

## Connector and Cable Specifications

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## Connector Specifications

## 10／100／1000 Ports（Including PoE）

All 10／100／1000 ports use standard RJ－45 connectors and Ethernet pinouts．
Figure 1：10／100／1000 Port Pinouts

| Pin | Label | 12345678 |
| :---: | :---: | :---: |
| 1 | TP0＋ | 明日月月日月日 |
| 2 | TPO－ |  |
| 3 | TP1＋ | ＊UU以U |
| 4 | TP2＋ |  |
| 5 | TP2－ |  |
| 6 | TP1－ |  |
| 7 | TP3＋ |  |
| 8 | TP3－ |  |

## Module Connectors

Figure 2：Duplex LC Cable Connector


38470

Figure 3: Simplex LC Cable Connector


Figure 4: Copper SFP Module LC Connector

| Pin | Label | 12345678 |
| :---: | :---: | :---: |
| 1 | TPO+ |  |
| 2 | TPO- |  |
| 3 | TP1+ |  |
| 4 | TP2+ |  |
| 5 | TP2- |  |
| 6 | TP1- |  |
| 7 | TP3+ |  |
| 8 | TP3- |  |

## MPO-12 Connectors

The multi-fiber push on (MPO) connector is a 12 -fiber optical connector with a footprint similar to the SC simplex connector. The MPO connector conforms to the TIA/EIA-604-5 intermateability standard. It is used for establishing 40G and 100G optical parallel connections.

Figure 5: MPO-12 Fiber-Optic Connector


| 1 | 12-fiber ribbon | 4 | Guide pins |
| :--- | :--- | :--- | :--- |
| 2 | Boot | 5 | Ferrule |


| 3 | Housing assembly | 6 | Dust cap |
| :--- | :--- | :--- | :--- |

Note You have to attach an adapter cable to this connector.

## Console Port

The switch has two console ports: a USB 5-pin mini-Type B port on the front panel and an RJ-45 console port on the rear panel.

Figure 6: USB Mini-Type B Port


The USB console port uses a USB Type A to 5-pin mini-Type B cable. The USB Type A-to-USB mini-Type B cable is not supplied. You can order an accessory kit (part number 800-33434) that contains this cable.

Figure 7: USB Type A-to-USB 5-Pin Mini-Type B Cable


The RJ-45 console port uses an 8-pin RJ-45 connection. The supplied RJ-45-to-DB-9 adapter cable is used to connect the console port of the switch to a console PC. You need to provide a RJ-45-to-DB-25 female DTE adapter if you want to connect the switch console port to a terminal.

## Cables and Adapters

## StackWise Accessories

All Cisco stack cables are halogen-free. The StackWise cables of lengths $0.5 \mathrm{~m}, 1 \mathrm{~m}$ and 3 m supported. You can order the stacking cables from your Cisco sales representative.

Table 1: Cisco StackWise-480 and StackWise-1T Accessories for C9300 and C9300X Series Switches

| Product ID | Product Description |
| :--- | :--- |
| STACK-T1-50CM | 50 cm stacking cable for Cisco StackWise-480 and Cisco <br> StackWise-1T |
| STACK-T1-1M | 1 m stacking cable for Cisco StackWise-480 and Cisco <br> StackWise-1T |
| STACK-T1-3M | 3 m stacking cable for Cisco StackWise-480 and Cisco <br> StackWise-1T |

The optional StackWise-320 kit for Catalyst 9300L and 9300LM Series models consists of two stack adapters and a stacking cable. The default stacking cable is 0.5 m , however options of 1 m and 3 m are also available.

Table 2: Cisco StackWise-320 Accessories for C9300L Series Switches

| Product ID | Product Description |
| :--- | :--- |
| C9300L-STACK | Stacking adapter for C9300L Series Switches that is <br> used in conjunction with STACK-T3 type cables |
| C9300L-STACK-A | Stacking adapter for C9300L and C9300LM Series <br> Switches that is used in conjunction with <br> STACK-T3A type cables |
| STACK-T3-50CM | 50 cm stacking cable for C9300L Series Switches |
| STACK-T3-1M | 1 m stacking cable for C9300L Series Switches |
| STACK-T3-3M | 3 m stacking cable for C9300L Series Switches |
| STACK-T3A-50CM | 50 cm stacking cable for C9300L and C9300LM <br> Series Switches |
| STACK-T3A-1M | 1 m stacking cable for C9300L and C9300LM Series <br> Switches |
| STACK-T3A-3M | 3 m stacking cable for C9300L and C9300LM Series <br> Switches |

Note C9300L Series Switches use both T3 and T3A type stacking cables.

The optional StackWise-320 kit for Catalyst 9300L and 9300LM Series models consists of two stack adapters and a stacking cable. The default stacking cable is 0.5 m , however options of 1 m and 3 m are also available.

Table 3: Cisco StackWise-320 Accessories for C9300LM Series Switches

| Product ID | Product Description |
| :--- | :--- |
| C9300L-STACK-A | Stacking adapter for C9300L and C9300LM Series <br> Switches that is used in conjunction with <br> STACK-T3A type cables |
| STACK-T3A-50CM | 50 cm stacking cable for C9300L and C9300LM <br> Series Switches |
| STACK-T3A-1M | 1 m stacking cable for C9300L and C9300LM Series <br> Switches |
| STACK-T3A-3M | 3 m stacking cable for C9300L and C9300LM Series <br> Switches |

Note C9300LM Series Switches use only T3A type stacking cables.

Table 4: StackWise Cables Minimum Bend Radius and Coiled Diameter

| Cable Part Number | Cable Length | Minimum Bend Radius | Minimum Coiled Diameter |
| :---: | :---: | :---: | :---: |
| STACK-T1-50CM | 1.64 feet ( 0.5 m ) | 1.6 in. (41 mm) | Not applicable |
| STACK-T1-1M | 3.28 feet (1.0 m) | 1.6 in. (41 mm) | 5.2 in. (132 mm) |
| STACK-T1-3M | 9.84 feet ( 3.0 m ) | 3.2 in. (82 mm) | $7.17 \mathrm{in} .(182 \mathrm{~mm})$ |
| STACK-T3-50CM | 1.64 feet ( 0.5 m ) | 1.6 in. (41 mm) | Not applicable |
| STACK-T3-1M | 3.28 feet (1.0 m) | 1.6 in. (41 mm) | 5.20 in. (132 mm) |
| STACK-T3-3M | 9.84 feet ( 3.0 m ) | 3.2 in. (82 mm) | 7.17 in. (182 mm) |
| STACK-T3A-50CM | 1.64 feet ( 0.5 m ) | 1.6 in. (41 mm) | Not applicable |
| STACK-T3A-1M | 3.28 feet (1.0 m) | 1.6 in. (41 mm) | 5.20 in. (132 mm) |
| STACK-T3A-3M | 9.84 feet ( 3.0 m ) | $3.2 \mathrm{in} .(82 \mathrm{~mm})$ | $7.17 \mathrm{in} .(182 \mathrm{~mm})$ |

1. With a 0.5 m cable, the minimum coiled diameter is negligible and the cable cannot be physically coiled without exceeding the bending limit.

## Transceiver Module Network Cables

For cabling specifications, refer to the following notes:

- Cisco SFP and SFP+ Transceiver Module Installation Notes
- Cisco 40-Gigabit QSFP+ Transceiver Modules Installation Note

Each port must match the wavelength specifications on the other end of the cable, and the cable must not exceed the stipulated cable length. Copper 1000BASE-T SFP module transceivers use standard four twisted-pair, Category 5 cable at lengths up to 328 feet ( 100 meters).

## Cable Pinouts

Figure 8: Four Twisted-Pair Straight-Through Cable Schematic


Figure 9: Four Twisted-Pair Semi-Cross Cable Schematic
Switch

Figure 10: Two Twisted-Pair Straight-Through Cable Schematic

| Switch | Router or PC |
| :---: | :---: |
| $\begin{aligned} & 3 \text { TD+ } \\ & 6 \text { TD- } \end{aligned}$ | $\begin{aligned} & \rightarrow 3 \text { RD+ } \\ & \rightarrow 6 \text { RD- } \end{aligned}$ |
| $\begin{aligned} & 1 \mathrm{RD}+ \\ & 2 \text { RD- } \end{aligned}$ |  |

Figure 11: Two Twisted-Pair Crossover Cable Schematic


## Identifying a Crossover Cable

To identify a crossover cable, compare the two modular ends of the cable. Hold the cable ends side-by-side, with the tab at the back. The wire connected to the pin on the outside of the left plug should be a different color from the wire connected to the pin on the inside of the right plug.

Figure 12: Identifying a Crossover Cable


## Console Port Adapter Pinouts

The RS-232 console port uses an 8-pin RJ-45 connector. Use an RJ-45-to-DB-9 adapter cable to connect the switch console port to a console PC. You need to provide a RJ-45-to-DB-25 female DTE adapter to connect the switch console port to a terminal.

## Table 5: Console Port Signaling with a DB-9 Adapter

| Switch Console <br> Port (DTE) | RJ-45-to-DB-9 <br> Terminal Adapter | Console <br> Device |
| :--- | :--- | :--- |
| Signal | DB-9 Pin | Signal |
| TxD | 2 | RxD |
| GND | 5 | GND |
| GND | 5 | GND |
| RxD | 3 | TxD |

Table 6: Console Port Signaling with a DB-25 Adapter

| Switch Console <br> Port (DTE) | RJ-45-to-DB-25 <br> Terminal Adapter | Console <br> Device |
| :--- | :--- | :--- |
| Signal | DB-25 Pin | Signal |
| TxD | 3 | RxD |
| GND | 7 | GND |
| GND | 7 | GND |
| RxD | 2 | TxD |

