

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 depth
- 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

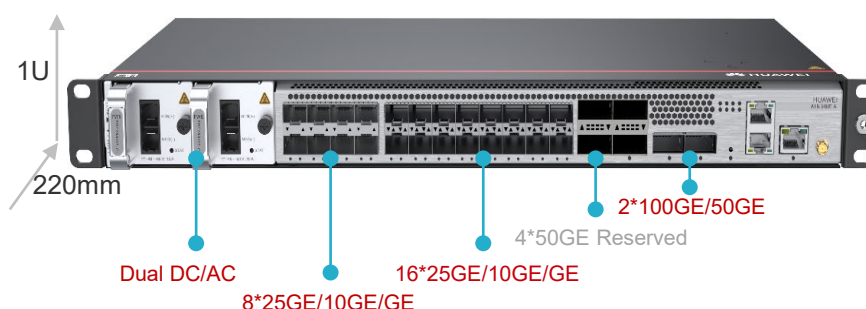
Energy saving

- -40°C ~ 65°C, 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 x 220mm x 44.5mm (1U)
Typical Power Consumption	115W
Temperature	-40°C ~ 65°C
Voltage	DC: 1 + 1 backup; External AC power adapter
BNG Session	2K (by default), up to 8K
CGNAT Session	1M
IPv4 NAT forwarding capability	0.75 Gbps (512-byte packet) / 0.93 Gbps (1024-byte packet)
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



Product Features

Features	Description
System Management	LAD, LLDP, System Time, NTP, SNMP, NETCONF, BootLoader Management, Device Management, Information Management, Fault Management, Performance Management, Upgrade Maintenance, DCN, RMON, SAID, PADS, KPI, VS
Clock and Time Synchronization	Physical-Layer Clock Synchronization, 1588v2, G.8275.1, CU-106, C37.238, 1588 ACR, 1588 ATR, CES ACR, Atom GPS, Atom GNSS, Atom GPS 3.0

Features	Description
Network Reliability	Intra-chassis High Availability, BFD, VRRP, VRRP6, Ethernet OAM, LPT, Dual-Device Backup, Bit-Error-Triggered Protection Switching, MPLS OAM, MPLS-TP OAM
Interface and Data Link	Interface Management, Transmission Alarm Customization and Suppression, Fiber Health Care (FHC)
LAN Access and MAN Access	MAC, Ethernet Interface, Eth-Trunk Interface, GVRP, Layer 2 Protocol Tunneling, VLAN, QinQ, EVC, ERPS (G.8032), MAC Flapping-based Loop Detection, STP_RSTP_MSTP, RRPP, BPDU Tunneling, VXLAN
WAN Access	PPP, WDM Interface
IP Services	ARP, ND, ACL, ACL6, DHCP, DHCPv6, DNS, IPv6 DNS, MTU, IPv4 Basic, IPv6 Basic, Load Balancing
IP Routing	Basic IP Routing, IPv4 Static Route, IPv6 Static Route, OSPF, OSPFv3, RIP, RIPng, IS-IS, BGP, BGP4+, Routing Policy, XPL, Route Monitoring Group
IP Multicast	IGMP, PIM, MSDP, MBGP, IPv4 Multicast Routing Management, IPv6 Multicast Routing Management, Rosen MVPN, NG MVPN, BIER, BIERv6, MLD, IPv6 PIM, User-side Multicast, Layer 2 Multicast
MPLS	Common MPLS, MPLS TE, MPLS LDP, Seamless MPLS, GMPLS UNI
Segment Routing	Segment Routing MPLS (SR MPLS), Segment Routing IPv6 (SRv6)
Application Awareness	APNv6
Path Control	PCEP
VPN	VPN Tunnel Management, GRE, BGP/MPLS IP VPN, BGP/MPLS IPv6 VPN, VPLS, VPWS, L2VPN Accessing L2VPN, L2VPN Accessing L3VPN, EVPN, PBB-EVPN, PBB VPLS, Loop Detection
QoS	Traffic Policing, Traffic Shaping, Congestion Management and Congestion Avoidance, Class-based QoS, Policy-based Routing, QPPB, HQoS, MPLS DiffServ Mode, SRv6 DiffServ Mode, QoS User Access, Multicast QoS, VPN QoS
Security	AAA and User Management, ARP Security, DHCP Snooping, DHCPv6 Snooping, GTSM, Keychain, TCP-AO, Local Attack Defense, MACsec, SOC, Packet Header Obtaining, Xsec, BGP Flow Specification, IPsec, PKI, Mirroring, Layer 2 Traffic Suppression, MPAC, 802.1X Port-based Authentication, PPPoE+, Security Risk Query, System Master Key, SSL, SSH, FIPS, HTTPS, HIPS, Weak Password Dictionary Maintenance, Weak Security Algorithm Disabling, Trusted System, EULA

Features	Description
System Monitoring	NetStream, NQA, Ping and Tracert, gRPC, Telemetry, TWAMP, TWAMP Light, STAMP, sFlow, IFIT, EMDI, Intelligent Monitoring, Path Detection, EVA, Remote Packet Header Obtaining
User Access	IPv4 Address Management, IPv6 Address Management, IPoE Access, PPPoE Access, 802.1X Access, L2TP Access, User Access Multi-Device Backup, EP Escape
NAT and IPv6 Transition	NAT, NAT64, IPv4 over IPv6 Tunnel, IPv6 over IPv4 Tunnel
Value-Added Services	BOD, DAA, EDSG

Regulatory compliance

Item	Description
Regulatory compliance	EMC • ANSI C63.4 • AS/NZSPR 32 • CISPR 24 • CISPR 32 • EN 55024 • EN 55032 • ETSI EN 300 386 • FCC CFR47 Part 15 Subpart B • ICES-003 Issue 6 • ICES-GEN Issue 1 • IEC 61000-3-2 • IEC 61000-3-3 • IEC 61000-4-11 • IEC 61000-4-2 • IEC 61000-4-29 • IEC 61000-4-3 • IEC 61000-4-4 • IEC 61000-4-5 • IEC 61000-4-6 • IEC 61000-6-1 • IEC 61000-6-3 • VCCI CISPR 32

Item	Description
Regulatory compliance	Environment • ETSI EN 300 019-1-1 • ETSI EN 300 019-1-2 • ETSI EN 300 019-1-3 • ETSI EN 300753 • ETSI EN 300 019-2-1 • ETSI EN 300 019-2-2 • ETSI EN 300 019-2-3 • IEC 60068-2-1 • IEC 60068-2-2 • IEC 60068-2-14 • IEC 60068-2-30 • IEC 60068-2-64 • IEC 60068-2-27 • IEC 60068-2-6 • IEC 60068-2-31 • IEC 60068-2-78 • ISTA 2A • ISO 7779 • GB/T 2423.26-2008 Safety • IEC/EN/UL/CSA 60950-1 • IEC/EN 62368-1 Environmental protection • 2011/65/EU & (EU)2015/863 (EU RoHS) • Regulation (EC) No.1907/2006 (REACH) • 2012/19/EU (WEEE) • 2006/66/EC & 2013/56/EU on batteries and accumulators

NOTE

- Regarding the physical dimensions provided in the table, the width (W) does not take mounting ears into account.
- Temperature and humidity are measured at 1.5 m (4.92 ft.) above the ground and 0.4 m (1.31 ft.) in front of the cabinet. There should be no protection board on the front or back of the cabinet.
- "Short-term" refers to continuous working time that does not exceed 96 hours and an accumulated working time per year that does not exceed 15 days. If the working time exceeds either of these values, it is considered "long-term".
- Some product features are subject to specific conditions. Please refer to the product manual for detailed specifications.

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

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