

# H3C LSWM124XG2QFC

## Interface Cards

### User Manual

New H3C Technologies Co., Ltd.  
<http://www.h3c.com>

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# About the LSWM124XG2QFC interface card

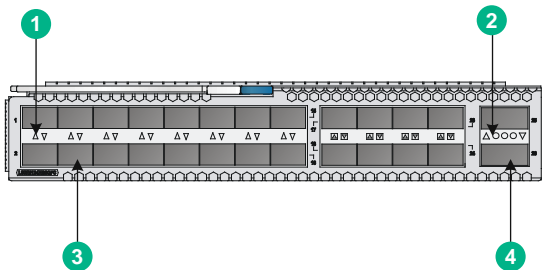
## Important information

The LSWM124XG2QFC interface card is applicable to multiple H3C switch models. For the interface card compatibility with switches, contact H3C Support or marketing staff.

## Front panel

The LSWM124XG2QFC interface card provides 24 SFP+ ports and two QSFP+ ports.

**Figure 1 Front panel**



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(1) SFP+ port LED

(2) QSFP+ port LED

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(3) QSFP+ port

(4) SFP+ port

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# Ports

## Important information

- As a best practice, use H3C transceiver modules and cables for the interface cards.
- The transceiver module and cable types supported by the LSWM124XG2QFC interface card vary by device model. For more information, see the installation guide or hardware reference for the device, or contact H3C Support or marketing staff.
- The restrictions and guidelines for using the LSWM124XG2QFC interface card vary by device model. For more information, see the installation guide or hardware reference for the device.
- For more information about H3C transceiver modules and cables, see *H3C Transceiver Modules User Guide* at [www.h3c.com](http://www.h3c.com).

## SFP+ ports

You can install the following transceiver modules and cables in the SFP+ ports on an LSWM124XG2QFC interface card.

- SFP transceiver module in [Table 1](#) and [Table 2](#).
- SFP+ transceiver modules in [Table 3](#) and [Table 4](#).
- SFP+ DAC cables in [Table 5](#).
- SFP+ fiber cables in [Table 6](#).

**Table 1 SFP transceiver modules available for the SFP+ ports (1)**

<b>SFP transceiver module</b>	<b>Central wavelength (nm)</b>	<b>Connector</b>
SFP-GE-T	N/A	RJ-45
SFP-GE-SX-MM850-A	850	LC
SFP-GE-LX-SM1310-A	1310	LC
SFP-GE-LH40-SM1310	1310	LC
SFP-GE-LH40-SM1550	1550	LC
SFP-GE-LH70-SM1550	1550	LC

**Table 2 SFP transceiver modules available for the SFP+ ports (2)**

<b>SFP transceiver module</b>	<b>Cable/fiber diameter (<math>\mu\text{m}</math>)</b>	<b>Modal bandwidth (MHz <math>\times</math> km)</b>	<b>Max transmission distance</b>
SFP-GE-T	Twisted pair	N/A	100 m (328.08 ft)
SFP-GE-S X-MM850-A	Multi-mode, 50/125	500	550 m (1804.46 ft)
		400	500 m (1640.42 ft)
	Multi-mode, 62.5/125	200	275 m (902.23 ft)
		160	220 m (721.78 ft)

<b>SFP transceiver module</b>	<b>Cable/fiber diameter (<math>\mu\text{m}</math>)</b>	<b>Modal bandwidth (MHz <math>\times</math> km)</b>	<b>Max transmission distance</b>
SFP-GE-LX-SM1310-A	Single-mode, 9/125	N/A	10 km (6.21 miles)
	Multi-mode, 50/125	500 or 400	550 m (1804.46 ft)
	Multi-mode, 62.5/125	500	550 m (1804.46 ft)
SFP-GE-LH 40-SM1310	Single-mode, 9/125	N/A	40 km (24.86 miles)
SFP-GE-LH 40-SM1550	Single-mode, 9/125	N/A	40 km (24.86 miles)
SFP-GE-LH 70-SM1550	Single-mode, 9/125	N/A	70 km (43.50 miles)

**Table 3 SFP+ transceiver modules available for the SFP+ ports (1)**

<b>SFP+ transceiver module</b>	<b>Central wavelength (nm)</b>	<b>Connector</b>
SFP-XG-SX-MM850-A	850	LC
SFP-XG-LX-SM1310	1310	LC
SFP-FC-8G-SW-MM850	850	LC
SFP-FC-8G-LW-SM1310	1310	LC

**Table 4 SFP+ transceiver modules available for the SFP+ ports (2)**

<b>SFP+ transceiver module</b>	<b>Fiber diameter (μm)</b>	<b>Modal bandwidth (MHz x km)</b>	<b>Max transmission distance</b>
SFP-XG-SX-MM850-A	Multi-mode, 50/125	2000	300 m (984.25 ft)
		500	82 m (269.03 ft)
		400	66 m (216.54 ft)
	Multi-mode, 62.5/125	200	33 m (108.27 ft)
		160	26 m (85.30 ft)
SFP-XG-LX-SM1310	Single-mode, 9/125	N/A	10 km (6.21 miles)
SFP-FC-8G-SW-MM850	Multi-mode, 62.5/125	200	150 m (492.12 ft)
	Multi-mode, 50/125	500	380 m (1246.72 ft)
		2000	500 m (1640.42 ft)
SFP-FC-8G-LW-SM1310	Single-mode, 9/125	N/A	10 km (6.21 miles)



**Table 5 SFP+ DAC cables available for the SFP+ ports**

SFP+ DAC cable	Cable length	Data rate
LSWM1STK	0.65 m (2.13 ft)	10.31 Gbps
LSWM2STK	1.2 m (3.94 ft)	
LSWM3STK	3 m (9.84 ft)	
LSTM1STK	5 m (16.40 ft)	

**Table 6 SFP+ fiber cables available for the SFP+ ports**

SFP+ fiber cable	Cable length	Data rate
SFP-XG-D-AOC-7M	7 m (22.97 ft)	10.31 Gbps
SFP-XG-D-AOC-10M	10 m (32.81 ft)	
SFP-XG-D-AOC-20M	20 m (65.62 ft)	

## QSFP+ ports

You can install the following transceiver modules and cables in the QSFP+ ports on an LSWM124XG2QFC interface card:

- QSFP+ transceiver modules in [Table 7](#) and [Table 8](#).
- QSFP+ DAC cables in [Table 9](#).
- QSFP+ to SFP+ DAC cables in [Table 10](#).
- QSFP+ fiber cables in [Table 11](#).

**Table 7 QSFP+ transceiver modules available for the QSFP+ ports (1)**

<b>QSFP+ transceiver module</b>	<b>Central wavelength (nm)</b>	<b>Connector</b>
QSFP-40G-SR4-MM850	850	MPO
QSFP-40G-CSR4-MM850	850	MPO
QSFP-40G-LR4-WDM1300	Four lanes: <ul style="list-style-type: none"> <li>• 1271</li> <li>• 1291</li> <li>• 1311</li> <li>• 1331</li> </ul>	LC
QSFP-40G-LR4L-WDM1300	Four lanes: <ul style="list-style-type: none"> <li>• 1271</li> <li>• 1291</li> <li>• 1311</li> <li>• 1331</li> </ul>	LC

**Table 8 QSFP+ transceiver modules available for the QSFP+ ports (2)**

<b>QSFP+ transceiver module</b>	<b>Cable/fiber diameter (μm)</b>	<b>Modal bandwidth (MHz × km)</b>	<b>Max transmission distance</b>
QSFP-40G-SR4-MM850	Multi-mode, 50/125	2000	100 m (328.08 ft)
		4700	150 m (492.12 ft)

<b>QSFP+ transceiver module</b>	<b>Cable/fiber diameter (μm)</b>	<b>Modal bandwidth (MHz × km)</b>	<b>Max transmission distance</b>
QSFP-40G-CSR4-MM850	Multi-mode, 50/125	2000	300 m (984.25 ft)
		4700	400 m (1312.33 ft)
QSFP-40G-LR4-WDM1300	Single-mode, 9/125	N/A	10 km (6.21 miles)
QSFP-40G-LR4L-WDM1300	Single-mode, 9/125	N/A	2 km (1.24 miles)

**Table 9 QSFP+ DAC cables available for the QSFP+ ports**

<b>QSFP+ DAC cable</b>	<b>Cable length</b>	<b>Data rate</b>
LSWM1QSTK0	1 m (3.28 ft)	40 Gbps
LSWM1QSTK1	3 m (9.84 ft)	
LSWM1QSTK2	5 m (16.40 ft)	

**Table 10 QSFP+ to SFP+ DAC cables available for the QSFP+ ports**

<b>QSFP+ to SFP+ DAC cable</b>	<b>Cable length</b>	<b>Data rate</b>
LSWM1QSTK3	1 m (3.28 ft)	40 Gbps
LSWM1QSTK4	3 m (9.84 ft)	
LSWM1QSTK5	5 m (16.40 ft)	

**Table 11 QSFP+ fiber cables available for the QSFP+ ports**

<b>QSFP+ fiber cable</b>	<b>Cable length</b>	<b>Data rate</b>
QSFP-40G-D-AOC-7M	7 m (22.97 ft)	40 Gbps
QSFP-40G-D-AOC-10M	10 m (32.81 ft)	
QSFP-40G-D-AOC-20M	20 m (65.62 ft)	

## LEDs

### Important information

The indications of the LEDs on the LSWM124XG2QFC interface card vary by device model. For more information, see the installation guide or hardware reference for the device.

## SFP+ port LEDs

**Table 12 SFP+ port LED description**

<b>LED status</b>	<b>Description</b>
Steady green	A transceiver module is installed in the port. The port is operating at 10 Gbps, and a link is present on the port.
Flashing green	The port is sending or receiving data at 10 Gbps.
Steady yellow	A transceiver module is installed in the port. The port is operating at 1 Gbps, and a link is present on the port.
Flashing yellow	The port is sending or receiving data at 1 Gbps.
Off	No transceiver module is installed in the port, or no link is present on the port.

## QSFP+ port LEDs

**Table 13 QSFP+ port LED description**

<b>LED status</b>	<b>Description</b>
Steady green	A transceiver module is installed in the port. The port is operating at 40 Gbps, and a link is present on the port.

<b>LED status</b>	<b>Description</b>
Flashing green	The port is sending or receiving data at 40 Gbps.
Steady yellow	A transceiver module is installed in the port. The port is operating at 10 Gbps, and a link is present on the port.
Flashing yellow	The port is sending or receiving data at 10 Gbps.
Off	No transceiver module is installed in the port, or no link is present on the port.

# Installing and removing an interface card

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## CAUTION:

- Before you install or remove an interface card, wear an ESD wrist strap and make sure the strap makes good skin contact and is reliably grounded.
  - To avoid device damage, do not use excessive force when you install or remove an interface card.
  - The LSWM124XG2QFC interface card is hot swappable. However, do not install or remove it during the startup of the switch.
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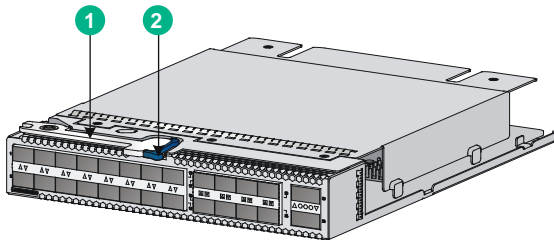
## Installing an interface card

Before you install an interface card, remove the filler panel (if any) from the target slot. Keep the removed filler panel secure for future use.

To install an interface card:

1. Unpack the interface card.

**Figure 2 LSWM124XG2QFC interface card**



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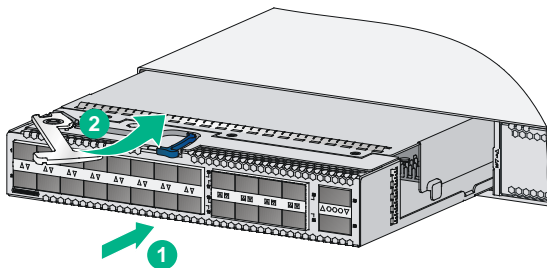
(1) Ejector lever

(2) Latch

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2. Press the latch on the interface card to release the ejector lever.
3. As shown by callout 1 in [Figure 3](#), insert the interface card slowly into the slot along the guide rails.
4. Rotate inward the ejector lever as shown by callout 2 in [Figure 3](#) until the latch locks the ejector lever in place.

**Figure 3 Installing an LSWM124XG2QFC interface card**





## Removing an interface card

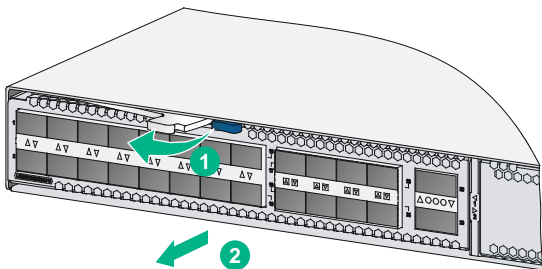
### **⚠ CAUTION:**

- Before you remove an interface card, remove the cable from it to avoid cable damage.
- After removing an interface card, if no new interface card is to be installed, install the filler panel as soon as possible to prevent dust and ensure good ventilation in the device.

To remove an interface card:

1. Prepare an anti-static bag.
2. Press the latch to release the ejector lever
3. Rotate outward the ejector lever as shown by callout 1 in [Figure 4](#).
4. Pull out the interface card slowly out of the interface card slot, as shown by callout 2 in [Figure 4](#).
5. Place the removed interface card in the anti-static bag.

**Figure 4 Removing an LSWM124XG2QFC interface card**



# Installing and removing SFP, SFP+, and QSFP+ transceiver modules and SFP+ and QSFP+ cables

For information about installing and removing SFP/SFP+ transceiver modules and SFP+ cables, see *H3C Transceiver Modules and Network Cables Installation Guide* at [www.h3c.com](http://www.h3c.com).

For information about installing and removing QSFP+ transceiver modules and QSFP+ cables, see *H3C Transceiver Modules and Network Cables Installation Guide* at [www.h3c.com](http://www.h3c.com).

## Verifying the installation

After the installation is complete, identify whether the interface card is operating correctly.

If the interface card fails to operate correctly, perform the following steps:

1. Reinstall it following the installation procedures described in this document.
2. If the problem persists, contact H3C Support.