

NE20E-S8A Configuration Help

1. New site or Expansion

This parameter is used for choosing the type of purchase: a new device or expand LPU/upgrade software for the device .

New site: If you want to purchase a new device , please select "New site".

Expansion: If the software upgrade of the different version or expand LPU for the old chassis, please select "Expansion".

2. Please select the version

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

V800R008: the corresponding iManager U2000 version is V200R016C50 or later;
eSight version is V300R006C00 or later.

V800R009: the corresponding iManager U2000 version is V200R017C50 or later.

V800R010: the corresponding iManager U2000 version is V200R018C50 or later.

V800R011: the corresponding iManager U2000 version is V200R018C60 or later.

3. Please select the version that after upgrading

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

V800R008: the corresponding iManager U2000 version is V200R016C50 or later;
eSight version is V300R006C00 or later.

V800R009: the corresponding iManager U2000 version is V200R017C50 or later.

V800R010: the corresponding iManager U2000 version is V200R018C50 or later.

V800R011: the corresponding iManager U2000 version is V200R018C60 or later.

4. Please input slots of Expansion(Separate multiple slots with a comma,example:1,2,3)

Please input slots of Expansion(Separate multiple slots with a comma,example:1,2,3)

5. Need the PPPoE/IPoE function or not(just for filtering card and license)

This parameter is used to filter PPPoE/IPoE function card and license:

If Yes is selected, the license(per chassis) parameters that support PPPoE/IPoE will be displayed, and the board that don't support PPPoE/IPoE will be filtered out and hidden.

If No is selected, the license parameters that support PPPoE/IPoE will be filtered out and hided.

6. Need Basic Software CD or not

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

7. ===Software Subscription and Support Service===

o 7.1 Please Select Quote Scene

1. First signed: when the customer firstly purchase the software, the license and the SnS must be bought together at the same time; there are two choices for the SnS, 1 year or 3 years or 5 years; for the first sign, the SnS must be bought at least 1 year.

2. Expansion: if the customer purchase the new software at the basis of the existing licenses in the current network, the new license and the SnS must be bought together at the same time; the available time of the expanded new license should be equal to the rest time of the existing licenses in the current network, which means both of them will expire at the same time; If the available time of the expanded new license is less than 1 year or 3 years or 5 years , there will be business discounted.

3. Renew: Only the SnS is necessary to be bought, however, all the license in current network need to be renewed. Period for renew can be chose as 1 year or 3 years or 5 years.

o 7.2 Annual Fee Start Rule

Set absolute input time in the configurator as Start Time

o 7.3 Annual Fee Start Date

Start date should not be later than 90 days after today.

8. ===Basic Configuration===

o 8.1 Please select the Portfolio Quotation of Basic Configuration

1. The basic configuration includes Chassis, 2*MPUE1, 2*Power, Power cord/PGND cable, but no NSP, Software Charge and Document.

2. The DC basic configuration includes DC Power cord (3m) and PGND cable (3m). The AC basic configuration includes PGND cable (3m).

o 8.2 Please select the type of NSP

1. It can be configured 2 PCS at most.

2. If configured NSP-D, the red sub-slot (No.5-No.8) can not support low speed card.

20G	20G	40G	40G	200G	200G
40G	40G	40G	40G	100G	100G
NSP-A/NSP-B		NSP-C		NSP-D	
NSP-A/NSP-B		NSP-C		NSP-D	
40G	40G	40G	40G	100G	100G
20G	20G	100G	100G	100G	100G



Network Service

Processor(NSP-A)



Network Service

Processor(NSP-B)

o 8.3 Please select the type of NSP after upgrading

1. It can be configured 2 PCS at most.
2. If configured NSP-D, the red sub-slot (No.5-No.8) cannot support low speed card.

20G	20G	40G	40G	200G	200G
40G	40G	40G	40G	100G	100G
NSP-A/NSP-B		NSP-C		NSP-D	
NSP-A/NSP-B		NSP-C		NSP-D	
40G	40G	40G	40G	100G	100G
20G	20G	100G	100G	100G	100G

o 8.4 Please select the quantity of NSP

Double NSPs are suggested for 1:1 backup.

o 8.5 Need DC PDU or not

1. Including DC PDU and PGND cable, without power cable(the length of power cable is calculated automatically);

2.The PDU can support 4 chassis. The quantity of power cable which connect the PDU to PDF(Power Distribution Frame) is calculated with total chassis by default.

○ **8.6 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

○ **8.7 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



Denmark C13-C13



C13Europe



South Africa



C13India



C13Italy



C13Japan



Korea C13-C13



C13North America



C13Switzerland



C13UKS(angled)

- **8.8 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).

- **8.9 Please select the type of power before upgrading**

NSP-D MUST be used with 2400W power module for S8A/S16A AC equipment, but before V8R10 the AC bundle is bound with 1600W power, so MUST replace AC power module when upgrade to NSP-D for the exsiting AC S8A/S16A equipment.

- **8.10 The quantity of AC Power PAC2400D5303-CL**

NSP-D MUST be used with 2400W power module for S8A/S16A AC equipment, but before V8R10 the AC bundle is bound with 1600W power, so MUST replace AC power module when upgrade to NSP-D for the exsiting AC S8A/S16A equipment.

- **8.11 Please select the type of C19 power cable**

1.PDU:Power Distribution Unit, the special main jack for the rack.

2.If the main jack is C19SF(as shown in figure), please select ""C19 PDU"" in the option ""Select the type of C19 power cable"", otherwise select ""ordinarily C19"".

3.A matching AC power cable is provided only when the AC power module is configured (or the device has the AC power module).



C19 PDU SF

Power Socket



PDU Cable C19-

C20

- 8.12 **Please select the type of C19 AC power cable**

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



Australia



Brazil



Britain



BS546



China



Europe



South Africa



Japan



North America



Switzerland

○ **8.13 Please select the type of C19 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).

○ **8.14 Total ports of all card**

Each chassis can support 118 ports for NSP-A/NSP-B/NSP-C/NSP-D. Expansion, the max number of ports for each chassis needs to include the existing network.

9. **===Interface Card===**

o 9.1 **Please read the help about old version DB upgrading**

In the old version datapackage, the cards configuration are not designed by slot.so when you configure project with old version datapackage and upgrade it, the cards will be lost. Please configure the cards anew.

o 9.2 **(Slot 1) select the interface card which you needed**

1.-E card mainly used in PPPOE scenario. 2.-H card mainly used in IP hard pipe scenario.

20G	20G	10G	10G	20G	20G
20G	20G	20G	20G	40G	40G
20G	20G	20G	20G	100G	100G
2G	2G	100G	100G	100G	100G
NSP-A/NSP-B		NSP-C		NSP-D	
NSP-A/NSP-B		NSP-C		NSP-D	
2G	2G	40G	40G	100G	100G
20G	20G	20G	20G	100G	100G
20G	20G	20G	20G	20G	20G
Slot1:20G	20G	Slot1:10G	10G	Slot1:20G	20G

o 9.3 **(Slot 2) select the interface card which you needed**

1.-E card mainly used in PPPOE scenario. 2.-H card mainly used in IP hard pipe scenario.

20G	20G	10G	10G	20G	20G
20G	20G	20G	20G	40G	40G
20G	20G	20G	20G	100G	100G
2G	2G	100G	100G	100G	100G
NSP-A/NSP-B		NSP-C		NSP-D	
NSP-A/NSP-B		NSP-C		NSP-D	
2G	2G	40G	40G	100G	100G
20G	20G	20G	20G	100G	100G
20G	20G	20G	20G	20G	20G
20G	Slot2:20G	10G	Slot2:10G	20G	Slot2:20G

o 9.4 (Slot 3) select the interface card which you needed

1.-E card mainly used in PPPOE scenario. 2.-H card mainly used in IP hard pipe scenario.

20G	20G	10G	10G	20G	20G
20G	20G	20G	20G	40G	40G
20G	20G	20G	20G	100G	100G
2G	2G	100G	100G	100G	100G
NSP-A/NSP-B		NSP-C		NSP-D	
NSP-A/NSP-B		NSP-C		NSP-D	
2G	2G	40G	40G	100G	100G
20G	20G	20G	20G	100G	100G
Slot3:20G	20G	Slot3:20G	20G	Slot3:20G	20G
20G	20G	10G	10G	20G	20G

o 9.5 (Slot 4) select the interface card which you needed

1.-E card mainly used in PPPOE scenario. 2.-H card mainly used in IP hard pipe scenario.

20G	20G	10G	10G	20G	20G
20G	20G	20G	20G	40G	40G
20G	20G	20G	20G	100G	100G
2G	2G	100G	100G	100G	100G
NSP-A/NSP-B		NSP-C		NSP-D	
NSP-A/NSP-B		NSP-C		NSP-D	
2G	2G	40G	40G	100G	100G
20G	20G	20G	20G	100G	100G
20G	Slot4:20G	20G	Slot4:20G	20G	Slot4:20G
20G	20G	10G	10G	20G	20G

o 9.6 (Slot 5) select the interface card which you needed

1.-E card mainly used in PPPOE scenario. 2.-H card mainly used in IP hard pipe scenario.

20G	20G	10G	10G	20G	20G
20G	20G	20G	20G	40G	40G

20G	20G	20G	20G	100G	100G
2G	2G	100G	100G	100G	100G
NSP-A/NSP-B		NSP-C		NSP-D	
NSP-A/NSP-B		NSP-C		NSP-D	
2G	2G	40G	40G	100G	100G
Slot5:20G	20G	Slot5:20G	20G	Slot5:100G	100G
20G	20G	20G	20G	20G	20G
20G	20G	10G	10G	20G	20G

o 9.7 (Slot 6) select the interface card which you needed

1.-E card mainly used in PPPOE scenario. 2.-H card mainly used in IP hard pipe scenario.

20G	20G	10G	10G	20G	20G
20G	20G	20G	20G	40G	40G
20G	20G	20G	20G	100G	100G
2G	2G	100G	100G	100G	100G
NSP-A/NSP-B		NSP-C		NSP-D	
NSP-A/NSP-B		NSP-C		NSP-D	
2G	2G	40G	40G	100G	100G
20G	Slot6:20G	20G	Slot6:20G	100G	Slot6:100G
20G	20G	20G	20G	20G	20G
20G	20G	10G	10G	20G	20G

o 9.8 (Slot 7) select the interface card which you needed

1.-E card mainly used in PPPOE scenario. 2.-H card mainly used in IP hard pipe scenario.

20G	20G	10G	10G	20G	20G
20G	20G	20G	20G	40G	40G
20G	20G	20G	20G	100G	100G
2G	2G	100G	100G	100G	100G
NSP-A/NSP-B		NSP-C		NSP-D	
NSP-A/NSP-B		NSP-C		NSP-D	
Slot7:2G	2G	Slot7:40G	40G	Slot7:100G	100G

20G	20G	20G	20G	100G	100G
20G	20G	20G	20G	20G	20G
20G	20G	10G	10G	20G	20G

- o 9.9 (Slot 8) select the interface card which you needed

1.-E card mainly used in PPPOE scenario. 2.-H card mainly used in IP hard pipe scenario.

20G	20G	10G	10G	20G	20G
20G	20G	20G	20G	40G	40G
20G	20G	20G	20G	100G	100G
2G	2G	100G	100G	100G	100G
NSP-A/NSP-B		NSP-C		NSP-D	
NSP-A/NSP-B		NSP-C		NSP-D	
2G	Slot8:2G	40G	Slot8:40G	100G	Slot8:100G
20G	20G	20G	20G	100G	100G
20G	20G	20G	20G	20G	20G
20G	20G	10G	10G	20G	20G

10. ===100G CFP2 Optical Transceiver===

- o 10.1 High Speed Transceiver,CFP2,1310nm,103.125Gb/s,Straight LC,SMF,40km,OMA,100GBASE-ER4

Production period is longer than 90 days. Please contact chief supply officer Lintao 00369640 before quotation, to check if the stocking quantity is sufficient.

11. ===40G CFP Optical Transceiver===

- o 11.1 High Speed Transceiver,CFP,850nm,4*10.3125Gb/s,mpo,MM,0.1km

- 1.Need configure 40G MPO Patch Cord
- 2.Does not support outdoor application

12. ===10G/GE Auto-adaptation XFP SFP+ Optical Transceiver===

- o 12.1 XFP SFP+ Transceiver-SFP+-1310nm-10G/1G-Single-mode-LC-10km

Only below boards supporting 10GE/GE auto-sensing optical transceiver:
 03032TTX 10-Port 10GBase LAN/WAN-SFP+ Physical Interface Card
 03031DJP 4-Port 10GBase LAN/WAN-SFP+ Physical Interface Card

03030WGQ 2-Port 10GBase LAN/WAN-SFP+ Physical Interface Card

03031DJQ 1-Port 10GBase LAN/WAN-SFP+ + 8-Port 100/1000Base-X-SFP Physical Interface Card

13. **===155M SFP/eSFP Optical Transceiver===**

- 13.1 **Optical Transceiver,eSFP,1310nm,2.048Mb/s,LC,SM,2km**

Need configure with MP8A board.

14. **==== RTU PORT LICENSE =====**

- 14.1 **100GE Bandwidth Expansion License**

This license is used for 2-Port 100GBase-QSFP28/1-Port100GBase-QSFP28+4-Port 10GBase-SFP+MACsec Interface Card

- 14.2 **50GE Bandwidth Expansion License**

This license is used for 2-Port 50GBase/1-Port 100GBase-QSFP28 Physical Interface Card(PIC)

15. **===Software(The Base Software is provided automatically)===**

- 15.1 **Need software bundle(Basic software+PPPoE/IPoE) or not**

The software bundle includes Basic software, PPPoE, IPoE, L2TP, 1588v2, 32K BRAS function access subscribers.

- 15.2 **Need PPPoE/IPoE Function or not**

Only Ethernet board support PPPoE/IPoE function

- 15.3 **Need L2TP Function or not**

Before enabling the L2TP function, configure the PPPoE/IPoE license to support the basic BRAS functions. The L2TP license is mandatory for the LNS and LTS functions. The L2TP license is not required for the LAC function. LNS, LTS, LAC are all required to configure user license.

- 15.4 **Need DAA Function or not**

Before enabling the DAA function, configure the PPPoE/IPoE license to support the basic BRAS functions. The DAA license is mandatory for the DAA functions. The DAA license is required to configure user license.

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

Need to work together with the PPPoE/IPoE function license. A maximum of 32k licenses can be configured for an NE20E-S.

- **15.6 MACsec Port Function License(per 100GE)**

This license is used for 2-Port 100GBase-QSFP28/1-Port100GBase-QSFP28+4-Port 10GBase-SFP+MACsec Interface Card mode1(2*100G) and 1-Port 100GBase-QSFP28+MACsec Interface Card.

- **15.7 MACsec Port Function License(per 10GE)**

1.This license is used for 2-Port 100GBase-QSFP28/1-Port100GBase-QSFP28+4-Port 10GBase-SFP+MACsec and 4-Port 10GBase-SFP+MACsec Interface Card.

2.Each 10G port could configure 1PCS.

16. ===Patch Cord===

- **16.1 Please select the Client Interface Option of Patch Cord**

Default LC,10m. For other specification, Please change it at "Bill of Configuration".

- **16.2 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.Multiplexing & Demultiplexing Card contains 1-channel Multiplexing and 8-channel Demultiplexing.Each channel need 2 PCS patch cords.

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

- **16.3 Please select the length of 100G MPO patch cord(8 cores)**

For 100G MPO optical module.

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

For 40G MPO optical module.

17. ===Trunk Cable===

- **17.1 Please select synchronous signal type**

The device can supply Clock signal("2M primary clock") and 1588v2 signal("1PPS+TOD signal" or "DCLS signal"). Please configure E1 cable when clock signal is needed. Please make network cable on site when 1588v2 signal is needed. Any question, please refer to Configuration Manual.

- **17.2 Need to configure the synchronous signal input cable or not**

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

- 17.3 **Need to configure the synchronous signal output cable or not**

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

- 17.4 **===RS232/FXS/FXO/E&M board cable===**

- 17.4.1 **Please input the quantity of RS232**

MPA and SA8 boards support RS232/RS485/RS422 interface, MPA board supports a maximum of two RS232 cable, two RS485/RS422, SA8 board supports a maximum of 8 pieces of RS232 cable.

- 17.4.2 **Please input the quantity of FXS/FXO**

MPA board supports four FXS/FXO interface, MPA board supports a maximum of need 4 standard phone lines.

- 17.4.3 **Need E&M Interface or not**

1. MPA board supports 2-channel E&M interface, MPA board supports a maximum of 2 pieces of E&M cable.

2. 6 Channels E&M Interface Board supports 6-channel E&M interface, MPA board supports a maximum of 6 pieces of E&M cable.

- 17.4.4 **Need lightning arrester or not**

Arrester must be configured when unshield cable is used in outdoor.

- 17.5 **===SA8 board cable===**

- 17.5.1 **Please input the quantity of X.21-DTE**

SA8 board supports 8-channel X.21 interface, SA8 board must be equipped with an 8 records at most X.21 DTE cable

- 17.5.2 **Please input the quantity of X.21-DCE**

SA8 board supports 8-channel X.21 interface, SA8 board must be equipped with an 8 records at most X.21 DCE cable

- 17.5.3 **Please input the quantity of V.24-DTE**

SA8 board supports 8-channel V.24 interface, SA8 board must be equipped with an 8 records at most V.24 DTE cable

- 17.5.4 **Please input the quantity of V.24-DCE**

SA8 board supports 8-channel V.24 interface,SA8 board must be equipped with an 8 records at most V.24 DCE cable

- **17.5.5 Please input the quantity of V.35-DTE**

SA8 board supports 8-channel V.35 interface,SA8 board must be equipped with an 8 records at most V.35 DTE cable

- **17.5.6 Please input the quantity of V.35-DCE**

SA8 board supports 8-channel V.35 interface,SA8 board must be equipped with an 8 records at most V.35 DCE cable

- **17.6 Please input the quantity of MP8A board cable**

MP8A board support SFP and RJ-45 interface,4 PCS Patch Cord and 4PCS 120ohm 1*E1 cable can be configured at most for each MP8A.

18. ===Power Cable===

- **18.1 Need separate configure DC power cable or not**

1.Not configured by default. The basic configuration includes a 3m power cable. Need to configure separately only when the length of power cable is not enough.

2.Usually, the device needs to configure separate power cable only when connecting to the PDF directly.

- **18.2 Please input the length of each device DC power cable (m)**

By default, Huawei provides blue cables (-48V) and black cables (GND). For the cables of the other colors, need to be remarked for purchase, and determine whether to purchase locally according to the actual situation.