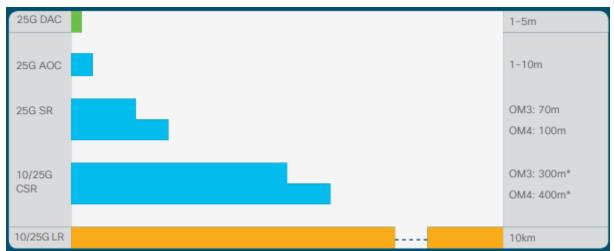


# Cisco 25G Transceivers and Cables Enable 25 Gigabit Ethernet over a Fiber or Copper Cable

Cisco's 25G transceivers and cables enable 25 Gigabit Ethernet for next generation switch and server applications

Optimal choices for next generation 25 Gigabit Ethernet applications.



<sup>\*</sup>depends upon fiber quality

### **Benefits**

- 25G is the next logical migration from 10G to reduce the cost per Gbit/sec
- 25G provides 2.5 times the bandwidth of 10G using in the same SFP form factor
- 25G is ideal for datacenter top of rack, wireless backhaul and enterprise interconnect applications
- 25G meets the newest server adapter requirements
- 10/25G transceivers are compatible with 10G, 25G, 40G and 100G transceivers

# SFP-H25G-CUxM Direct Attached Cables (DAC) SFP-25G-AOC-xM Active Optical Cables (AOC)

25G DACs provide the lowest cost fixed length 1 to 5 meter interconnect in data center "Top of Rack" consolidation applications where high performance servers are increasing application density on virtualized servers using 25G Sever Adapters driving network capacity demands to levels previously unimagined using Twin-AX passive copper Ethernet technology.

Figure 1. Cisco 25G DAC, 25G AOC and 10/25G CSR & 10/25G LR and 25G-SR Transceivers



Figure 2. Top of Rack

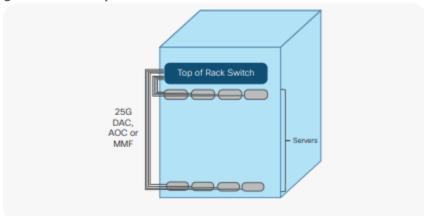


Figure 3. 25G Server Adapters



## SFP-25G-AOC-xM Active Optical Cables (AOC)

25G AOC's provides a cost effect solution for those same data center applications that require longer distance fixed length 1 to 10 meter interconnect using active optical Ethernet technology.

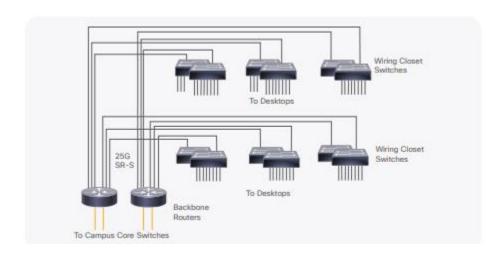
### SFP-25G-SR-S Transceivers

SFP-25G-SR-S transceiver are an ideal solution for those same data center applications that require up 100 meters over OM4 fiber or 70 meters over OM3 fiber interconnect using optical (Multi Mode Fiber) MMF Ethernet technology.

### SFP-10/25G-CSR-S Transceivers

SFP-10/25-CSR-S provides an ideal solution for many enterprise campus backbones where the distances are less than 300 meters for OM4 fiber or 400 meters for OM3 fiber. (Distance is dependent upon fiber quality)

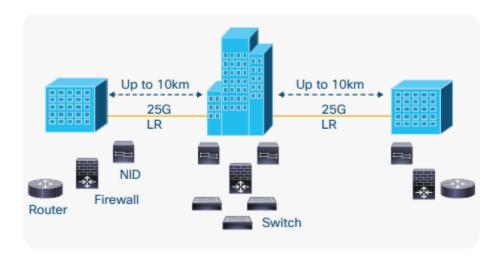
Figure 4. Campus Backbone



### SFP-10/25G-LR-S Transceivers

SFP-10/25G-LR-S transceivers provide an ideal solution for service provider applications that require up to 10km reach using SMF (Single Mode Fiber). In addition SFP-10/25G-LR can also be used in the data center applications requiring SMF Ethernet technology

Figure 5. 25G SMF application



### **Breakout Configurations**

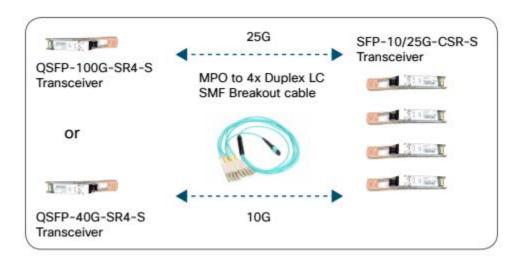
Cisco's SFP-25G-SR-S transceivers can be used with Cisco's QSFP-100GSR4-S using 3rd party MMF break-out cables.\*,#

Figure 6. 25G SR-S Breakout configuration



Cisco's SFP-10/25G-CSR-S transceivers can be used with Cisco's QSFP40G-SR4-S and Cisco's QSFP-100G-SR4-S using 3rd party MMF break-out cables<sup>\*</sup>,#

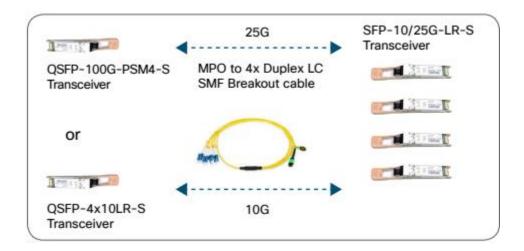
Figure 7. 10/25G CSR-S Breakout configuration





Cisco's SFP-10/25G-LR-S transceivers can be used with Cisco's QSFP100G-PSM4-S at 25Gbps using 3rd party SMF break-out cables. Please note both hosts require RS-FEC. Or, Cisco's SFP-10/25G-LR-S transceivers can be used with Cisco's QSFP4x10G-S at 10Gbps using 3rd party SMF break-out cables.\*,#

Figure 8. 10/25G LR-S Breakout configuration



### **Interfacing with 10G**

When configured Cisco's SFP-10/25-LR-S can interoperable with Cisco's SFP-10G-LR-S at 10Gbps.#

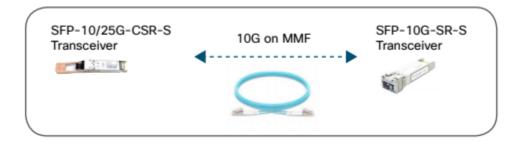
Figure 9. 10/25G LR-S interoperates with 10G-LR-S



When configured Cisco's SFP-10/25-CSR-S can interoperable with Cisco's SFP-25G-SR-S at 25Gbps.#

Figure 10. 10/25G CSR-S interoperates with 10G-SR-S





<sup>\*</sup> Please note both hosts require RS-FEC

# Please see compatibility matrix: <a href="https://www.cisco.com/c/en/us/support/interfaces-modules/transceiver-modules/products-device-support-tables-list.html">https://www.cisco.com/c/en/us/support/interfaces-modules/transceiver-modules/products-device-support-tables-list.html</a>

Table 1. Cisco 25G Portfolio

Product	Descriptions
Cisco SFP-H25G-CU1M	25GBASE-CR1 Copper Cable 1-meter
Cisco SFP-H25G-CU1.5M	25GBASE-CR1 Copper Cable 1.5-meter
Cisco SFP-H25G-CU2M	25GBASE-CR1 Copper Cable 2-meter
Cisco SFP-H25G-CU2.5M	25GBASE-CR1 Copper Cable 2.5-meter
Cisco SFP-H25G-CU3M	25GBASE-CR1 Copper Cable 3-meter
Cisco SFP-H25G-CU4M	25GBASE-CR1 Copper Cable 4-meter
Cisco SFP-H25G-CU5M	25GBASE-CR1 Copper Cable 5-meter
Cisco SFP-25G-AOC1M	25GBASE-AOC Active Optical Cable 1-meter
Cisco SFP-25G-AOC2M	25GBASE-AOC Active Optical Cable 2-meter
Cisco SFP-25G-AOC3M	25GBASE-AOC Active Optical Cable 3-meter
Cisco SFP-25G-AOC4M	25GBASE-AOC Active Optical Cable 4-meter
Cisco SFP-25G-AOC5M	25GBASE-AOC Active Optical Cable 5-meter
Cisco SFP-25G-AOC7M	25GBASE-AOC Active Optical Cable 7-meter
Cisco SFP-25G-AOC10M	25GBASE-AOC Active Optical Cable 10-meter
Cisco SFP-25G-SR-S	25GBASE-SR SFP28 Module for MMF
Cisco SFP-10/25G-CSR-S	10/25GBASE-CSR SFP28 Module for MMF
Cisco SFP-10/25G-LR-S	10/25GBASE-LR SFP28 Module for SMF

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