100GE QSFP28+36*25GE(SFP28)/10GE(SFP+)/GE(SFP)
	LPUI-2T-L	72*25GE(SFP28)/10GE(SFP+)/GE(SFP)
		20*100GE QSFP28
		10*100GE QSFP28+36*25GE(SFP28)/10GE(SFP+)/GE(SFP)
	LPUI-4T	
		8*400GE QSFP-DD+8*100GE QSFP28
		4*400GE QSFP-DD+24*100GE QSFP28
	LPUI-4T-E	40*100GE QSFP28
		8*400GE QSFP-DD+8*100GE QSFP28
		4*400GE QSFP-DD+24*100GE QSFP28
	LPUI-4T-L	40*100GE QSFP28
		8*400GE QSFP-DD+8*100GE QSFP28
		4*400GE QSFP-DD+24*100GE QSFP28
	LPUI-7T2	18*400GE QSFP-DD
	LPUI-14T4:	36*400GE QSFP-DD
Integrated Service Unit	/	VSUI-400-E + CGN/IPSEC/SA RTU
Flexible Card	LPUF-1T	P1T: 36*10GE SFP+
		P1T: 5*100GE QSFP28
		P1T: 10*10GE + 16*155M/16*622M/8*2.5G/2*10G POS
	LPUF-1T-E	P1T: 36*10GE SFP+
		P1T: 5*100GE QSFP28
	LPUF-2T	P1T: 36*10GE SFP+
		P1T: 5*100GE QSFP28
		P2T: 10*100GE QSFP28
		P2T: 2*400GE QSFP-DD+2*100GE QSFP28



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