

NE40E-M2H Configuration Help

1. New site or Expansion

This parameter is used to choose to purchase a new chassis or the old chassis only expand LPU or upgrade software. If you want to purchase a new chassis, select "New site". If the software upgrade of the different version or the old chassis only expand LPU, select "Expansion".

2. Please select the version

Please confirm the corresponding iManager version is correct when you select the version:

V800R009C10: the corresponding iManager U2000 version is V200R017C50 or later;

V800R010C10: the corresponding iManager U2000 version is V200R018C50 or later;

3. Please select the version that after upgrading

Please confirm the corresponding iManager version is correct when you select the version:

V800R009C10: the corresponding iManager U2000 version is V200R017C50 or later;

V800R010C10: the corresponding iManager U2000 version is V200R018C50 or later;

4. Need the PPPoE/IPoE function or not(just for filtering license)

This parameter is used to filtered PPPoE/IPoE function; If Yes is selected, the license(per chassis) parameters that support PPPoE/IPoE will be display; if No is selected, the license parameters that support PPPoE/IPoE will be filtered out.

5. Need basic software CD or not

The basic software has been loaded on the equipment, and can be downloaded from <http://support.huawei.com>. The CD is not delivered by default. If the CD is required by customer, please choose 'YES'.

6. ===Basic Configuration===

o 6.1 Please select the Portfolio Quotation of Basic Configuration

Basic Configuration includes Chassis, 26*10GE-SFP+ and 2*10GE/18*GE-SFP Combo interface, Dual DC Powers, excludes Software Charge and Document. Each chassis supports 2 subcard slots.

- **6.2 Need 100G interface card or not**

Considering the cost and price, the 4*10GE interface card is with larger profitability than 10*10GE/1*100GE, so we suggest use 4*10GE at present, if the 10*10GE/1*100GE are not indispensable.

- **6.3 Need DC PDU or not**

This PDU can support 4 chassis, Power cable will be configured according to fully loaded condition

7. ===High Speed Card===

- **7.1 20-Port 100/1000Base-X-CSFP/10-Port 100/1000Base-X-SFP Physical Interface Card(PIC)**

1. 20*GE CSFP card can be configured with both CSFP and SFP transceiver. Each CSFP transceiver can be work as 2 GE mode, while each SFP transceiver only work as 1 GE mode.

2. Don't support Electrical Transceiver.

8. ===Low Speed Card===

- **8.1 4-Port Channelized STM-1c POS-SFP Physical Interface Card(PIC)**

Need configure 155M SFP/eSFP Optical Transceiver.

- **8.2 4-Port OC-3c/STM-1c POS-SFP Flexible Interface Card(FIC)**

Need configure 155M SFP/eSFP Optical Transceiver.

- **8.3 2-Port OC-3c/STM-1c (or 1-Port OC-12c/STM-4C) POS-SFP Physical Interface Card(PIC)**

Need configure 155M or 622M SFP/eSFP Optical Transceiver.

9. ===Need Multiplexing & Demultiplexing Card or not===

Pls consult marketing technique or MO before using CWDM/DWDM card, as the R&D need to estimate your network solution.

10. ===Multiplexing & Demultiplexing Card===

- **10.1 8-Channel Multiplexing & Demultiplexing Card**

1. This card does not need to configure Optical Transceiver.

2. The port connected with demultiplexing-port must configure CWDM Optical Transceiver.

3. Multiplexing & Demultiplexing Card contains 1-channel Multiplexing and 8-channel Demultiplexing. Each channel needs 2 PCS patch cords.

- **10.2 4-Channel CWDM Optical Add/Drop Multiplexing (1551/1571/1591/1611nm) Physical Interface Card(PIC)**

1. This card does not need to configure Optical Transceiver, It must be CWDM optical transceivers on the opposite side to connect to this card;
2. There are 4 demultiplexing ports and 1 interconnection port (MI & MO) in each card, accordingly the opposite side should be configured with 4 PCS CWDM optical transceivers (1551nm/1571nm/1591nm/1611nm), and 2 PCS optical patch cords internal-side(14130667) for each port.
3. 2 PCS optical patch outward-side cords are needed for each card.

- **10.3 4-Channel CWDM Optical Add/Drop Multiplexing (1471/1491/1511/1531nm) Physical Interface Card(PIC)**

1. This card does not need to configure Optical Transceiver, It must be CWDM optical transceivers on the opposite side to connect to this card;
2. There are 4 demultiplexing ports and 1 interconnection port (MI & MO) in each card, accordingly the opposite side should be configured with 4 PCS CWDM optical transceivers (1471nm/1491nm/1511nm/1531nm), and 2 PCS optical patch cords internal-side(14130667) for each port.
3. 2 PCS optical patch outward-side cords are needed for each card.

- **10.4 Bidirectional 2-Channel CWDM Optical Add/Drop Multiplexing (1591/1611nm) Physical Interface Card(PIC)**

1. This card does not need to configure Optical Transceiver.
2. There are 4 demultiplexing ports in each card, accordingly need 2 PCS CWDM optical transceivers with 1591nm wavelength, 2 PCS optical transceiver with 1611nm, and 2 PCS optical patch cord internal-side(14130667) for each transceiver.
3. 4 PCS optical patch cords outward-side are needed for each card.

- **10.5 Bidirectional 2-Channel CWDM Optical Add/Drop Multiplexing (1551/1571nm) Physical Interface Card(PIC)**

1. This card does not need to configure Optical Transceiver.
2. There are 4 demultiplexing ports in each card, accordingly need 2 PCS CWDM optical transceivers with 1551nm wavelength, 2 PCS optical transceiver with 1571nm, and 2 PCS optical patch cord internal-side(14130667) for each transceiver.
3. 4 PCS optical patch cords outward-side are needed for each card.

- **10.6 Bidirectional 2-Channel CWDM Optical Add/Drop Multiplexing (1511/1531nm) Physical Interface Card(PIC)**

- 1.This card does not need to configure Optical Transceiver.
- 2.There are 4 demultiplexing ports in each card, accordingly need 2 PCS CWDM optical transceivers with 1511nm wavelength, 2 PCS optical transceiver with 1531nm, and 2 PCS optical patch cord internal-side(14130667) for each transceiver.
3. 4 PCS optical patch cords outward-side are needed for each card.

- **10.7 Bidirectional 2-Channel CWDM Optical Add/Drop Multiplexing (1471/1491nm) Physical Interface Card(PIC)**

- 1.This card does not need to configure Optical Transceiver.
- 2.There are 4 demultiplexing ports in each card, accordingly need 2 PCS CWDM optical transceivers with 1471nm wavelength, 2 PCS optical transceiver with 1491nm, and 2 PCS optical patch cord internal-side(14130667)for each transceiver.
- 3.4 PCS optical patch cords outward-side are needed for each card.

- **10.8 Bidirectional 1-Channel CWDM Optical Add/Drop Multiplexing (1611nm) Physical Interface Card(PIC)**

- 1.This card does not need to configure Optical Transceiver.
- 2.There are 2 demultiplexing ports in each card, accordingly need 2 PCS CWDM optical transceivers with 1611nm wavelength, and 2 PCS optical patch cord internal-side (14130667)for each transceiver.
- 3.4 PCS optical patch cords outward-side are needed for each card.

- **10.9 Bidirectional 1-Channel CWDM Optical Add/Drop Multiplexing (1591nm) Physical Interface Card(PIC)**

- 1.This card does not need to configure Optical Transceiver.
- 2.There are 2 demultiplexing ports in each card, accordingly need 2 PCS CWDM optical transceivers with 1591nm wavelength, and 2 PCS optical patch cord internal-side (14130667)for each transceiver.
- 3.4 PCS optical patch cords outward-side are needed for each card.

- **10.10 Bidirectional 1-Channel CWDM Optical Add/Drop Multiplexing (1571nm) Physical Interface Card(PIC)**

- 1.This card does not need to configure Optical Transceiver.
- 2.There are 2 demultiplexing ports in each card, accordingly need 2 PCS CWDM optical transceivers with 1571nm wavelength, and 2 PCS optical patch cord internal-side (14130667)for each transceiver.
- 3.4 PCS optical patch cords outward-side are needed for each card.

- **10.11 Bidirectional 1-Channel CWDM Optical Add/Drop Multiplexing (1551nm) Physical Interface Card(PIC)**

- 1.This card does not need to configure Optical Transceiver.
- 2.There are 2 demultiplexing ports in each card, accordingly need 2 PCS CWDM optical transceivers with 1551nm wavelength, and 2 PCS optical patch cord internal-side(14130667)for each transceiver.
- 3.4 PCS optical patch cords outward-side are needed for each card.

- **10.12 Bidirectional 1-Channel CWDM Optical Add/Drop Multiplexing (1531nm) Physical Interface Card(PIC)**

- 1.This card does not need to configure Optical Transceiver.
- 2.There are 2 demultiplexing ports in each card, accordingly need 2 PCS CWDM optical transceivers with 1531nm wavelength, and 2 PCS optical patch cord internal-side(14130667)for each transceiver.
- 3.4 PCS optical patch cords outward-side are needed for each card.

- **10.13 Bidirectional 1-Channel CWDM Optical Add/Drop Multiplexing (1511nm) Physical Interface Card(PIC)**

- 1.This card does not need to configure Optical Transceiver.
- 2.There are 2 demultiplexing ports in each card, accordingly need 2 PCS CWDM optical transceivers with 1511nm wavelength, and 2 PCS optical patch cord internal-side(14130667)for each transceiver.
- 3.4 PCS optical patch cords outward-side are needed for each card.

- **10.14 Bidirectional 1-Channel CWDM Optical Add/Drop Multiplexing (1491nm) Physical Interface Card(PIC)**

- 1.This card does not need to configure Optical Transceiver.
- 2.There are 2 demultiplexing ports in each card, accordingly need 2 PCS CWDM optical transceivers with 1491nm wavelength, and 2 PCS optical patch cord internal-side(14130667)for each transceiver.
- 3.4 PCS optical patch cords outward-side are needed for each card.

- **10.15 Bidirectional 1-Channel CWDM Optical Add/Drop Multiplexing (1471nm) Physical Interface Card(PIC)**

- 1.This card does not need to configure Optical Transceiver.
- 2.There are 2 demultiplexing ports in each card, accordingly need 2 PCS CWDM optical transceivers with 1471nm wavelength, and 2 PCS optical patch cord internal-side(14130667)for each transceiver.
- 3.4 PCS optical patch cords outward-side are needed for each card.

11. ===1G SFP/eSFP Optical/Electrical Transceiver===

- **11.1 1000BASE-T (RJ45) SFP Electrical Module,Auto Negotiate,100m**

It can support 10M/100M/1000M self-adjustment,not support 1588v2.

12. **===BiDi eSFP Optical Transceiver===**

- 12.1 **BiDi Transceiver,eSFP,Tx1310/Rx1550,155M,LC,SM,40km**

This Optical Transceiver only uses for FE BiDi 40KM,can not used for GE.

- 12.2 **BiDi Transceiver,eSFP,Tx1550/Rx1310,155M,LC,SM,40km**

This Optical Transceiver only uses for FE BiDi 40KM,can not used for GE.

13. **==== RTU PORT LICENSE =====**

- 13.1 **Please input the quantity of the 50GE Bandwidth Expansion License**

The second port of 2*50GE card is disabled by default,each license of 50GE Bandwidth Expansion is used for enable one 50GE port.

14. **===License(The Base Software is provided automatically)===**

- 14.1 **Need L3VPN&EVPN Function License or not**

L2EVPN is support from V8R8C10, and L2EVPN does NOT need license;
L3EVPN is support from V8R10C10, need L3VPN&EVPN license to enable.

- 14.2 **Need PPPoE/IPoE Function License or not**

Optional, each chassis only need 1 license.

- 14.3 **Need L2TP Function License or not**

Must configure"NE40E-M2 Series PPPoE/IPoE Function License"first.

- 14.4 **Need EDSG function or not**

Must configure"NE40E-M2 Series PPPoE/IPoE Function License"first.

- 14.5 **Need Series DAA Function License or not**

Must configure"NE40E-M2 Series PPPoE/IPoE Function License"first.

- 14.6 **Need Virtual Access client license or not**

Work as the client of X3X8X16, used for port expansion.

- 14.7 **Please input the quantity of the BRAS function access subscribers(K)**

- 1.Optional, at most 32K for each chassis.
- 2.Must configure "NE40E-M2 Series PPPoE/IPoE Function License"first.

- **14.8 Please input the quantity of OTT Service Boost Quantity License Annual Fee(per 1k OTT services)**

- 1.Optional, at most 32K for each chassis.
2. NOT bound with "NE40E-M2 Series EDSG Function License"

- **14.9 Please input the quantity of the FlexEth Function License(per 50GE)**

This license is used to enable Flexible Ethernet function, each license for 50GE bandwidth, so it need 2 FlexE license for 100GE port.

- **14.10 Please input the quantity of FlexEth Function License(per 100GE)**

- 1.This license is used to enable Flexible Ethernet function, each license support 100GE bandwidth.
- 2.Used with 1*100G CFP2 card.

15. ===Patch Cord===

- **15.1 Please select the client interface option of patch cord**

Default FC,10m.If need other specification,Please change it at "Bill of Configuration".

- **15.2 Please input the quality of demultiplexing port of this equipment**

1. This parameter is used for calculating the quantity of patch cords of demultiplexing-port;
2. Port number:
8-Channel Multiplexing & Demultiplexing Card (03030RJQ): 1 port must be configured at least, and 8 ports at most;
4-Channel CWDM Optical Add/Drop Multiplexing Physical Interface Card: 4 ports must be configured;
Bidirectional 2-Channel CWDM Optical Add/Drop Multiplexing Physical Interface Card: 4 ports must be configured;
Bidirectional 1-Channel CWDM Optical Add/Drop Multiplexing Physical Interface Card: 2 ports must be configured;
3. The port connected with demultiplexing-port must configure CWDM Optical Transceiver. Please refer to the HELP info.

- **15.3 Please select the length of 40G MPO Patch Cord**

40G MPO optical module use this fiber

16. ===Trunk Cable===

o 16.1 Please select synchronous signal type

The device can supply Clock signal("2M primary clock")or 1588v2 signal("1PPS+TOD signal" or "DCLS signal").If need Clock signal,please configure E1 cable.If need 1588v2 signal,made network cable on site.Any question ,please refer to Configuration Manual or contact developer.

o 16.2 Need to configure the synchronous signal input cable or not

Need to configure this cable, while need to input "2M Primary Clock".

o 16.3 Need to configure the synchronous signal output cable or not

Need to configure this cable, while need to output "2M Primary Clock".

o 16.4 Please select the type of network cable for GE/FE electrical interface

The illustration of ElectroMagnetic Compatibility:

- 1.Unshielded RJ45 cable meet basic level of EMC certification only.
- 2.Shielded RJ45 cable can support Class B and higher level of ElectroMagnetic Immunity.

17. ===Power Cable===

o 17.1 Please input the length of each PDU DC power cable (m)

- 1.If you need configure PDU,this parameter means the length of the DC power cable which connect the PDU to a Power Distribution Frame(PDF).The PDU DC Power cable length is usually between 0m and 35m, the initial length is 15m. If it is longer than 35m, need to deploy the first power cabinet of a row nearby to reduce the length.
- 2.DC power cable length from PDU to device is calculated automatically in Bill of Configuration, the initial length is 3m.
- 3.By default, Huawei provides blue cables (-48V) and black cables (GND), and cables of the other colors need to be remarked for purchase, and determine whether to purchase locally according to the actual situation.

o 17.2 Please input the length of each equipment DC power cable (m)

- 1.This parameter means the length of the DC power cable which connect the chassis to a Power Distribution Frame(PDF),or the chassis to a Power Distribution Unit(PDU) within a cabinet.
- 2.In the case of getting electricity from a PDF, 15m cable is used by default.
- 3.In the case of getting electricity from PDU, 3m cable is generally used.
- 4.By default, Huawei provides blue cables (-48V) and black cables (GND), and cables

of the other colors need to be remarked for purchase, and determine whether to purchase locally according to the actual situation.

- 17.3 **Please select the type of C13 power cable**

- 1.PDU:Power Distribution Unit, the special main jack for the rack.
- 2.If the main jack in the rack is C13SF(as shown in figure), please select ""C13 PDU"" in the option ""Select the type of C13 power cable"", otherwise select ""ordinarily C13"".
- 3.A matching AC power cable is provided only when the AC power module is configured (or the device has the AC power module).



C13 PDU SF

Power Socket



PDU Cable C13-

C14

- 17.4 **Please select the type of C13 AC power cable**

Please select the right type of AC power cable according to the actual situation.



BS546



C13Argentina



C13Australia



C13Brazil



C13Britain



C13China



C13Denmark



C13Europe



South Africa



C13India



C13Italy



C13Japan



C13Korea



C13North America



C13Switzerland



C13UKS(angled)

- **17.5 Please select the type of C13 PDU power cable**

- 1.The recommended value is the power cable type allowed in the specific country. Do not change this value unless a specific power cable type is required.
- 2.A matching AC power cable is provided only when the AC power module is configured (or the device has the AC power module).

- **17.6 Please input the length of PDU PGND cable (m)**

- 1.The initial PDU PGND cable length for DC Power is 3m.
- 2.Device PGND cable length is calculated automatically in Bill of Configuration, the initial length is 3m.
- 3.By default, Huawei provides yellow and green cables (PGND), and cables of the other colors need to be remarked for purchase, and determine whether to purchase locally according to the actual situation.

- **17.7 Please input the length of each equipment PGND cable (m)**

- 1.The initial device PGND cable length is 15m.
- 2.By default, Huawei provides yellow and green cables (PGND), and cables of the other colors need to be remarked for purchase, and determine whether to purchase locally according to the actual situation.