NetEngine 8000E M1E-B Service Router

Overview

NetEngine 8000E M1E-B is a 1U access router specially designed for BNG scenarios, and up to 800G, flexible adaptation to different services, 100GE/50GE/25GE/10GE/GE ports, saving precious space resources and greatly reducing the Capex. It supports features such as SRv6/EVPN、 FlexE、 MACsec, and ClassD.

The product fully supports the future-oriented next-generation unified network SRv6 technology and can be used to build IP backbone, metro, mobile backhaul, and data center networks. It can be used for individual/enterprise cloud migration, inter-cloud interconnection, IoT, government and enterprise private lines, home broadband applications, and CDN. As a basic bearer protocol of the entire network, SRv6 implements end-to-end full-service bearer capabilities. SRv6 enables simplified protocols, large-scale networking, seamless integration, high reliability, integrated service chains, network and service programmability, and a full ecosystem.

The NetEngine 8000E series router integrates multiple functions, simplifies the network structure, provides rich service types, reliable service quality, and intelligent O&M. It leads the IP WAN to an intelligent network with self-driving driving, and continuously drives the business success of enterprise customers.

NetEngine 8000E M1E-B （DC）

Product Highlights

Compact and high-density

- Volume： 1U, 220mm deepth
- Capacity ： 800 Gbps, Up to 2*100GE/50GE, 24*25GE/10GE/GE

SRv6 Ready, Simplified network

- SRv6/EVPN: Simplified protocols
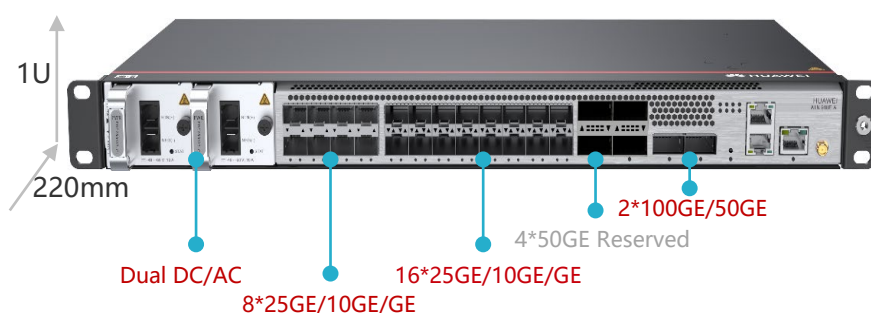- Programmable NP, meeting future evolution requirements

Energy saving

- -40℃ ~ 65℃, Industrial wide temperature design
- 115W, Industry-leading low power consumption

Product Specifications

Item	Description
Switching Capacity	240Gbps (by default), up to 800Gbps
Interface Type	100GE / 50GE / 25GE / 10GE / GE
Main Control Board	Fixed-Box
Dimensions (W x D x H)	442mm × 220mm × 44.5mm (1U)
Typical Power Consumption	115W
Temperature	-40℃ ~ 65℃
Voltage	DC: 1 + 1 backup; External AC power adapter
BNG Session	2K (by default), up to 8K
CGNAT Session	400K (1K = 1024)
HQOS	56000
FIB (v4 / v6)	3M / 1M
ACL (v4 / v6)	16K / 8K (1K = 1024)
MAC	128K (1K = 1024)

2*100GE/50GE+24*25GE/10GE/GE

1U
220mm

2*100GE/50GE
4*50GE Reserved
16*25GE/10GE/GE
8*25GE/10GE/GE
Dual DC/AC

Product Features

Features	Description
Layer 2	IEEE 802.1q, IEEE 802.1p, IEEE 802.3ad, IEEE 802.1ab, and STP/RSTP/MSTP
Layer 3	OSPF, OSPFv3, RIP, RIPng, IS-IS, BGP, BGP4+, ACL, 6vPE, ARP, VLANIF, VXLAN, EVPN
MPLS	LDP, RSVP-TE, Segment Routing MPLS, and seamless MPLS

Features	Description
IPv4	Tracert, NQA, IP policy-based routing, specified next hop forwarding based on flows, IP policy-based routing load balancing, QinQ interfaces (QinQ and dot1q tag termination sub-interfaces), IPv4 load balancing, and enabling/disenabling the ping fast reply function based on the interface board Egress of an MPLS in UDP tunnel
IPv6	IPv6 (ND), Path MTU (PMTU), TCP6, ping IPv6, tracert IPv6, socket IPv6, DHCPv6 relay, static IPv6 DNS, TFTP IPv6 client, IPv6 policy routing, and IPv6 ND fast reply
Multicast	IGMP, static multicast routing, PIM-SM/SSM, NG MVPN, BIER, and BIERv6
SRv6	IS-IS for SRv6, OSPFv3 for SRv6, SRv6 TE Policy, SRv6 TE Policy Shortcut, SRv6 Flex-Algo, SRv6 SRH compression, SRv6 network slicing BGP for SRv6, SRv6 BE, SBFD for SRv6 BE, SRv6 TI-LFA FRR, SRv6 middle-node protection, SRv6 micro-loop avoidance, SRv6 OAM, SRv6 SFC, G-SRv6
EVPN	EVPN L3VPN, EVPN VPWS, and EVPN VPLS
L2VPN	PWE3/VLL, VPLS, VXLAN, VPWS, L2TPv3, BGP/MPLS IPv4/IPv6 VPN, PBB-EVPN, PBB VPLS, GRE
L3VPN	CE routers can access the L3VPN through L3 interfaces. Support static routes between CE and PE, BGP, RIPv1/v2, OSPF and IS-IS Inter-AS VPN, including RFC2547bis option A Inter-AS VPN, including RFC2547bis option B Inter-AS VPN, including RFC2547bis option C NG MVPN IPv6 VPN HoVPN Seamless MPLS BGP LSP entropy label Redirect to VPN L3VPN PIPE/Uniform mode L3VPN statistics
Value added service	MACsec, IPsec
Clock	Class D
QoS	QPPB, DiffServ, HQoS, and Redirection
Reliability	IP FRR, LDP FRR, TE FRR, VPN FRR, BGP FRR, mLDP FRR
OAM	IFIT, IP FPM, NQA, TWAMP, BFD, MPLS OAM, MPLS-TP OAM, VRRP, Ethernet OAM, 802.3ah, Y.1731, Ethernet LPT, and bit error-triggered switching

Software Upgrade Paths

Visit [Software Upgrade Paths](#) or contact local Huawei engineers for more detailed information.

For More Information

For more information about the NetEngine 8000E series router, visit https://e.huawei.com or contact us in the following ways:

Global service hotline: https://e.huawei.com/en/service-hotline

Logging in to the Huawei Enterprise technical support web: https://support.huawei.com/enterprise/

Sending an email to the customer service mailbox: support_e@huawei.com

Huawei Technologies Co., Ltd.
Address: Huawei Industrial Base
Bantian, Longgang Shenzhen 518129
People's Republic of China

Website: www.huawei.com