



NetEngine 8000 M8 Series Universal Service Routers



Overview

HUAWEI NetEngine 8000 M8 all-scenario intelligent router is a high-end intelligent router launched by Huawei for the industry. It is mainly used in access and aggregation scenarios to form an intelligent and simplified IP bearer network solution with simplified architecture, intelligent connection, and committed high availability. The details are as follows:

- (1) The NetEngine 8000 M8 breaks through multiple technical difficulties, such as ultra-high-speed signal transmission, super heat dissipation, and efficient power supply. It achieves a compact and large capacity of 3 U/1.2 Tbit/s and 220 mm which is the most compact router in the industry. Supports a full series of interfaces to meet the traffic growth and diversified service access requirements in the cloud era. Currently, Ethernet, SDH and PDH interfaces are supported, and PCM interfaces are supported in the roadmap. NetEngine 8000 M8 is a full-scenario converged platform that supports home broadband, private line, mobile bearer, and cloud bearer scenarios, simplifying network layers and complexity. The network slicing (FlexE) function implements multi-purpose and comprehensive bearer on one network.
- (2) NetEngine 8000 M8 supports SRv6 and enables intelligent connections. Based on IPv6, SRv6 provides a large number of continuous addresses and rich scalability capabilities, implements automatic cross-domain connection and minute-level service provisioning, and implements cloud scheduling network and one-hop to the cloud. SRv6 can identify applications and tenants and implement intelligent traffic steering such as latency and bandwidth based on customer requirements to ensure service SLA. The number of network protocols is reduced from 10+ to 2, simplifying network O&M.
- (3) The NetEngine 8000 M8 supports intelligent O&M. Automation and intelligent technologies are introduced to implement intelligent O&M. Based on iMaster NCE, the In-situ Flow Information Telemetry (iFIT) technology accurately detects network SLAs in real time, visualizes service quality in real time, and supports minute-level fault locating. Unique ROAM algorithm, intelligent traffic steering and optimization; The intelligent algorithm reduces the number of displayed alarms by 99%.

The NetEngine 8000 M8 can be flexibly deployed at multiple locations on the network. It integrates multiple functions, simplifies the network structure, provides various service types, reliable service quality, and intelligent O&M, and leads the IP WAN towards an intelligent network with autonomous driving, providing continuous and surging power for enterprise customers' business success.



NetEngine 8000 M8 Router (DC)



NetEngine 8000 M8 Router (AC)

Product Features

Features of Huawei NetEngine 8000 M8 series routers

Feature	Description
Interface type	100GE/50E/40GE/25GE/10GE/GE/FE/E1/cPOS/POS
Typical port density	100GE:12; 50GE:16; 25GE:32; 10GE:80; GE:160
Ethernet layer 2 protocol	G.8032, STP/RSTP, MSTP, L2 protocol transparent transmission, BPDU, LACP
Ethernet service	VLAN, Bridge domain, L2TPv3, QinQ

Feature	Description
Routing	RIP, RIPng, OSPF, OSPFv3, IS-IS, IS-ISv6, BGP, BGPv6, Static routing, IPv4 Multicast, IPv6 Multicast, Multicast static, etc
IPv4	TCP/IP, for example, ICMP, IP, TCP, UDP, Socket (TCP/UDP/RAW IP), ARP Static DNS DNS Client FTP Server FTP Client TFTP Client DHCP Relay and DHCP Server Ping Tracert NQA IP policy-based routing Forwarding next hop based on traffic IP policy-based route load balancing The QinQ interface (QinQ termination and dot1q termination) supports IPv4 load balancing. Enabling and disabling the rapid ping reply function based on interface boards Forcible fragmentation for packets with length greater than MTU and DF enabled MPLS-in-UDP tunnel egress
IPv6	IPv6(ND) Path MTU (PMTU) TCP6 Ping IPv6 Tracert IPv6 Socket IPv6 DHCPv6 Relay Static IPv6 DNS TFTP IPv6 Client IP policy-based routing IPv6 ND fast reply
MPLS	LDP, MPLS TE, Segment Routing MPLS、MPLS-TP
L2VPN	PWE3/VLL, VPLS, EVPN, EVPN L3VPN, VxLAN
L3VPN	CE routers can access the L3VPN through L3 interfaces. Support static routes between CE and PE, BGP, RIP, OSPF and ISIS Inter-AS VPN, including RFC2547bis option A.

Feature	Description
	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
SRv6	SRv6-BE, SRv6-TE Policy, SRv6 egress protection
VAS	BNG/BRAS(IPOE/PPPOE), NAT/CGN, IPsec, MACSec
Clock	Physical layer synchronization, 1588v2
OAM	iFIT IPPFM NQA TWAMP BFD MPLS OAM MPLS-TP OAM VRRP Ethernet OAM 802.3ah Y1731 Ethernet LPT Bit-error-triggered protection switching
QoS	QPPB, Differ-Serv, HQoS, Redirection, ACL, PBR
Others	AAA, Radius, TACACS, Telnet, SSH, SNMP v1 / v2 / v3, Syslog

Product Specifications

Item	NetEngine 8000 M8
Dimensions (H x W x D)	132.6 mm (3 U) x 442 mm x 220 mm (5.22 in. x 17.4 in. x 8.66 in.)
Weight (full configuration)	<ul style="list-style-type: none"> DC: 16.5 kg (36.38 lb) AC: 17.1 kg (37.71 lb)

Item	NetEngine 8000 M8
Cabinet installation standard	ETSI 21-inch; IEC 19-inch
Typical power consumption	<ul style="list-style-type: none"> [IPU-1T2] DC: 484.34 W [IPU-1T2] AC: 485.27 W [IPU-480] DC: 428.11 W [IPU-480] AC: 457.79 W
Typical heat dissipation	<ul style="list-style-type: none"> [IPU-1T2] DC: 1532.61 BTU/hour [IPU-1T2] AC: 1532.91 BTU/hour [IPU-480] DC: 1350.19 BTU/hour [IPU-480] AC: 1443.77 BTU/hour
DC input voltage	<ul style="list-style-type: none"> Input voltage range: -40 V to -72 V Input rated voltage: -48 V/-60 V
AC input voltage	<ul style="list-style-type: none"> Input voltage range: 90 V to 290 V Input rated voltage: 200 V to 240 V/100 V to 127 V dual live wires, 240 V HVDC supported
MTBF	101.78 years
MTTR	0.5 hour
Availability	0.999999439
Slot quantity	DC: 8 AC inside: 6 AC outside: 8
Redundant IPUs	1:1
Redundant fans	1+1. The device can work properly for a short time at 40°C (104°F) if a single fan fails (one fan module contains two fans).
Redundant power supply	1+1
Forwarding performance	IPU-1T2: 453 Mpps IPU-480: 405 Mpps
Switching capacity	IPU-1T2: 2.4 Tbit/s IPU-480: 960 Gbit/s
Operating temperature	<ul style="list-style-type: none"> Long-term: DC: -40°C to +65°C (-40°F to +149°F), lowest temperature for startup: -20°C (68°F); AC: -20°C to +55°C (-4°F to +131°F) Temperature change rate limit: 30°C/hour
Storage temperature	-40°C to +70°C (-40°F to +158°F)
Relative operating humidity	<ul style="list-style-type: none"> Long term: 5% to 85% RH, non-condensing Short term: 5% to 95% RH, non-condensing
Relative storage humidity	5% to 95% RH, non-condensing
Long-term operating altitude	≤ 4000 m (13123.2 ft.) (For altitudes between 1800 m to 4000 m [5905.44 ft. to 13123.2 ft.], the operating temperature of the NEU100 must decrease by 1°C [33.8°F] for every 220 m [721.78 ft.].)
Storage altitude	Lower than 5000 meters
Regulatory compliance	EMC

Item	NetEngine 8000 M8
	<ul style="list-style-type: none"> • ANSI C63.4 • AS/NZS CISPR 32 • CISPR 24 • CISPR 32 • EN 55024 • EN 55032 • ETSI EN 300 386 • ETSI ES 201 468 • 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 61000-6-2 • IEC 61000-6-4 • VCCI-CISPR 32 <p>Environment</p> <ul style="list-style-type: none"> • ETSI EN 300 019-1-1 • ETSI EN 300 019-1-2 • ETSI EN 300 019-1-3 • ETSI EN 300 019-2-1 • ETSI EN 300 019-2-2 • ETSI EN 300 019-2-3 • ETSI EN 300 753 • IEC 60068-2-1 • IEC 60068-2-14 • IEC 60068-2-2 • IEC 60068-2-27 • IEC 60068-2-30

Item	NetEngine 8000 M8
	<ul style="list-style-type: none"> • IEC 60068-2-31 • IEC 60068-2-39 • IEC 60068-2-6 • IEC 60068-2-64 • ISO 7779 • ISTA 2A <p>Safety</p> <ul style="list-style-type: none"> • IEC/EN/UL/CSA 60950-1 • IEC/EN 62368-1 <p>Environmental protection</p> <ul style="list-style-type: none"> • 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".

Ordering Information

Basic Hardware Configurations

NetEngine 8000 M8 Basic Configurations

BOM Number	Order Name	Description	Remarks
02353ANN	CR8PM8BASDC1	NetEngine 8000 M8 Basic Configuration (Includes NetEngine 8000 M8 Chassis,2*IPU-1T2, 2*DC Power,without Software Charge and Document)	
02353CDB	CR8PM8BASDC2	NetEngine 8000 M8 Basic Configuration (Includes NetEngine 8000 M8 Chassis,2*IPU-480, 2*DC Power,without Software Charge and Document)	
02353EWN	CR8PM8BASAC1	NetEngine 8000 M8 Basic Configuration (Includes NetEngine 8000 M8 Chassis,2*IPU-1T2, 2*AC Power,without Software Charge and Document)	
02353EWQ	CR8PM8BASAC3	NetEngine 8000 M8 Basic Configuration (Includes NetEngine 8000 M8 Chassis,2*IPU-480, 2*AC Power,without Software Charge and Document)	
02353MXU	CR8PM8BASAC8	NetEngine 8000 M8 Basic Configuration (Includes NetEngine 8000 M8 Chassis,2*IPU-240, 2*AC Power,without Software Charge and Document)	

BOM Number	Order Name	Description	Remarks
02354EED	CR8PM8BASDCA	NetEngine 8000 M8 Basic Configuration (Includes NetEngine 8000 M8 Chassis,2*IPU-1T2-B, 2*DC Power,without Software Charge and Document)	
02354EEF	CR8PM8BASDCC	NetEngine 8000 M8 Basic Configuration (Includes NetEngine 8000 M8 Chassis,2*IPU-480-B, 2*DC Power,without Software Charge and Document)	
02354EEM	CR8PM8BASACA	NetEngine 8000 M8 Basic Configuration (Includes NetEngine 8000 M8 Chassis,2*IPU-1T2-B, 2*AC Power,without Software Charge and Document)	
02354EEP	CR8PM8BASACC	NetEngine 8000 M8 Basic Configuration (Includes NetEngine 8000 M8 Chassis,2*IPU-480-B, 2*AC Power,without Software Charge and Document)	
02353ANP	CR8BM8BKPDC1	NetEngine 8000 M8 Integrated DC Chassis Components (Including 2*DC Power,Fan Box)	
02353EWU	CR8BM8BKPAC1	NetEngine 8000 M8 Integrated AC Chassis Components (Including 2*AC Power,Fan Box)	
03033FXD	CR8DIPU1T2C1	Integrated Network Processing Unit (IPU-1T2)	
03033GLB	CR8DIPU480C1	Integrated Network Processing Unit (IPU-480)	
03033NNR	CR8DIPU240C1	Integrated Network Processing Unit (IPU-240)	
03034BMH	CR8DIPU1T2CB	Integrated Network Processing Unit (IPU-1T2-B)	
03034BMK	CR8DIPU480C3	Integrated Network Processing Unit (IPU-480-B)	
03033GGC	CR8MM82FBXC1	NetEngine 8000 M8 Fan Box	
03025PJF	DP32PDC1K6A1	Power Interface Board	
02312QXK	ETP4860-4KW	AC Power Box	
02131663	PAC1K5S53-AL	AC-DC Power,-40degC,65degC,90V,264V,53.5V/28.04A	
03025PHF	DP52APIUCA00	AC Power Interface Unit Converting Board	

Interface Cards

BOM	Order Name	Description	NetEngine 8000 M8
03033BLN	CR5D00LAXF91	10-Port 10GE/GE LAN/WAN-SFP+ MACsec Physical Interface Card(PIC)	●
03033BLK	CR5D00E4XM25	4-Port 25GE(SFP28)/10GE(SFP+) MACsec Physical Interface Card (PIC)	●
03033GDR	CR5D0E5XMF94	2-Port 50GBase/1-Port 100GBase-QSFP28 FlexE MACsec Physical Interface Card(PIC)	●
03033GDS	CR5DE2NE4X14	2-Port 100GBase/50GBase-QSFP28 FlexE MACsec Interface Card(PIC)	●

BOM	Order Name	Description	NetEngine 8000 M8
03033FXE	CR5D00EAGF95	10-port 100/1000Base-X-SFP MACsec Physical Interface Card(PIC)	●
03033GGD	CR5D000DE1C1	16-Port E1 Physical Interface Card(PIC,75ohm/120ohm)	●
03033GGE	CR5D00P4CFC1	4-Port OC-3c/STM-1c POS-SFP Flexible Interface Card(PIC)	●
03033GGF	CR5D00C4CFC1	4-Port Channelized STM-1c POS-SFP Physical Interface Card(PIC)	●
03033GMU	CR5D00EEGF73	20-Port 100/1000Base-X-CSFP/10-Port 100/1000Base-X-SFP Physical Interface Card(PIC)	●
03033FXF	CR5D00L4XF91	4-Port 10GE(SFP+)/GE(SFP) MACsec Physical Interface Card(PIC)	●
03033HAF	CR5D00E1NC97	1-Port 100GE/ 1-Port 200GE CFP2 Physical Interface Card(PIC) (Enable 1*100GE by default)	●
03033GFJ	CR5D00EAGF96	10-port 100/1000Base-X-SFP MACsec Physical Interface Card(PIC)	●
03032TGR	CR2D000SA890	8-Channel V.35/X.21/V.24 Board	●
03032TGS	CR2D00MP8A90	4 Channels C37.94 Optical Interface and 4 Channels CoDir64K Electric Interface Board	●
03032TGP	CR2D00MPAA90	4-Channel FXS/FXO+2-Channel E&M+2-Channel RS232+2-Channel RS485 Board	●
03032VFA	CR2D000EM890	6 Channes E&M Interface Board	●
03033VMB	CR8D00L4XFC1	4-Port 10G-SFP+ Physical Interface Card(PIC)	●
03033VMC	CR8DE1NE2VC1	2-Port 50GBase/1-Port 100GBase-QSFP28 Physical Interface Card(PIC)	●
03033VME	CR8D00E4YBC1	4-Port 25GE-SFP28 Physical Interface Card (PIC)	●
03030QCQ	CR2D000IE110	32-Port E1 Physical Interface Card(75ohm)	●
03030QCP	CR2D000IE111	32-Port E1 Physical Interface Card(120ohm)	●
03030RFA	CR2D000DE110	16-Port E1 Physical Interface Card(75ohm)	●
03030REY	CR2D000DE111	16-Port E1 Physical Interface Card(120ohm)	●
03031DHB	CR2D00E8GE12	8-Port 100/1000Base-RJ45 Physical Interface Card	●

BOM	Order Name	Description	NetEngine 8000 M8
03031DJK	CR2D00EAGF10	10-Port 100/1000Base-X-SFP Physical Interface Card	●
03033YLL	CR8D00P8CFC1	8-Port STM-1c/8-Port STM-4c POS Card (PIC)(Default Enable 4*STM-1c)	●

NOTE

The symbol "●" indicates that the device supports this card, and the symbol "-" indicates that the device does not support this card.

RTU

BOM Number	Order Name	Description	Remarks
88036WCF	CR8SM004S1C0	NetEngine 8000 M Series Flexible Card 4*155M POS Port Enable RTU	Matching 03033YLL
88036WCG	CR8SM004S4C0	NetEngine 8000 M Series Flexible Card 4*622M POS Port Enable RTU	Matching 03033YLL

Software Configuration

Software License for NetEngine 8000 M8

BOM Number	Order Name	Description	Remarks
88035YME	N1-N8KM8F-LIC	NetEngine 8000 M8 Fundation SW License	
88035YMF	N1-N8KM8A-LIC	NetEngine 8000 M8 Advance SW License	
88036AXS	N1-N8KM8F2A-LIC	NetEngine 8000 M8 Fundation to Advance SW License	
88035YMG	N1-N8KM8TMSY-LIC	NetEngine 8000 M8 Time Synchronization Function License	
88035YMJ	N1-N8KM8SRV6-LIC	NetEngine 8000 M8 SRv6 Function License	
88035YMK	N1-N8KM8SLI-LIC	NetEngine 8000 M8 Port Slicing Function License	
88035YML	N1-N8KM8MACS-LIC	NetEngine 8000 M8 MACSec Function License	
88060TJF	N1-N8KM8F-SNS1Y	NetEngine 8000 M8 Fundation SW License SnS(1 year)	
88060TJG	N1-N8KM8A-SNS1Y	NetEngine 8000 M8 Advance SW License SnS(1 year)	
88060UET	N1-N8KM8F2A-SNS1Y	NetEngine 8000 M8 Fundation to Advance SW License SnS(1 year)	

BOM Number	Order Name	Description	Remarks
88060TJK	N1-N8KM8TMSY-SNS1Y	NetEngine 8000 M8 Time Synchronization Function License SnS(1 year)	
88060TJM	N1-N8KM8SRV6-SNS1Y	NetEngine 8000 M8 SRv6 Function License SnS(1 year)	
88060TJP	N1-N8KM8SLI-SNS1Y	NetEngine 8000 M8 Port Slicing Function License SnS(1 year)	
88060TJR	N1-N8KM8MACS-SNS1Y	NetEngine 8000 M8 MACSec Function License SnS(1 year)	

Documents

Documents for NetEngine 8000 M8

BOM Number	Order Name	Description	Remarks
31180BHN	CR8I820DOCC1	HUAWEI NetEngine 8000 M Series Router Product Documentation	
31180BHS	CR8I8CDOCEC0	HUAWEI NetEngine 8000 M14 and M8 Series Router Product Documentation	

Optical/Electrical Transceivers

100Gbps Optical Transceiver

BOM Number	Order Name	Description	Remarks
02311NTY	OMND10N13	High Speed Transceiver, QSFP28, 850nm, 100G, -8.4dBm, 2.4dBm, -10.3dBm, MPO, MM, 0.1km, OM4	
02311QDH	OSN020N15	High Speed Transceiver, QSFP28, 1310nm, 4*25GBase, -6.5dBm, 2.5dBm, -9.8dBm, LC/PC, 2km (100GBASE-CWDM4)	
02312BSS	OSN010N24	High Speed Transceiver, QSFP28, 1310nm, 100G, -4.3dBm, 4.5dBm, -8.6dBm, LC, SMF, 10km	
02312AUE	OSN030N05	High Speed Transceiver, QSFP28, 1310nm, 100G, -2.5dBm, 2.9dBm, -21.4dBm, LC, SMF, 30km	
02312NCX	QSFP28-100G-1310nm-80km-SM	High Speed Transceiver, QSFP28, 1310nm, 100G, 3dBm, 6.5dBm, -30dBm, LC, SMF, 80km	
02310WUR	OSN010N09	High Speed Transceiver, CFP2, 4*25Gb/s (1310nm Band), 103.125Gb/s, -4.3dBm, 4.5dBm, -10.6dBm, LC straight, SMF, 10km	
02311FAP	OSN040N03	High Speed Transceiver, CFP2, 1310nm, 103.125Gb/s, -2.9dBm, 2.9dBm, -21.4dBm, Straight LC, SMF, 40km, OMA, 100GBASE-ER4	
02312AXE	CFP2-100G-1310nm-80km-SM	High Speed Transceiver, CFP2, 1310nm, 103.125Gb/s, 3dBm, 6.5dBm, -30dBm, Straight LC, SMF, 80km	

BOM Number	Order Name	Description	Remarks
02312NDL	CFP2-Coherent-DCO-100G-SM	High Speed Transceiver,CFP2,C extend band tunable,50GHz ITU grid,134.7Gbit/s,-10dBm,1dBm,-30dBm,LC,SMF	

50Gbps Optical Transceiver

BOM Number	Order Name	Description	Remarks
02311YNR	OSL010N01	High Speed Transceiver,QSFP28,1311nm,50Gb/s,-4dBm,4.2dBm,-8.8dBm,LC,SMF,10km	
02312AXF	QSFP28-50G-1311nm-40km-SM	High Speed Transceiver,QSFP28,1310nm,53.125G,1.5dBm,8dBm,-15dBm,Stright LC,SMF,40km	
02312MLF	QSFP28-50G-1310nm-80km-SM	High Speed Transceiver,QSFP28,1311nm,50G,two-fiber bidirectional,80km	
02312EVV	QSFP28-50G-BIDI-10km-SM-1	BiDi Transceiver,QSFP28,1331nm(TX)/1271nm(RX),50G,-4.5dBm,4.2dBm,-8.9dBm,LC,10km	
02312EVW	QSFP28-50G-BIDI-10km-SM-2	BiDi Transceiver,QSFP28,1271nm(TX)/1331nm(RX),50G,-4.5dBm,4.2dBm,-8.9dBm,LC,10km	
02312EVX	QSFP28-50G-BIDI-40km-SM-2	BiDi Transceiver,QSFP28,1295nm(TX)/1309nm(RX),50G,1.5dBm,8dBm,-13.5dBm,LC,40km	
02312EVY	QSFP28-50G-BIDI-40km-SM-1	BiDi Transceiver,QSFP28,1309nm(TX)/1295nm(RX),50G,1.5dBm,8dBm,-13.5dBm,LC,SMF,40km	

40Gbps Optical Transceiver

BOM Number	Order Name	Description	Remarks
02310WUT	OMXD30009	High Speed Transceiver,QSFP+,1310nm,41.25Gbps,-7dBm,2.3dBm,-11.5dBm,LC,SMF,10km	
02310WUU	OMXD30010	High Speed Transceiver,QSFP+,850nm,41.25Gbps,-7.6dBm,0.5dBm,-9.5dBm,MPO,MMF,0.15km	
02311NUA	OSM010N11	High Speed Transceiver,QSFP+,1310,41.25Gbps,-8.2dBm,0.5dBm,-12.6dBm,MPO,SM,10km	

25Gbps SFP28 Optical Transceiver

BOM Number	Order Name	Description	Remarks
02312PDL	SFP28-25G-1310nm-10km-SM	High Speed Transceiver,SFP28,1310nm,25G,-7dBm,2dBm,-11.3dBm,LC,SMF,10km	
02312PDK	SFP28-25G-850nm-0.1km-MM	High Speed Transceiver,SFP28,850nm,25G,-8.4dBm,2.4dBm,-10.3dBm,LC,MM,0.1km	
02312TVC	SFP28-25G-BIDI-10km-SM-3	BiDi Transceiver,SFP28,1270nm(Tx)/1330nm(Rx),25Gb/s,-4dBm,2dBm,-10.3dBm,LC,10km,-40~85degc	
02312TXG	SFP28-25G-BIDI-10km-SM-4	BiDi Transceiver,SFP28,1330nm(Tx)/1270nm(Rx),25Gb/s,-4dBm,2dBm,-10.3dBm,LC,10km,-40~85degc	
34061940-001	SFP28-25G-1310nm-300m-SM	High Speed Transceiver,SFP28,1310nm,25G,-7dBm,2dBm,-10.5dBm,LC,SMF,0.3km	

10Gbps SFP+ Optical Transceiver

BOM Number	Order Name	Description	Remarks
S4017482	OSX040N03	Optical Transceiver(SFP+,850nm,10Gb/s,-7.3~-1dBm,-11.1dBm,LC, MM,0.3km)	
S4017483	OSX001002	Optical Transceiver(SFP+,1310nm,10Gb/s,-8.2~0.5dBm,-12.6dBm,LC,SM,10km)	
S4017484	OMXD30002	Optical Transceiver(SFP+,1550nm,9.95~11.1Gb/s,-4.7~4dBm,-14.1dBm,LC,SM,40km)	
02310PVU	OSX080N04	Optical Transceiver(SFP+,1550nm,9.953~10.3125Gb/s,0~4dBm,-24dBm,LC,SM,80km)	

1.25/9.953/10.3125Gbps SFP+ Optical Transceiver

BOM Number	Order Name	Description	Remarks
34061042	OSX010N13	XFP SFP+ Transceiver-SFP+-1310nm-10G/1G--8.2dbm-0.5dbm-Single-mode-14.4dbm-LC-10km	

1.25Gbps eSFP Optical Transceiver

BOM Number	Order Name	Description	Remarks
S4017307	OMGD50N02	Optical Transceiver(eSFP,850nm,2.125Gb/s(Multi rate),-9.5~-2.5dBm,-17dBm,LC,MM,0.5km)	
S4016067	OSG010N05	Optical transceiver(eSFP,1310nm,1.25Gb/s,-9~-3dBm,-20dBm,LC,Single Mode,10km)	

BOM Number	Order Name	Description	Remarks
S4016954	OSG040002	Optical Transceiver(eSFP,1310nm,1.25Gb/s,-5~0dBm,-23dBm,LC,SM,40km)	
02310RAW	OSG080N01	Optical Transceiver,eSFP,1550nm,1.25Gb/s,-2~5dBm,-23dBm,LC,SM,80km	

1.25Gbps eSFP BIDI Optical Transceiver

BOM Number	Order Name	Description	Remarks
34060470	SFP-GE-LX-SM1310-BIDI	Optical Transceiver,ESFP,Tx1310/Rx1490,1.25Gb/s,-3dBm,-9dBm,-19.5dBm,LC,Single Mode,10km	
34060475	SFP-GE-LX-SM1490-BIDI	Optical Transceiver,ESFP,Tx1490/Rx1310,1.25Gb/s,-3dBm,-9dBm,-19.5dBm,LC,Single Mode,10km	
34060539	OGEBIDI41	Optical Transceiver,eSFP,1310nm(Tx)/1490nm(Rx),1.25Gb/s,-2dBm,3dBm,-23dBm,LC,SM,40km	
34060540	OGEBIDI40	Optical Transceiver,eSFP,1490nm(Tx)/1310nm(Rx),1.25Gb/s,-2dBm,3dBm,-23dBm,LC,SM,40km	

1.25Gbps CSFP BIDI Optical Transceiver

BOM Number	Order Name	Description	Remarks
02312WHD	O00CSFP25	BiDi Transceiver,CSFP,1490(Tx)/1310(Rx)nm,1.25Gb/s,-9dBm,-3dBm,-19.5dBm,LC,SM,10km	
02312WHC	OSG010007	BiDi Transceiver,CSFP,1310(Tx)/1490(Rx)nm,1.25Gb/s,-9dBm,-3dBm,-24dBm,LC,SMF,10km	
02312WHA	OSG040008	BiDi Transceiver,CSFP,Tx1490/Rx1310nm,1.25G,-5dBm,0dBm,-25dBm,LC(-40~85),SM,40km	
02312WHA	OSG010005	Integrated Optical Transmitting and Receiving Module,CSFP,Transmitting:1490nm,Receiving:1310nm,1.25Gb/s,-9.0dBm,-3.0dBm,-24dBm,LC,GE/FE autonegotiation	

1Gbps Electrical Transceiver

BOM Number	Order Name	Description	Remarks
02310VPT	OEGD01N02	Optical functional module,1000BASE-T -SFP RJ45Electrical Module,Auto Negotiate,100m ,-40~85degC	

622M SFP/eSFP Optical Transceiver

BOM Number	Order Name	Description	Remarks
S4015760	OSH015N05	Optical Transceiver(eSFP,1310nm,STM4,-15dBm~-8dBm,-30dBm,Singlemode,LC,15Km)	
S4015713	eSFP-1310nm-L-4.1	Optical Transceiver(eSFP,1310nm,STM4,-3dBm~2dBm,-30dBm,Singlemode,LC,40km)	
02310QXT	OSH080N01	Optical Transceiver,eSFP,1550nm,STM4,-3~2dBm,-30dBm,LC,SM,80km	

155Mbps eSFP Optical Transceiver

BOM Number	Order Name	Description	Remarks
S4015755	eSFP-FE-LX-SM1310	Optical Transceiver(eSFP,1310nm,STM1,-15dBm~-8dBm,-31dBm,Singlemode,LC,15Km)	
S4015715	eSFP-FE-LH40-SM1310	Optical Transceiver(eSFP,1310nm,STM1,-5dBm~0dBm,-37dBm,Singlemode,LC,40Km)	
S4015716	eSFP-FE-LH80-SM1550	Optical Transceiver(eSFP,1550nm,STM1,-5dBm~0dBm,-37dBm,Singlemode,LC,80Km)	

155Mbps eSFP BIDI Optical Transceiver

BOM Number	Order Name	Description	Remarks
02310QNG	OSC015B01	Optical transceiver,eSFP,Tx 1310nm/Rx 1550nm,155M,-8dBm,-15dBm,-32dBm,LC/PC,SM,15km	
02310QNH	OSC015B02	Optical transceiver,eSFP,Tx 1550nm/Rx 1310nm,STM1,-8dBm,-15dBm,-32dBm,LC/PC,SM,15km	

PCM Subcard Matching Module

BOM Number	Order Name	Description	Remarks
34060588	OSC002B01	Optical Transceiver,eSFP,1310nm,2.048Mb/s,-15dBm,-8dBm,-26dBm,LC,SM,2km	

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 8000 M8 routers, visit <https://e.huawei.com> or contact us by doing any of the following:

- Contacting one of our global branches: <https://e.huawei.com/en/service-hotline>
 - Logging into the Huawei Enterprise technical support web: <https://support.huawei.com/enterprise/>
 - Sending an email to the customer service mailbox: support_e@huawei.com
-

Copyright © Huawei Technologies Co., Ltd. 2021. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

Trademarks and Permissions

 HUAWEI and other Huawei trademarks are trademarks of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

Notice

The purchased products, services and features are stipulated by the contract made between Huawei and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

Huawei Technologies Co., Ltd.

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

Website:www.huawei.com