syRotech
NETWORKS

Upgrade Your Network's Performance with
High-Speed Optical Transceivers

DATACOM | TELECOM | FTTx | NETWORKING

www.syrotech.com

About Company

We are an Indian manufacturing brand (Parent company-GO IP Global services Private Limited) for Optical Transceivers (SFP Modules),Passive CWDM, DWDM, DAC & AOC.

A fiber optic transceivers are adapted for use in transmitting and receiving optical signals in a fiber-optical network. With strong research and development capabilities, Syrotech designs and manufactures a variety of transceiver modules ranging from 1G-100G.

Our focus is directed towards the design and development of SFPs for various applications and data rate to cater to the coding parameters of various brands of switches and routers. Each transceiver is individually tested for compatibility on the original brands switches (specific to the client's requirement) to ensure 100% compatible before delivery.

In accordance with IEEE and MSA protocol, the transceivers use the form factor of SFP, SFP+, SFP28, QSFP+, QSFP28, QSFP-DD, DAC & AOC, and Optical Patch chords.

Our focus is providing modules with fast delivery, High-reliable design and quality control, low power consumption design and flexible brands compatibility.

Transceivers
High-Speed Communication

QSFP28-100G

GOXQ28-85100G-SR4
100G QSFP28 SR4 850nm 100m

GOXQ28-13100G-LR4
100G QSFP28 LR4 1310nm 10Km

GOXQ28-13100G-ER4
100G QSFP28 ER4 1310nm 40Km

GOXQ28-13100G-ZR4
100G QSFP28 ZR4 1310nm 80Km

- ☑ Operates with IEEE-compliant 100GBASE interfaces
- ☑ Tested QSFP-100G ports for superior performance, quality, and reliability
- ☑ 4 independent full-duplex channels
- ☑ Up to 28Gb/s data rate per channel
- ☑ Up to 100m OM4 MMF transmission
- ☑ Supports upto 80KM over Duplex Single Mode

QSFP28 100G PRODUCT DESCRIPTION

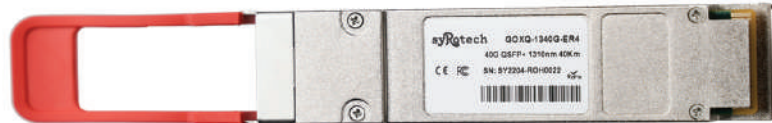| Part No.	Type	Data Rate (bps)	Wavelength (nm)	Fiber Type	Distance	Tx Power (dBm)	Rx Sens. (dBm)	Operating Temp.
GOXQ28-85100G-02SR4	SR4	100G	850	MMF/MPO	100 m	-7~+2.5	-9.5	0 to 70°
GOXQ28-13100G-LR4	LR4	100G	1310	SM	10 Km	-4~+3.5	-11.5	0 to 70°
GOXQ28-13100G-ER4	ER4	100G	1310	SM	40 Km	-2~+4.5	-18	0 to 70°
GOXQ28-13100G-ZR4	ZR4	100G	1310	SM	80 Km	0~+6.5	-26	0 to 70°
GOXQ28-85100G-02SR4-IND	SR4	100G	850	MMF/MPO	100 m	-7~+2.5	-9.5	-40° to 85°
GOXQ28-13100G-LR4-IND	LR4	100G	1310	SM	10 Km	-4~+3.5	-11.5	-40° to 85°
GOXQ28-13100G-ER4-IND	ER4	100G	1310	SM	40 Km	-2~+4.5	-18	-40° to 85°
GOXQ28-13100G-ZR4-IND	ZR4	100G	1310	SM	80 Km	0~+6.5	-26	-40° to 85°

QSFP+ 40G

GOXQ-8540G-02-SR4
40G QSFP+ SR4 850nm 150m

GOXQ-1340G-10-LR4
40G QSFP+ LR4 1310nm 10km
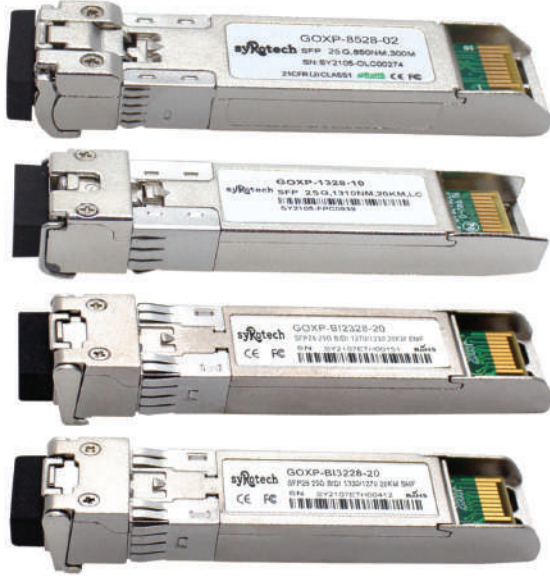
GOXQ-1340G-ER4
40G QSFP+ ER4 1310nm 40km

GOXQ-1340G-ZR4
40G QSFP+ ER4 1310nm 80km

☑ Hot-swappable input/output device that plugs into a 40 Gigabit Ethernet QSFP port

☑ Interoperable with IEEE-compliant 40GBASE interfaces

☑ Highly compact: savings of 60% on edge and board usage compared to four comparable SFP+ module

☑ MTP/MPO optical connector for MMF

☑ Support upto 80KM over SMF

☑ Offers a wide variety of high-density and low-power 40 Gigabit Ethernet connectivity options for data center, high-performance computing networks, enterprise core and distribution layers, and service provider applications

QSFP+ 40G PRODUCT DESCRIPTION

Part No.	Type	Data Rate (bps)	Wavelength (nm)	Fiber Type	Distance	Tx Power (dBm)	Rx Sens. (dBm)	Operating Temp
GOXQ-8540G-02SR4	SR4	40G	850	MMF/MPO	100 m	-7~+2.5	-9.5	0 to 70°
GOXQ-1340G-LR4	LR4	40G	1310	SM	10 km	-4~+3.5	-11.5	0 to 70°
GOXQ-1340G-ER4	ER4	40G	1310	SM	40 km	-2~+4.5	-18	0 to 70°
GOXQ-1340G-ZR4	ZR4	40G	1310	SM	80KM	-1~+6	-26	0 to 70°
GOXQ-8540G-02SR4	SR4	40G	850	MMF/MPO	100 m	-7~+2.5	-9.5	-40° to 85°
GOXQ-1340G-LR4	LR4	40G	1310	SM	10 km	-4~+3.5	-11.5	-40° to 85°
GOXQ-1340G-ER4	ER4	40G	1310	SM	40 km	-2~+4.5	-18	-40° to 85°
GOXQ-1340G-ZR4	ZR4	40G	1310	SM	80KM	-1~+6	-26	-40° to 85°

SFP28 25G

GOXP-8528-02
25G SFP 850nm 300m

GOXP-1328-10
25G SFP 1310nm 10km

GOXP-BI2328-20
28G,25G SFP 1270/1330nm 20km

GOXP-BI3228-20
28G,25G SFP 1330/1270nm 20km

- ☑ 5G Operations for LTE eCPRI & CPRI APPLICATION
- ☑ Interoperable with other IEEE-compliant 25G interfaces where applicable
- ☑ Certified and tested on DU & CU devices ports for superior performance, quality, and reliability on 5G.

- ☑ High-speed connectivity compliant to IEEE 802.3by and IEEE 802.3ccn
- ☑ Majorly deployed in 5G rollout
- ☑ Offers customers a wide variety of high-density and low-power 25 Gigabit Ethernet connectivity options for data center and high-performance 5G implementation. The 25G Modules are based on SFP28 form factor.

SFP28 25G PRODUCT DESCRIPTION

Part No.	Spec.	Data Rate (bps)	Wavelength (nm)	Fiber Type	Distance	Tx Power (dBm)	Rx Sens. (dBm)	Operating Temp.
GOXP-8528-02	SR	25G	850	MMF	300m	–8~+2	–10	0 to 70°
GOXP-8528-02M	SR	10G/25G	850	MMF	300m	–8~+2	–10	0 to 70°
GOXP-1328-10	LR	25G	1310	SM Dup.	10 km	–4~+5	–11	0 to 70°
GOXP-1328-10M	LR	10G/25G	1310	SM Dup.	10 km	–4~+5	–11	0 to 70°
GOXP-8528-02IND	SR	25G, eCPRI	850	MMF	300m	–8~+2	–10	–40° to 85°
GOXP-1328-03CIND	LR	25G, eCPRI	1310	SM Dup.	300m	–5~+2	–12	–40° to 85°
GOXP-1328-10IND	LR	25G, eCPRI	1310	SM Dup.	10 km	–4~+5	–11	–40° to 85°

SFP+ 10G

GOXP-8596-02
SFP+ 10G 850nm 300m

GOXP-1396-20
SFP+ 10G 1310nm 20km

GOXP-1596-40
SFP+ 10G 1550nm 40km

GOXP-1596-80
SFP+ 10G 1550nm 80km

☑ Provide a wide variety of 10 Gigabit Ethernet connectivity options for data center, enterprise wiring closet, and service provider transport applications. 10G SFP+ & SFP transceivers include -T, SR, LR, LRM, ER, ZR, and C/DWDM, BiDi series

☑ 10G Ethernet or SDH/SONET compliance

☑ Distance range from 300M to 80KM over Single mode

☑ Data rate selectable ≤4.25Gbps or 9.95Gbps to 10.3Gbps bit rates

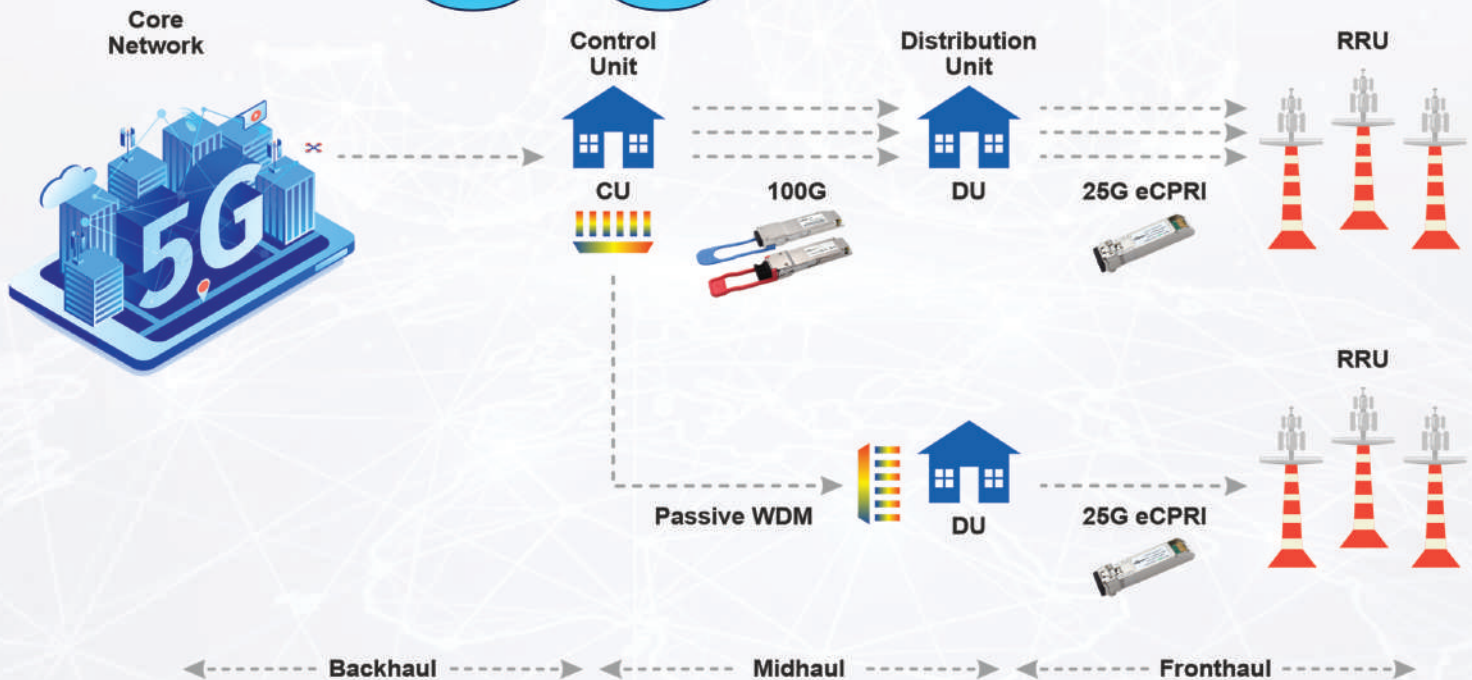☑ Distance up to 10, 20, 40, 60, 80

☑ Low power consumption

SFP+ 10G PRODUCT DESCRIPTION-COMMERCIAL

Part No.	Spec.	Data Rate (bps)	Wavelength (nm)	Fiber Type	Distance	Tx Power (dBm)	Rx Sens. (dBm)	Operating Temp.
GOXP-8596-02	SR	10G	850	MMF	200 m	-7~-1	-11	0 to 70°
GOXP-1396-20	LR	10G	1310	SM Dup.	20 km	-4~-1	-15	0 to 70°
GOXP-1596-40	ER	10G	1550	SM Dup.	40 km	-2~+2	-16	0 to 70°
GOXP-1596-80	ZR	10G	1550	SM Dup.	80 km	0~+3	-24	0 to 70°
GOXP-C96-02	10GBase-T	10G	–	Cat6/Cat5	30mtr			0 to 70°
GOXP-BI2396-20	BiDi-20	10G	1270Tx/1330Rx	SM Simp.	20 km	-4~-1	-14	0 to 70°
GOXP-BI3296-20	BiDi-20	10G	1330Tx/1270Rx	SM Simp.	20 km	-4~-1	-14	0 to 70°
GOXP-BI2396-40	BiDi-40	10G	1270Tx/1330Rx	SM Simp.	20 km	-2~+2	-18	0 to 70°
GOXP-BI3296-40	BiDi-40	10G	1330Tx/1270Rx	SM Simp.	20 km	-2~+2	-18	0 to 70°
GOXP-BI2396-60	BiDi-60	10G	1270Tx/1330Rx	SM Simp.	60 km	0~+3	-20	0 to 70°
GOXP-BI3296-60	BiDi-60	10G	1330Tx/1270Rx	SM Simp.	60 km	0~+3	-20	0 to 70°
GOXP-BI2396-80	BiDi-80	10G	1270Tx/1330Rx	SM Simp.	80 km	+1~+4	-24	0 to 70°
GOXP-BI3296-80	BiDi-80	10G	1330Tx/1270Rx	SM Simp.	80 km	+1~+4	-24	0 to 70°

SFP+ 10G PRODUCT DESCRIPTION- INDUSTRIAL

Part No.	Spec.	Data Rate (bps)	Wavelength (nm)	Fiber Type	Distance	Tx Power (dBm)	Rx Sens. (dBm)	Operating Temp.
GOXP-8596-02IND	SR	10G	850	MMF	200 m	-7~-1	-11	-40° to 85°
GOXP-1396-02IND	LR	10G, CPRI	1310	SM Dup	1.4Km	-6~-1	-14.4	-40° to 85°
GOXP-1396-20IND	LR	10G, CPRI	1310	SM Dup.	20 km	-5~0	-15	-40° to 85°
GOXP-1596-40IND	ER	10G, CPRI	1550	SM Dup.	40 km	-2~+2	-16	-40° to 85°
GOXP-1596-80IND	ZR	10G, CPRI	1550	SM Dup.	80 km	0~+3	-24	-40° to 85°
GOXP-C96-02IND	10GBase-T	10G	-	Cat6/Cat5	30mtr			-40° to 85°
GOXP-BI2396-20IND	BiDi-20	10G	1270Tx/1330Rx	SM Simp.	20 km	-4~-1	-14	-40° to 85°
GOXP-BI3296-20IND	BiDi-20	10G	1330Tx/1270Rx	SM Simp.	20 km	-4~-1	-14	-40° to 85°
GOXP-BI2396-40IND	BiDi-40	10G	1270Tx/1330Rx	SM Simp.	20 km	-2~+2	-18	-40° to 85°
GOXP-BI3296-40IND	BiDi-40	10G	1330Tx/1270Rx	SM Simp.	20 km	-2~+2	-18	-40° to 85°
GOXP-BI2396-60IND	BiDi-60	10G	1270Tx/1330Rx	SM Simp.	60 km	0~+3	-20	-40° to 85°
GOXP-BI3296-60IND	BiDi-60	10G	1330Tx/1270Rx	SM Simp.	60 km	0~+3	-20	-40° to 85°
GOXP-BI2396-80IND	BiDi-80	10G	1270Tx/1330Rx	SM Simp.	80 km	+1~+4	-24	-40° to 85°
GOXP-BI3296-80IND	BiDi-80	10G	1330Tx/1270Rx	SM Simp.	80 km	+1~+4	-24	-40° to 85°

5G NETWORK STRUCTURE

Core Network

Control Unit — CU — 100G

Distribution Unit — DU — 25G eCPRI — RRU

Passive WDM — DU — 25G eCPRI — RRU

Backhaul — Midhaul — Fronthaul

GOXS-8512-20D
SFP 1.25G 850nm 550m

GOXS-1312-20D|40D
SFP 1.25G 1310nm 20|40km

GOXS-1512-40D
SFP 1.25G 1550nm 40km

GOXS-1512-80D
SFP 1.25G 1550nm 80km

GOXS-1512-120D
SFP 1.25G 1550nm 120km

- ☑ Hot swappable to maximize uptime and simplify serviceability
- ☑ Flexibility of media and interface choice on a port-by-port basis.
- ☑ Robust design for enhanced reliability

- ☑ Compatible with all major OEMs
- ☑ Supports Digital Optical Monitoring (DOM) capability
- ☑ RoHS 6 Compliant

SFP 1.25G PRODUCT DESCRIPTION- COMMERCIAL

Part No.	Type	Data Rate	Wavelength(nm)	Fiber Type	Distance	Tx Power (dBm)	Rx Sens.(dBm)	Operating Temp
GOXS-8512-02	SX	1.25G	850nm	MMF	500m	-10~-3	-18	0 to 70°
GOXS-1312-20D	LX	1.25G	1310nm	SM Dup.	20 km	-9~-3	-24	0 to 70°
GOXS-1312-40D	EX	1.25G	1310nm	SM Dup.	40 km	-7~-2	-26	0 to 70°
GOXS-1512-40D	EX	1.25G	1550nm	SM Dup.	40 km	-7~-2	-26	0 to 70°
GOXS-1512-80D	ZX	1.25G	1550nm	SM Dup.	80 km	-5~0	-28	0 to 70°
GOXS-1512-120D	ZX	1.25G	1550nm	SM Dup.	120 km	0~4	-32	0 to 70°
GOXS-C12-02	Base 1000-T	1.25G		Cat6/Cat5	100M			0 to 70°
GOXS-C12-02A	Base 10/100/1000-T	1.25G		Cat6/Cat5	100m			0 to 70°
GOXS-BI3512-20D	BiDi-20	1.25G	1310Tx/1550Rx	SM Simp.	20 km	-9~-3	-24	0 to 70°
GOXS-BI5312-20D	BiDi-20	1.25G	1550Tx/1310Rx	SM Simp.	20 km	-9~-3	-24	0 to 70°
GOXS-BI3512-20SC	BiDi-20	1.25G	1310Tx/1550Rx	SM Simp.	20 km	-9~-3	-24	0 to 70°
GOXS-BI5312-20SC	BiDi-20	1.25G	1550Tx/1310Rx	SM Simp.	20 km	-9~-3	-24	0 to 70°
GOXS-BI3412-20D	BiDi-20	1.25G	1310Tx/1490Rx	SM Simp.	20 km	-9~-3	-24	0 to 70°
GOXS-BI4312-20D	BiDi-20	1.25G	1490Tx/1310Rx	SM Simp.	20 km	-9~-3	-24	0 to 70°
GOXS-BI3412-40D	BiDi-40	1.25G	1310Tx/1490Rx	SM Simp.	40 km	-6~-2	-26	0 to 70°
GOXS-BI4312-40D	BiDi-40	1.25G	1490Tx/1310Rx	SM Simp.	40 km	-6~-2	-26	0 to 70°
GOXS-BI3512-40D	BiDi-40	1.25G	1310Tx/1550Rx	SM Simp.	40 km	-6~-2	-26	0 to 70°
GOXS-BI5312-40D	BiDi-40	1.25G	1550Tx/1310Rx	SM Simp.	40 km	-6~-2	-26	0 to 70°
GOXS-BI4512-80D	BiDi-80	1.25G	1490Tx/1550Rx	SM Simp.	80 km	-4~-1	-28	0 to 70°
GOXS-BI5412-80D	BiDi-80	1.25G	1550Tx/1490Rx	SM Simp.	80 km	-4~-1	-28	0 to 70°
GOXS-BI4512-120D	BiDi-120	1.25G	1490Tx/1550Rx	SM Simp.	120 km	-2~0	-30	0 to 70°
GOXS-BI5412-120D	BiDi-120	1.25G	1550Tx/1490Rx	SM Simp.	120 km	-2~0	-30	0 to 70°

Part No.	Type	Data Rate	Wavelength(nm)	Fiber Type	Distance	Tx Power (dBm)	Rx Sens.(dBm)	Operating Temp
GOXS-8512-02IND	SX	1.25G	850	MMF	550m	-10~-3	-18	–40° to 85°
GOXS-1312-20DIND	LX	1.25G	1310	SM Dup.	20 km	-9~-3	-24	–40° to 85°
GOXS-1312-40DIND	EX	1.25G	1310	SM Dup.	40 km	-7~-2	-26	–40° to 85°
GOXS-1512-40DIND	EX	1.25G	1550	SM Dup.	40 km	-7~-2	-26	–40° to 85°
GOXS-1512-80DIND	ZX	1.25G	1550	SM Dup.	80 km	-5~0	-28	–40° to 85°
GOXS-1512-120DIND	ZX	1.25G	1550	SM Dup.	120 km	0~4	-32	–40° to 85°
GOXS-C12-02IND	Base 1000-T	1.25G		Cat6/Cat5	100M			–40° to 85°
GOXS-C12-02AIND	Base 10/100/1000-T	1.25G		Cat6/Cat5	100m			–40° to 85°
GOXS-BI3512-20DIND	BiDi-20	1.25G	1310Tx/1550Rx	SM Simp.	20 km	-9~-3	-24	–40° to 85°
GOXS-BI5312-20DIND	BiDi-20	1.25G	1550Tx/1310Rx	SM Simp.	20 km	-9~-3	-24	–40° to 85°
GOXS-BI3412-40DIND	BiDi-40	1.25G	1310Tx/1490Rx	SM Simp.	40 km	-6~-2	-26	–40° to 85°
GOXS-BI4312-40DIND	BiDi-40	1.25G	1490Tx/1310Rx	SM Simp.	40 km	-6~-2	-26	–40° to 85°
GOXS-BI3512-40DIND	BiDi-40	1.25G	1310Tx/1550Rx	SM Simp.	40 km	-6~-2	-26	–40° to 85°
GOXS-BI5312-40DIND	BiDi-40	1.25G	1550Tx/1310Rx	SM Simp.	40 km	-6~-2	-26	–40° to 85°
GOXS-BI4512-80DIND	BiDi-80	1.25G	1490Tx/1550Rx	SM Simp.	80 km	-4~-1	-28	–40° to 85°
GOXS-BI5412-80DIND	BiDi-80	1.25G	1550Tx/1490Rx	SM Simp.	80 km	-4~-1	-28	–40° to 85°
GOXS-BI4512-120DIND	BiDi-120	1.25G	1490Tx/1550Rx	SM Simp.	120 km	-2~0	-30	–40° to 85°
GOXS-BI5412-120DIND	BiDi-120	1.25G	1550Tx/1490Rx	SM Simp.	120 km	-2~0	-30	–40° to 85°

DAC CABLE

SFP+/QSFP/QSFP28 Copper Twin ax direct-attach cables are suitable for very short distances and offer a cost-effective way to connect within racks and across adjacent racks.

Syrotech offers passive Twin ax cables in lengths of 1-5meters in SFP+/QSFP domain and upto 5meters in QSFP28. DAC offer a highly cost-effective way to connect within racks and across adjacent racks.

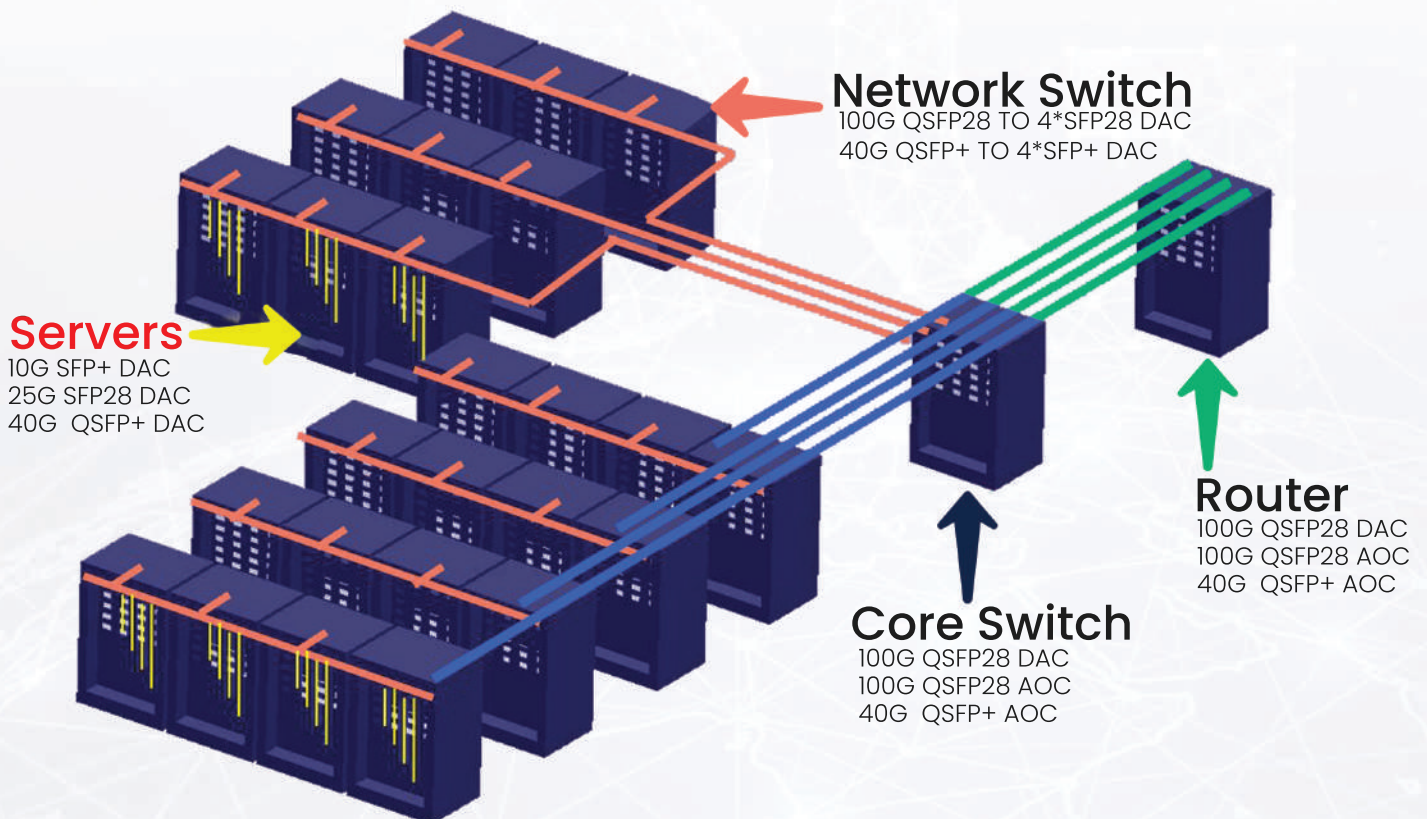DAC based on IEEE 802.3ba and compliant MSA SFF-8436.

AOC CABLE

10G+ AOC

Syrotech SFP+ Active Optical Cables are hot-swappable, low-voltage cable assemblies that connect directly into SFP+ modules at both ends. These cables use a 20-position connector with active circuitry to increase distances and to improve EMI and reduce signal loses. It transmits

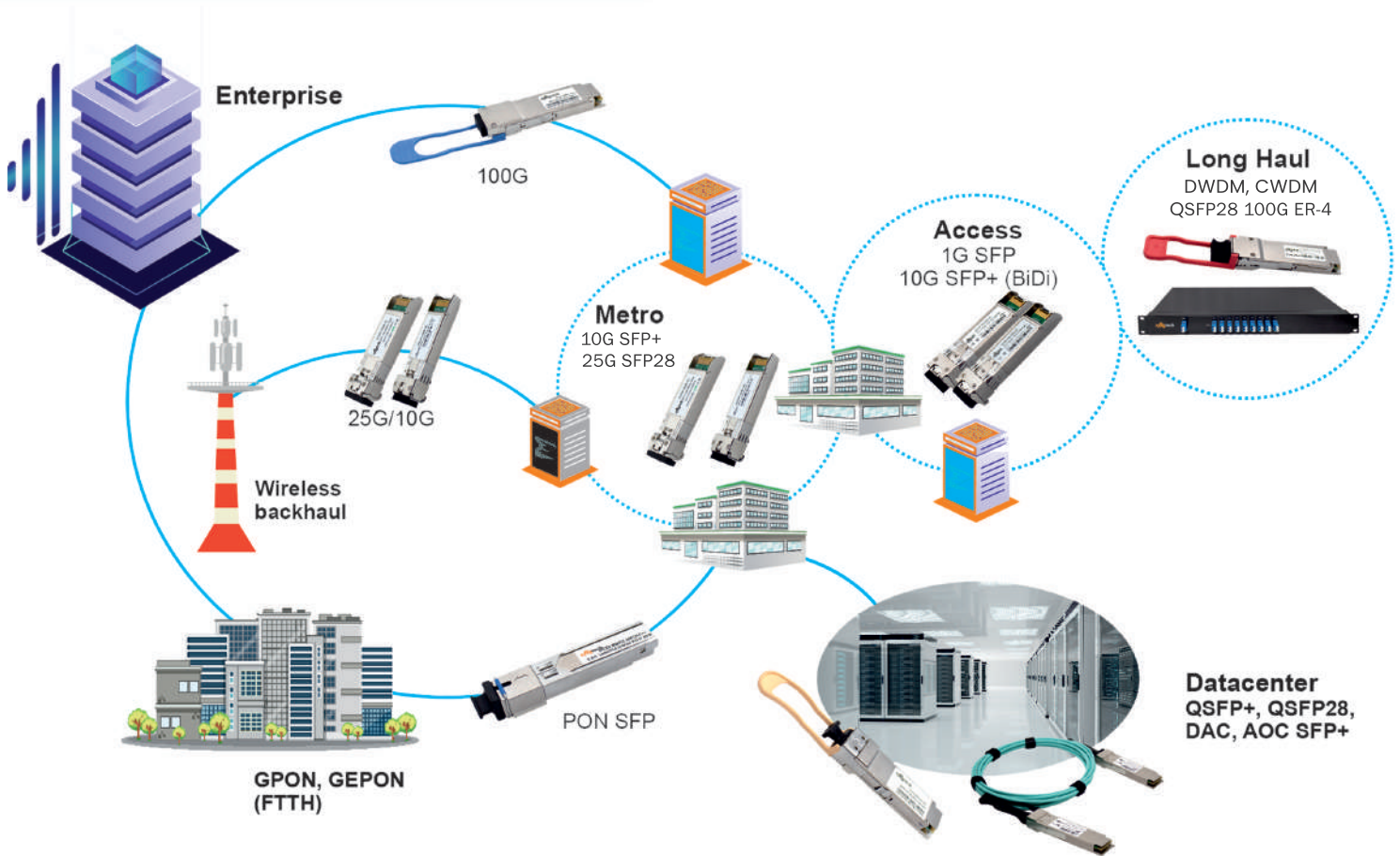loose tube fiber with distance up to 100m.

QSFP/QSFP28 AOC

Syrotech QSFP to QSFP 40GBASE/100GBASE cables are suitable for very short distances and offer a flexible way to connect within racks and across adjacent racks. Active optical cables are much thinner and lighter than copper cables, which makes cabling easier. Active optical Syrotech currently offers active optical cables in lengths of 1, 2, 3, 5, 7, 10, 15, 20, 25 and 30 meters.

DAC AND AOC APPLICATION

Network Switch
100G QSFP28 TO 4*SFP28 DAC
40G QSFP+ TO 4*SFP+ DAC

Servers
10G SFP+ DAC
25G SFP28 DAC
40G QSFP+ DAC

Router
100G QSFP28 DAC
100G QSFP28 AOC
40G QSFP+ AOC

Core Switch
100G QSFP28 DAC
100G QSFP28 AOC
40G QSFP+ AOC

SFP Application

Enterprise

100G

25G/10G

Wireless backhaul

GPON, GEPON (FTTH)

PON SFP

Metro
10G SFP+
25G SFP28

Access
1G SFP
10G SFP+ (BiDi)

Long Haul
DWDM, CWDM
QSFP28 100G ER-4

Datacenter
QSFP+, QSFP28,
DAC, AOC SFP+

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Indian craftsmanship and digital technology makes Syrotech the masters of connectivity & compatibility.

MAKE IN INDIA

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