

Validated SFPs for CSG5000 Appliances Series Appliances

This article lists the small form-factor pluggable (SFP/SFP+) optics supported on the Cloud Services Gateway (CSG) 5000 series appliance fiber interfaces, and it describes the remote switches that have been tested with the SFPs.

Supported VNI Ports

Table 1 describes the VNI ports and supported transceivers on the CSG5000 series appliance.

Table 1: VNI Ports and Interfaces Supported on the CSG5000 Series Appliance

Appliance	Ports	Supported SFP/SFP+
CSG5000	vni-0/0 through vni-0/15	1/10/25-Gigabit Ethernet fiber ports
CSG5000	vni-0/16 through vni-0/19	100-Gigabit Ethernet fiber ports Direct attach copper cable (copper DAC)

Supported 1-Gigabit Ethernet SFP Transceivers

Table 2 describes the 1-Gigabit Ethernet SFP transceiver modules supported on the CSG5000 series appliance.

Table 2: 1-Gigabit Ethernet SFP Transceiver Modules Supported on the CSG5000 Series Appliance

Туре	Manufacturer	Part Number	vni-0/0 through vni-0/15	Transceiver Description
Short-reach (SR)	Finisar	FTLF8519P3BNL	Yes	1000BASE-SX Ethernet 500-m extended temperature SFP+ optical transceiver
Long-reach (LR)	Finisar	FTLF1318P3BTL	Yes	1000BASE-LX Ethernet 10-km industrial temperature Gen 3 SFP+ optical transceiver

Supported 10-Gigabit Ethernet SFP+ Transceivers

Table 3 describes the 10-Gigabit Ethernet SFP+ transceiver modules supported on the CSG5000 series appliance.

Table 3: 10-Gigabit Ethernet SFP+ Transceiver Modules Supported on the CSG5000 Series Appliance

Туре	Manufacturer	Part Number	vni-0/0 through vni-0/15	Transceiver Description
Short-reach (SR)	Finisar	FTLX8574D3BCL	Yes	10GBASE-SR/SW 400-m multimode datacom SFP+ optical transceiver
Long-reach (LR)	Finisar	FTLX1471D3BCL/ FTLX1475D3BCL	Yes	10GBASE-LR/LW 1310-m single-mode datacom SFP+ optical transceiver

Supported 25-Gigabit Ethernet SFP28 Transceivers

Table 4 describes the 25-Gigabit Ethernet SFP28 transceiver modules supported on the CSG5000 series appliance.

Table 4: 25-Gigabit Ethernet SFP28 Transceiver Modules Supported on the CSG5000 Series Appliance

Туре	Manufacturer	Part Number	vni-0/0 through vni-0/15	Transceiver Description
Short-reach (SR)	Finisar	FTLF8536P4BCL	Yes	25-Gigabit Ethernet 850-nm SFP28 100-m multimode optical transceiver
Long-reach (LR)	Finisar	FTLF1436P3BCL	Yes	25-Gigabit Ethernet 1310-nm SFP28 10-km single mode optical transceiver

Supported 100-Gigabit Ethernet QSFP28 Transceivers

Table 5 describes the 100-Gigabit Ethernet QSFP28 transceiver modules supported on the CSG5000 series appliance.

Table 5: 100-Gigabit Ethernet QSFP28 Transceiver Modules Supported on the CSG5000 Series Appliance

Туре	Manufacturer	Part Number	vni-0/16 through vni-0/19	Transceiver Description
Short-reach (SR)	Finisar	FTLC9558REPM/ FTLC9555REPM	Yes	100-m parallel MMF 100-GB QSFP28 multimode optical transceiver
Long-reach (LR)	Finisar	FTLC1154RDPL/ FTLC1156RDPL	Yes	10-km 1310-nm 100-GB QSFP28 single-mode optical transceiver
Direct attach copper cable (DAC)	Finisar	QSFP-100G	Yes	QSFP-100G- CU5M-compatible 100-GB QSFP28 passive direct-attach copper cable

Compatible Remote Switches

The following switches have been tested with a 1-Gigabit Ethernet link connection to the CSG5000 series appliance:

- Cisco Nexus-3048T
- Dell S3048 and S4128F switches
- Juniper EX2200

Connection Recommendations

The following are recommendations for connecting the CSG5000 series appliance at 10/25/100-Gigabit Ethernet speeds:

- After you insert an SFP or change the SFP speed, you must disable and then re-enable the VNI interface on the CSG5000 series appliance.
- If the configuration on the remote device changes, you must disable and then reenable the VNI interface on the CSG5000 series appliance.
- Ensure that you have enabled the 1-Gigabit Ethernet interface in the Versa Operating SystemTM (VOSTM) software.
- For 1-Gigabit Ethernet SFPs, you must turn off autonegotiation on the remote device, and then you must set the
 connection speed to 1-Gigabit Ethernet. For example, for Cisco switches, in the interface configuration, configure
 the speed to 1000:

interface Ethernet 1/25 speed 1000

For Juniper switches, configure no-autonegotiation on the interface:

```
enable;
ether-options {
    no-auto-negotiation;
    link-mode full-duplex;
    speed {
        1g;
    }
}
```

Note: Before you order units in bulk, validate connections with the target remote device in a lab or testing environment to ensure that there are no compatibility or link issues.