

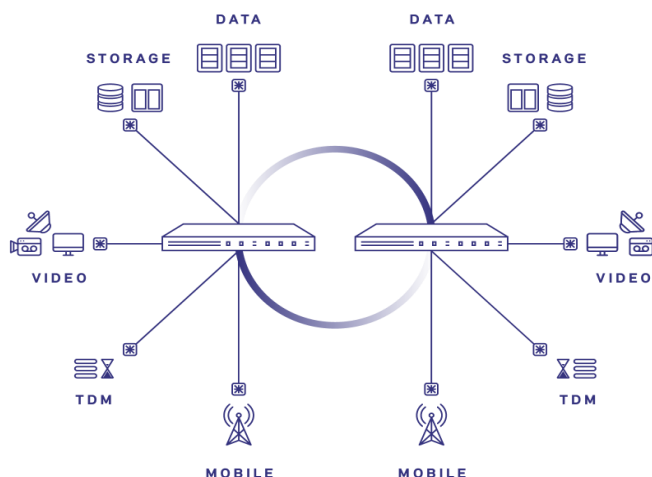
Optical Infrastructure Solutions

Overview

The Itectra Optical Infrastructure Solutions builds upon high-density WDM systems, optical transceivers and accessories designed to provide optical network support for high-speed data Ethernet and Fiber Channel communication.

These WDM systems and optical transceivers deliver capacity from 1 Gbps to 800 Gbps per wavelength suitable for datacenter, enterprises, and service provider networks.

In addition to WDM systems and optical transceivers the Itectra portfolio spans across long-haul active DWDM systems, MPO cassettes, inspection and cleaning equipment.



Product Features

- Active DWDM systems
- Passive CWDM and DWDM systems
- 1/10/25/40/50/100/200/400 GbE transceivers
- 8/16/32Gb FC transceivers
- Direct Attach Cables (DAC)
- Active Optical Cables (AOC)
- MPO cassettes
- Inspection and cleaning equipment

Applications

- Datacentre
- Enterprise
- Core/Metro/Access
- FTTX
- Mobile Fronthaul

Supported by leading vendors

The Itectra Optical Infrastructure portfolio includes a variety of today's leading optical network vendors; Infinera, Skylane Optics, EXFO, Corning and Sticklers. Please consult Itectra for further information on specific products and solutions.

Compatibility

Itectra offers a wide range of compatible solutions allowing full network operational capabilities across the network. All equipment and modules are fully compliant with the relevant standards and recommendations and are manufactured utilizing the highest quality components available.

1Gb (SFP)



Standard: 1000Base
 MSA: INF-8074 / SFF-8472
 Size: 8.55 × 13.7 × 56.5 mm
 All optical modules feature DOM
 Distances based on IEEE 802.3-2012 fibres

Temp., Operation: C: Commercial: 0 – 70°C
 E: Extended: -20 – 85°C
 I: Industrial: -40 – 85°C
 Temp, Storage: -40 – 85°C
 Humidity: 5 – 95%

| Standard | Wavelength [nm] | Temp | Laser/ Receiver | Tx Power [dBm] | Rx Sensitivity [dBm] | Rx Overload [dBm] | Conn | Distance/ Power Budget | Effect [Watt] | Product Number |
|-----------------------|------------------------|-------|-----------------|----------------|----------------------|-------------------|------|------------------------|---------------|----------------|
| 1000Base | | | | | | | | | | |
| 1000Base-TX | ¹ - | C/E | | - | - | | RJ45 | 100m | 1W | SGT00P10DR0A |
| 1000Base-SX | ¹ 850 | C/I | VCSEL/PIN | -9,5 to 0,3 | -17 | 0 | LC | 550m/7,5dB | 1W | SFP85P55GE0B |
| 1000Base-LXM | ^{1 2} 1310 | C/I | FP/PIN | -9 to -3 | -21 | 0 | LC | 1km/12dB | 1W | SFP13001GE0B |
| 1000Base-LX | 1310 | C/I | FP/PIN | -10 to -3 | -21 | 0 | LC | 10km/11dB | 1W | SFP13010GE0B |
| 1000Base-LX | 1310 | C/I | FP/PIN | -8 to -3 | -22 | 0 | LC | 20km/14dB | 1W | SFP13020GE0B |
| 1000Base-EX | 1310 | C/E/I | DFB/PIN | -2 to 3 | -24 | 0 | LC | 40km/22dB | 1W | SFP13040GE0B |
| 1000Base-EX | 1550 | C/E/I | DFB/PIN | -5 to 0 | -24 | 0 | LC | 40km/19dB | 1W | SFP15040GE0B |
| 1000Base-ZX | 1550 | C/E/I | DFB/PIN | 0 to +5 | -23 | 0 | LC | 80km/23dB | 1W | SFP15080GE0B |
| 1000Base-ZX | 1550 | C/E/I | DFB/APD | 0 to 5 | -32 | -10 | LC | 120km/32dB | 1W | SFP15120GE0D |
| 1000Base-ZX | 1550 | C/I | DFB/APD | 3 to 7 | -37 | -10 | LC | 160km/40dB | 1W | SFP15160GE0B |
| Bi-directional | | | | | | | | | | |
| 1000Base-BXD | 1550/1310 | C/I | DFB/PIN | -9 to -3 | -21 | -3 | LC | 10km/12dB | 1W | SBD53010GE0B |
| 1000Base-BXU | 1310/1550 | C/I | FP/PIN | -9 to -3 | -21 | -3 | LC | 10km/12dB | 1W | SBU35010GE0B |
| 1000Base-BXD | 1550/1310 | C/I | DFB/PIN | -8 to -3 | -22 | -3 | LC | 20km/14dB | 1W | SBD53020GE0B |
| 1000Base-BXU | 1310/1550 | C/I | FP/PIN | -8 to -3 | -22 | -3 | LC | 20km/14dB | 1W | SBU35020GE0B |
| 1000Base-BXD | 1550/1310 | C/I | DFB/PIN | -5 to 0 | -23 | -3 | LC | 40km/18dB | 1W | SBD53040GE0B |
| 1000Base-BXU | 1310/1550 | C/I | DFB/PIN | -3 to 2 | -23 | -3 | LC | 40km/20dB | 1W | SBU35040GE0B |
| 1000Base-BXD | 1550/1310 | C/I | DFB/PIN | -2 to 3 | -24 | -3 | LC | 60km/22dB | 1W | SBD53060GE0B |
| 1000Base-BXU | 1310/1550 | C/I | DFB/PIN | 0 to 5 | -26 | -3 | LC | 60km/26dB | 1W | SBU35060GE0B |
| 1000Base-BXD | 1490/1310 | C/I | DFB/PIN | -9.5 to -3 | -22 | -3 | LC | 10km/12.5dB | 1W | SBD43010GE0B |
| 1000Base-BXU | 1310/1490 | C/I | FP/PIN | -9.5 to -3 | -22 | -3 | LC | 10km/12.5dB | 1W | SBU34010GE0B |
| 1000Base-BXD | 1490/1310 | C/I | DFB/PIN | -8 to -3 | -22 | -3 | LC | 20km/14dB | 1W | SBD43020GE0B |
| 1000Base-BXU | 1310/1490 | C/I | FP/PIN | -8 to -3 | -22 | -3 | LC | 20km/14dB | 1W | SBU34020GE0B |
| 1000Base-BXD | 1490/1310 | C/I | DFB/PIN | -5 to 0 | -24 | -3 | LC | 40km/19dB | 1W | SBD43040GE0B |
| 1000Base-BXU | 1310/1490 | C/I | DFB/PIN | -5 to 0 | -24 | -3 | LC | 40km/19dB | 1W | SBU34040GE0B |
| 1000Base-BXD | 1490/1310 | C/I | DFB/PIN | 0 to 5 | -27 | -3 | LC | 60km/27dB | 1W | SBD43060GE0B |
| 1000Base-BXU | 1310/1490 | C/I | DFB/PIN | 0 to 5 | -27 | -3 | LC | 60km/27dB | 1W | SBU34060GE0B |
| 1000Base-BXD | 1550/1490 | C/I | DFB/PIN | 0 to 5 | -26 | -3 | LC | 80km/26dB | 1W | SBD54080GE0D |
| 1000Base-BXU | 1490/1550 | C/I | DFB/PIN | 0 to 5 | -26 | -3 | LC | 80km/26dB | 1W | SBU45080GE0D |
| CWDM | | | | | | | | | | |
| 1000Base-EX | ³ 1270-1610 | C/E | DFB/PIN | -5 to 0 | -21 | -3 | LC | 40km/16dB | 1W | SFCxx040GE0D |
| 1000Base-ZX | ³ 1270-1610 | C/E | DFB/PIN | 0 to 5 | -24 | 0 | LC | 80km/24dB | 1W | SFCxx080GE0D |
| 1000Base-ZX | 1470-1610 | C/E | DFB/APD | 0 to 5 | -32 | -8 | LC | 120km/32dB | 1W | SFCxx120GE0D |
| 1000Base-ZX | 1470-1610 | C/E | DFB/APD | 4 to 7 | -36 | -10 | LC | 160km/40dB | 1W | SFCxx160GE0D |
| DWDM | | | | | | | | | | |
| 1000Base-EX | 19x.x00THz | C | DFB/PIN | 0 to 4 | -20 | -1 | LC | 40km/20dB | 1W | SFDxx040GE0D |
| 1000Base-ZX | 19x.x00THz | C | DFB/PIN | 0 to 5 | -24 | -3 | LC | 80km/24dB | 1W | SFDxx080GE0D |
| 1000Base-ZX | 19x.x00THz | C | DFB/APD | 0 to 5 | -32 | -10 | LC | 120km/32dB | 1W | SFDxx120GE0D |
| 1000Base-ZX | 19x.x00THz | C | DFB/APD | 4 to 7 | -36 | -10 | LC | 160km/40dB | 1W | SFDxx160GE0D |

¹: 100Base/1000Base, SerDes. SGMII on request

²: Utilizing MMF (OM3/OM4: 1 km / OM1/OM2: 550 m)

³: Please contact Itectra for recommended distance per channel for the lambdas 1270 – 1450nm

Specifications are subject to change without notice.

10G (SFP+)



Standard: 10GBase
 MSA: SFF-8431 / SFF-8472
 Size: 8.55 × 13.7 × 56.5 mm
 All optical modules feature DOM
 Distances based on IEEE 802.3-2012 fibres

Temp., Operation: C: Commercial: 0 – 70°C
 E: Extended: -20 – 85°C
 I: Industrial: -40 – 85°C
 Temp., Storage: -40 – 85°C
 Humidity: 5 – 95%

| Standard | Wavelength [nm] | Temp | Laser/ Receiver | Tx Power [dBm] | Rx Sensitivity [dBm] | Rx Overload [dBm] | Conn | Distance/ Power Budget | Effect [Watt] | Product Number |
|-----------------------|------------------------|-------|-----------------|----------------|----------------------|-------------------|------|------------------------|---------------|----------------|
| 1GBase/10GBase | | | | | | | | | | |
| 1/10GBase-TX | ¹ - | C | - | - | - | - | RJ45 | 30m | 3W | SPT00M30MR00 |
| 1/10GBase-SR | 850 | C | VCSEL/PIN | -6 to -1 | -11.1 | -1 | LC | 300m/5dB | 1W | SPP85P301R0D |
| 1/10GBase-LR | 1310 | C/I | DFB/PIN | -8.2 to 0.5 | -14.4 | 0 | LC | 10km/6.2dB | 1W | SPP130101RxD |
| 10GBase | | | | | | | | | | |
| 10GBase-TX | ¹ - | C | - | - | - | - | RJ45 | 30m | 3W | SPT00M301000 |
| 10GBase-SR | ² 850 | C/E/I | VCSEL/PIN | -6 to 1 | -11 | -1 | LC | 400m/5dB | 1W | SPP85P30100B |
| 10GBase-LRM | ³ 1310 | C | FP/PIN | -8.2 to 0.5 | -14.4 | 0.5 | LC | 220m/6.2dB | 1W | SPP13P22100A |
| 10GBase-LRlite | 1310 | C/I | FP/PIN | -8.2 to 0.5 | -12.6 | 0 | LC | 2km/4.4dB | 1W | SPP13002100B |
| 10GBase-LR | 1310 | C/E/I | DFB/PIN | -8.2 to 0.5 | -14.4 | 0 | LC | 10km/6.2dB | 1W | SPP13010100B |
| 10GBase-LR | 1310 | C/E/I | DFB/PIN | -3 to 1 | -14.4 | 0 | LC | 20km/11.4dB | 1W | SPP13020100B |
| 10GBase-ER | 1310 | C/E/I | DFB/PIN | 0 to 5 | -15 | 0 | LC | 40km/15dB | 1W | SPP13040100B |
| 10GBase-ER | 1550 | C/E/I | EML/PIN | -4 to 4 | -15.8 | -1 | LC | 40km/11.8dB | 1.5W | SPP15040100B |
| 10GBase-ZR | 1550 | C/E/I | EML/ADP | 0 to 4 | -24 | -7 | LC | 80km/24dB | 1W | SPP15080100D |
| 10GBase-ZR | 1550 | C | EML/APD | 1 to 4 | -26 | -7 | LC | 100km/27dB | 1.6W | SPP15100100D |
| Bi-directional | | | | | | | | | | |
| 10GBase-BXD | 1330/1270 | C/E/I | DFB/PIN | -5 to 0 | -14 | 0 | LC | 10km/9dB | 1.5W | SPB32010100B |
| 10GBase-BXU | 1270/1330 | C/E/I | DFB/PIN | -5 to 0 | -14 | 0 | LC | 10km/9dB | 1.5W | SPB23010100B |
| 10GBase-BXD | 1330/1270 | C/E/I | DFB/PIN | -2 to 2 | -14 | 0 | LC | 20km/14dB | 1.5W | SPB32020100B |
| 10GBase-BXU | 1270/1330 | C/E/I | DFB/PIN | -2 to 2 | -14 | 0 | LC | 20km/14dB | 1.5W | SPB23020100B |
| 10GBase-BXD | 1330/1270 | C/E/I | DFB/PIN | 1 to 5 | -15 | 0 | LC | 40km/16dB | 1.5W | SPB32040100B |
| 10GBase-BXU | 1270/1330 | C/E/I | DFB/PIN | 1 to 5 | -15 | 0 | LC | 40km/16dB | 1.5W | SPB23040100B |
| 10GBase-BXD | 1330/1270 | C/E/I | DFB/ADP | 1 to 6 | -20 | -8 | LC | 60km/21dB | 1.5W | SPB32060100B |
| 10GBase-BXU | 1270/1330 | C/E/I | DFB/ADP | 1 to 6 | -20 | -8 | LC | 60km/21dB | 1.5W | SPB23060100B |
| 10GBase-BXD | 1550/1490 | C | EML/ADP | -1 to 3 | -23 | -6 | LC | 80km/22dB | 1.5W | SPB54080100D |
| 10GBase-BXU | 1490/1550 | C | EML/ADP | -1 to 3 | -23 | -6 | LC | 80km/22dB | 1.5W | SPB45080100D |
| CWDM | | | | | | | | | | |
| 10GBase-ER | ⁴ 1270-1450 | C/E | DFB/PIN | -2 to 3 | -16 | 0.5 | LC | 40km/14dB | 1.5W | SPCxxB14100D |
| 10GBase-ER | 1470-1610 | C/E/I | EML/PIN | -1 to 4 | -15 | 0 | LC | 40km/14dB | 1.5W | SPCxx040100D |
| 10GBase-ZR | ⁴ 1270-1450 | C/E | DFB/ APD | +2 to 4 | -21 | -8 | LC | 70km/23dB | 1.5W | SPCxxB23100D |
| 10GBase-ZR | 1470-1610 | C/E | EML/APD | 0 to 4 | -23 | -8 | LC | 70km/23dB | 1.5W | SPCxx070100D |
| 10GBase-ZR | 1470-1550 | C | EML/APD | 1 to 4 | -26 | -7 | LC | 100km/27dB | 1.5W | SPCxx100100D |
| DWDM | | | | | | | | | | |
| 10GBase-ER | 19x.x00THz | C/I | EML/PIN | -1 to 4 | -15 | -1 | LC | 40km/14dB | 1.5W | SPDxx040100D |
| 10GBase-ZR | 19x.x00THz | C/I | EML/ADP | 0 to 4 | -23 | -7 | LC | 80km/23dB | 1.5W | SPDxx080100D |
| 10GBase-ZR | ⁵ Tuneable | C/I | ILMZ/ADP | -1 to 3 | -24 | -7 | LC | 80km/23dB | 1.7W | SPDTU080100D |
| 10GBase-ZR | ⁶ Tuneable | C/I | ILMZ/ADP | -1 to 3 | -24 | -7 | LC | 80km/23dB | 1.7W | SPATU080100D |

1: Cat6a/Cat7 cable

2: Utilising MMF (OM4: 400 m / OM3: 300 m / OM2: 82 m / OM1: 33 m)

3: Utilising MMF (OM4: 500 m / OM3: 315 m / OM2: 220 m / OM1: 220 m), mode conditioning patch cord and electric dispersion compensation (EDC)

4: Please contact Itectra for recommended distance per channel

5: 191.100 THz – 196.150 THz (50 GHz spacing) Tuneable

6: 191.100 THz – 196.150 THz (50 GHz spacing) Auto tuneable

7: 191.300 THz – 196.050 THz (50 GHz spacing) Tuneable

Specifications are subject to change without notice.

8/16/32G Fiber Channel (SFP+)



Standard: 8G / 16G / 32G FC
 MSA: SFF-8431 / SFF-8472
 Size: 8.55 × 13.7 × 56.5 mm
 All optical modules feature DOM
 Distances based on IEEE 802.3-2012 fibres

Temp., Operation: C: Commercial: 0 – 70°C
 E: Extended: -20 – 85°C
 I: Industrial: -40 – 85°C
 Temp., Storage: -40 – 85°C
 Humidity: 5 – 95%

| Standard | Wavelength [nm] | Temp | Laser/ Receiver | Tx Power [dBm] | Rx Sensitivity [dBm] | Rx Overload [dBm] | Conn | Distance/ Power Budget | Effect [Watt] | Product Number |
|-----------------------|------------------------|-------|-----------------|----------------|----------------------|-------------------|------|------------------------|---------------|----------------|
| Fibre Channels | | | | | | | | | | |
| 8G FC | 850 | C/E/I | VCSEL/PIN | -6 to -1 | -10 | -1 | LC | 100m/4dB | 1.0W | SPP85P30100B |
| 8G FC | 1310 | C/E/I | DFB/PIN | -8.2 to 0.5 | -14.4 | 0 | LC | 10km/6.2dB | 1.0W | SPP13010100B |
| 8G/16G FC | 850 | C | VCSEL/PIN | -6 to -1.2 | -7.7 | 0 | LC | 100m/1.7dB | 1.2W | SPP85P10160C |
| 8G/16G FC | 1310 | C | DFB/PIN | -5 to 2 | -12 | 2 | LC | 10km/7dB | 1.2W | SPP13010160C |
| 8G/16G/32G FC | 850 | C | VCSEL/PIN | -6.2 to 2 | -5.8 | 2 | LC | 70m/1.6dB | 1.2W | S2885P10320C |
| 8G/16G/32G FC | 1310 | C | DFB/PIN | -5 to 2 | -11.4 | 2 | LC | 10km/6.4dB | 1.2W | S2813010320C |
| CWDM | | | | | | | | | | |
| 8G FC | ¹ 1271-1611 | C/E/I | DFB/PIN | -4 to 1 | -14 | 0.5 | LC | 10km/10dB | 1.0W | SPCxxB10100D |
| 8G FC | ¹ 1271-1451 | C/E | DFB/PIN | -2 to 3 | -16 | 0.5 | LC | 40km/14dB | 1.5W | SPCxxB14100D |
| 8G FC | 1471-1611 | C/E/I | EML/PIN | -1 to 4 | -15 | 0 | LC | 40km/14dB | 1.5W | SPCxx040100D |
| 8G FC | ¹ 1271-1451 | C/E | DFB/ APD | +2 to 4 | -21 | -8 | LC | 70km/23dB | 1.5W | SPCxxB23100D |
| 8G FC | 1471-1611 | C/E | EML/APD | 0 to 4 | -23 | -8 | LC | 70km/23dB | 1.5W | SPCxx070100D |
| 8G/16G FC | 1471-1611 | C | EML/PIN | -1 to 3 | -14 | -1 | LC | 40km/13dB | 2.0W | SPCxx020160C |
| DWDM | | | | | | | | | | |
| 8G FC | 19x.x00THz | C/I | EML/PIN | -1 to 4 | -15 | -1 | LC | 40km/14dB | 1.5W | SPDxx040100D |
| 8G FC | 19x.x00THz | C/I | EML/ADP | 0 to 4 | -23 | -7 | LC | 80km/23dB | 1.5W | SPDxx080100D |
| 8G FC | ² Tuneable | C/I | ILMZ/ADP | -1 to 3 | -24 | -7 | LC | 80km/23dB | 1.7W | SPDTU080100D |
| 8G FC | ³ Tuneable | C/I | ILMZ/ADP | -1 to 3 | -24 | -7 | LC | 80km/23dB | 1.7W | SPATU080100D |
| 8G/16G FC | 19x.x00THz | C | EML/PIN | -1 to 3 | -14 | -1 | LC | 40km/13dB | 2.0W | SPDxx020160C |

¹: Please contact Itectra for recommended distance per channel

²: 191.100 THz – 196.150 THz (50 GHz spacing) Tuneable

³: 191.100 THz – 196.150 THz (50 GHz spacing) Auto tuneable

Specifications are subject to change without notice.

10G (XFP)



Standard: 10GBase
 MSA: INF-8077 / SFF-8472
 Size: 8.55 × 18.35 × 78.0 mm
 All optical modules feature DOM
 Distances based on IEEE 802.3-2012 fibres

Temp., Operation: C: Commercial: 0 – 70°C
 E: Extended: -20 – 85°C
 I: Industrial: -40 – 85°C
 Temp., Storage: -40 – 85°C
 Humidity: 5 – 95%

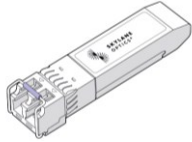
| Standard | Wavelength [nm] | Temp | Laser/ Receiver | Tx Power [dBm] | Rx Sensitivity [dBm] | Rx Overload [dBm] | Conn | Distance/ Power Budget | Effect [Watt] | Product Number |
|-----------------------|------------------------|-------|-----------------|----------------|----------------------|-------------------|------|------------------------|---------------|----------------|
| 10GBase | | | | | | | | | | |
| 10GBase-SR | 850 | C/E/I | VCSEL/PIN | -7.5 to -1 | -11.1 | -1 | LC | 300m/3.5dB | 1.5W | XFP85P30100D |
| 10GBase-LR | 1310 | C/I | DFB/PIN | -6 to -1 | -14.4 | 0 | LC | 10km/8.4dB | 2.5W | XFP13010100D |
| 10GBase-LR | 1310 | C | DFB/PIN | -3 to 1 | -15 | 0 | LC | 20km/12dB | 2.5W | XFP13020100D |
| 10GBase-ER | 1310 | C/I | DFB/PIN | 0 to 4 | -16 | 0.5 | LC | 40km/16dB | 2.5W | XFP13040100D |
| 10GBase-ER | 1550 | C/E/I | EML/PIN | -1 to 4 | -15.8 | 0 | LC | 40km/14.8dB | 3.5W | XFP15040100D |
| 10GBase-ZR | 1550 | C/I | EML/ADP | 0 to 4 | -23 | -7 | LC | 80km/23dB | 3.5W | XFP15080100D |
| Bi-directional | | | | | | | | | | |
| 10GBase-BXD | 1330/1270 | C/E/I | DFB/PIN | -5 to 0 | -14 | 0 | LC | 10km/9dB | 2.0W | XFB32010100D |
| 10GBase-BXU | 1270/1330 | C/E/I | DFB/PIN | -5 to 0 | -14 | 0 | LC | 10km/9dB | 2.0W | XFB23010100D |
| 10GBase-BXD | 1330/1270 | C/E | DFB/PIN | -3.5 to 3.0 | -14.5 | 0 | LC | 20km/11dB | 2.0W | XFB32020100D |
| 10GBase-BXU | 1270/1330 | C/E | DFB/PIN | -3.5 to 3.0 | -14.5 | 0 | LC | 20km/11dB | 2.0W | XFB23020100D |
| 10GBase-BXD | 1330/1270 | C/I | DFB/PIN | 1 to 5 | -15 | 0 | LC | 40km/16dB | 2.0W | XFB32040100D |
| 10GBase-BXU | 1270/1330 | C/I | DFB/PIN | 1 to 5 | -15 | 0 | LC | 40km/16dB | 2.0W | XFB23040100D |
| 10GBase-BXD | 1330/1270 | C | DFB/ADP | 1 to 7 | -20 | -7 | LC | 60km/21dB | 2.0W | XFB13060100D |
| 10GBase-BXU | 1270/1330 | C | DFB/ADP | 1 to 7 | -20 | -7 | LC | 60km/21dB | 2.0W | XFB23060100D |
| 10GBase-BXD | 1550/1490 | C | EML/ADP | -1 to 3 | -23 | -6 | LC | 80km/22dB | 2.5W | XFB54080100D |
| 10GBase-BXU | 1490/1550 | C | EML/ADP | -1 to 3 | -23 | -6 | LC | 80km/22dB | 2.5W | XFB45080100D |
| CWDM | | | | | | | | | | |
| 10GBase-LR | ¹ 1270-1610 | C | DFB/PIN | -5 to 0 | -15 | 0 | LC | 10km/10dB | 3.5W | XFCxxB10100D |
| 10GBase-ER | ¹ 1270-1450 | C | DFB/PIN | -1.8 to 0 | -15.8 | -1 | LC | 40km/14dB | 3.5W | XFCxxB14100D |
| 10GBase-ER | 1470-1610 | C | EML/PIN | -3 to 4 | -15 | 0 | LC | 40km/14dB | 3.5W | XFCxx040100D |
| 10GBase-ZR | ¹ 1270-1450 | C | DFB/ APD | 2 to 4 | -21 | -10 | LC | 70km/23dB | 3.5W | XFCxxB23100D |
| 10GBase-ZR | 1470-1610 | C | EML/APD | 0 to 4 | -23 | 3.5 | LC | 70km/23dB | 3.5W | XFCxx070100D |
| DWDM | | | | | | | | | | |
| 10GBase-ER | 19x.x00THz | C | EML/PIN | -3 to 4 | -15 | 0 | LC | 40km/12dB | 3.5W | XFDxx040100D |
| 10GBase-ZR | 19x.x00THz | C | EML/ADP | 0 to 4 | -23 | -10 | LC | 80km/23dB | 3.5W | XFDxx080100D |
| 10GBase-ZR | ² Tuneable | C | ILMZ/ADP | -1 to 3 | -24 | -7 | LC | 80km/23dB | 3.5W | XFDU0800H0D |

¹: Please contact Itectra for recommended distance per channel

²: 191.100 THz – 196.150 THz (50 GHz spacing) Tuneable

Specifications are subject to change without notice.

25G (SFP28)



Standard: 25GBase
 MSA: INF-8074 / SFF-8402
 Size: 8.55 × 13.7 × 56.5 mm
 All optical modules feature DOM
 Distances based on IEEE 802.3-2012 fibres

Temp., Operation: C: Commercial: 0 – 70°C
 E: Extended: -20 – 85°C
 I: Industrial: -40 – 85°C
 Temp., Storage: -40 – 85°C
 Humidity: 5 – 85%

| Standard | Wavelength [nm] | Temp | Laser/ Receiver | Tx Power [dBm] | Rx Sensitivity OMA [dBm] | Rx Overload [dBm] | Conn | Distance ⁷ | Effect [Watt] | Product Number |
|------------------------|--------------------------|-------|-----------------|----------------|--------------------------|-------------------|------|-----------------------|---------------|----------------|
| 10GBase/25GBase | | | | | | | | | | |
| 10/25GBase-SR | ^{1 2} 850 | C/I | VCSEL/PIN | -8.4 to 2.4 | -10.3 | 2.4 | LC | 100m | 1.0W | S2885P102RxF |
| 10/25GBase-LR | ¹ 1310 | C | DFB/PIN | -7 to 2 | -13.3 | 2 | LC | 10km | 1.5W | S28130102R0F |
| 10/25GBase-LR | ¹ 1310 | C | DFB/PIN | 1 to 4.5 | -14.5 | 2.5 | LC | 20km | 1.5W | S28130202R0F |
| Bi-directional | | | | | | | | | | |
| 10/25GBase-BXD | ¹ 1330/1270 | I | DFB/PIN | -2 to 4 | -13 | 2.5 | LC | 10km | 1.5W | S2B320102R2F |
| 10/25GBase-BXU | ¹ 1270/1330 | I | DFB/PIN | -2 to 4 | -13 | 2.5 | LC | 10km | 1.5W | S2B230102R2F |
| 10/25GBase-BXD | ¹ 1310/1270 | I | DFB/APD | -1 to 6 | -17 | -4 | LC | 40km | 1.8W | S2B170402R2F |
| 10/25GBase-BXU | ¹ 1270/1310 | I | DFB/APD | -1 to 6 | -17 | -4 | LC | 40km | 1.8W | S2B710402R2F |
| CWDM | | | | | | | | | | |
| 10/25GBase-LR | ¹³⁵ 1270-1370 | C/I | DFB/PIN | -6.5 to 2.5 | -11.5 | 2.5 | LC | 10km | 1.5W | S2Cxx0102RxF |
| 10/25GBase-LR | ¹³⁵ 1270-1370 | C/I | DFB/PIN | 1 to 4.5 | -14.5 | 2.5 | LC | 20km | 1.5W | S2Cxx0202RxF |
| DWDM | | | | | | | | | | |
| 10/25GBase-LR | ^{1 6} Tuneable | C/I | ILMZ/PIN | 0 to 6 | -16 | 0 | LC | 10km | 2.5W | S2DTU0102RxF |
| 10/25GBase-LR | ^{1 6} Tuneable | C/I | ILMZ/APD | 0 to 4 | -19.5 | -2 | LC | 15km | 3.0W | S2DTU0152RxF |
| 25GBase | | | | | | | | | | |
| 25GBase-SR | ^{1 2} 850 | C/I | VCSEL/PIN | -8.4 to 2.4 | -10.3 | 2.4 | LC | 100m | 1.0W | S2885P1025xF |
| 25GBase-LR | ¹ 1310 | C/I | DFB/PIN | -5 to 2 | -11.4 | 2 | LC | 10km | 1.5W | S2813010250F |
| 25GBase-ER | ¹ 1310 | C/I | DFB/APD | -3 to 6 | -21 | -4 | LC | 40km | 1.8W | S2813040250F |
| Bi-directional | | | | | | | | | | |
| 25GBase-BXD | ¹ 1330/1270 | C/I | DFB/PIN | -2 to 4 | -13 | 2.5 | LC | 10km | 1.5W | S2B3201025xF |
| 25GBase-BXU | ¹ 1270/1330 | C/I | DFB/PIN | -2 to 4 | -13 | 2.5 | LC | 10km | 1.5W | S2B2301025xF |
| 25GBase-BXD | ¹ 1310/1270 | C/I | DFB/APD | -1 to 6 | -19 | -4 | LC | 40km | 1.8W | S2B17040252F |
| 25GBase-BXU | ¹ 1270/1310 | C/I | DFB/APD | -1 to 6 | -19 | -4 | LC | 40km | 1.8W | S2B71040252F |
| CWDM | | | | | | | | | | |
| 25GBase-LR | ¹³⁵ 1270-1550 | C/E/I | DFB/PIN | 0 to 6 | -13 | 2 | LC | 10km | 1.5W | S2Cxx01025xF |
| 25GBase-LR | ¹³⁵ 1270-1370 | C/E/I | DFB/PIN | 0.5 to 6 | -13.3 | 2 | LC | 20km | 1.5W | S2Cxx02025xF |
| DWDM | | | | | | | | | | |
| 25GBase-LR | ¹ 17 - 61 | C/I | ILMZ/PIN | -1 to 5 | -14.5 | 2 | LC | 10km | 2.0W | S2Dxx01025xF |
| 25GBase-LR | ^{1 6} Tuneable | C/I | ILMZ/PIN | 0 to 6 | -16 | 0 | LC | 10km | 2.5W | S2DTU01025xF |
| 25GBase-LR | ^{1 6} Tuneable | C/I | ILMZ/APD | 0 to 4 | -19.5 | -2 | LC | 15km | 3.0W | S2DTU01525xF |

¹: With Reed-Solomon Forward Error Correction (RS-FEC) for 25 Gbps

²: OM4: 100 m / OM3: 70 m

³: E.g., for break-out from 40G CWDM4 or 100G CWDM4

⁴: 1270 nm / 1290 nm / 1310 nm / 1330 nm / 1350 nm / 1370 nm / 1470 nm / 1490 nm / 1510 nm / 1530 nm / 1550 nm

⁵: Please contact Itectra for recommended channel distance

⁶: Tuneable within the 100 GHz ITU grid, 191.300 THz – 196.100 THz

⁷: As the data rate increases, the pulse spreading due to dispersion also increases resulting in a shorter covered distance.

Specifications are subject to change without notice.

40G (QSFP+)



Standard: 40GBase
 MSA: SFF-8661 / INF-8628 / SFF-8490
 Size: 8.55 × 18.35 × 72.4 mm
 All optical modules feature DOM
 Distances based on IEEE 802.3-2012 fibres

Temp., Operation: C: Commercial: 0 – 70°C
 E: Extended: -20 – 85°C
 I: Industrial: -40 – 85°C
 Temp., Storage: -20 – 85°C
 Humidity: 5 – 85%

| Standard | Wavelength [nm] | Temp | Laser/ Receiver | Tx Power ¹ [dBm] | Rx Sensibility ¹ [dBm] | Rx Overload ¹ [dBm] | Conn | Distance | Effect [Watt] | Product Number |
|--------------------------------|--------------------------|------|-----------------|-----------------------------|-----------------------------------|--------------------------------|--------|----------|---------------|----------------|
| 40G BiDi | | | | | | | | | | |
| 40GBase-SR-Bidi | ² 850 / 900 | C | VCSEL/PIN | -4 – 5 | -11 | -3,8 | LC | 150m | 3.5W | QFB85P10400D |
| 40GBase | | | | | | | | | | |
| 40GBase-SR4 | 850 | C | VCSEL/PIN | -6 to 3 | -13 | 0 | MPO-12 | 100m | 1.5W | QFP85P1040PD |
| 40GBase-SR4 | 850 | C | VCEL/PIN | -2.8 to 3 | -11.1 | 2.4 | MPO-12 | 300m | 1.5W | QFP85P3040PD |
| 40GBase-IR4 | ³ 1310 | C | FP/PIN | -6 to 1.5 | -12.5 | 2.3 | MPO-12 | 1.4km | 3.5W | QFP13C1440PD |
| 40GBase-IR4 | 1271-1331 | C | DFB/PIN | -2 to 3.5 | -11.5 | 2.3 | LC | 2km | 3.5W | QFPQL002400D |
| 40GBase-PSM4 | ³ 1310 | C | DFB/PIN | -8.2 to 0.5 | -14.4 | -0.5 | MPO-12 | 10km | 3.5W | QFP1301040PD |
| 40GBase-LR4 | 1271-1331 | C | DFB/PIN | -4 to 3.5 | -11.5 | 2.3 | LC | 10km | 3.5W | QFPQL010400D |
| 40GBase-ER4 | 1271-1331 | C | DFB/APD | 3.3 to 10.5 | -13.2 | -1 | LC | 40km | 3.5W | QFPQL040400D |
| 40GBase-ZR4 | ^{4 5} 1295-1310 | C | EML/PIN+SOA | 2 to 6.5 | -28 | -7 | LC | 80km | 5.0W | QFP13080405D |
| QSFP+ to SFP+ converter | | | | | | | | | | |
| 40G converter | - | C | - | - | - | - | LC | - | - | QF040CON00C |

- 1: Per lane
- 2: Utilises two fibres
- 3: Parallel SingleMode (PSM4)
- 4: With Forward Error Correction (FEC)
- 5: Operating temperature range 0°C to 65°C

Specifications are subject to change without notice.

100G (QSFP28)



Standard: 100GBase
 MSA: SFF-8636 / SFF-8679 / SFF-8661
 Size: 8.55 × 18.35 × 72.4 mm
 All optical modules feature DOM
 Distances based on IEEE 802.3-2012 fibres

Temp., Operation: C: Commercial: 0 – 70°C
 E: Extended: -20 – 85°C
 I: Industrial: -40 – 85°C
 Temp., Storage: -20 – 85°C
 Humidity: 5 – 85%

| Standard | Wavelength [nm] | Temp | Laser/ Receiver | Tx Power ¹ [dBm] | Rx Sensitivity ¹⁷ [dBm] | Rx Overload ¹ [dBm] | Conn | Distance | Effect [Watt] | Product Number |
|----------------------------------|---------------------------|------|-----------------|-----------------------------|------------------------------------|--------------------------------|--------|--------------------|---------------|----------------|
| 100GBase BiDi | | | | | | | | | | |
| 100GBase-SR1.2 | ^{2 13} 850/900 | C | VCSEL/PIN | -6 to 4 | -7.9 | 4 | LC | 100m | 3.5W | Q2B85M70C00D |
| 100GBase-CWDM4 | ⁵ 1271-1331 | C | DFB/PIN | -0.5 to 8.5 | -7.3 | 2.5 | LC/APC | 2km | 3.5W | Q2BQL002C0TF |
| 100GBase-LR1 | ^{8 10} 1270/1330 | C/I | WDM/PIN | -1.4 to 4 | -4.1 | 4.5 | LC | 10km | 4.5W | Q2B23010C00F |
| 100GBase-LR1 | ^{8 10} 1330/1270 | C/I | WDM/PIN | -1.4 to 4 | -4.1 | 4.5 | LC | 10km | 4.5W | Q2B32010C00F |
| 100GBase-eLR1 | ^{8 10} 1310/1290 | C | WDM/PIN | -0.2 to 6.6 | -10 | 6.6 | LC | 20km | 4.5W | Q2B19020C00F |
| 100GBase-eLR1 | ^{8 10} 1290/1310 | C | WDM/PIN | -0.2 to 6.6 | -10 | 6.6 | LC | 20km | 4.5W | Q2B91020C00F |
| 100GBase-ER1 | ^{8 10} 1304/1309 | C | WDM/APD | 1.7 to 7.1 | -16 | -3.4 | LC | 40km | 5.0W | Q2B49040C00F |
| 100GBase-ER1 | ^{8 10} 1309/1304 | C | WDM/APD | 1.7 to 7.1 | -16 | -3.4 | LC | 40km | 5.0W | Q2B94040C00F |
| 100GBase-ZR4 | 1273-1288 / 1294-1310 | C | WDM/APD | 1.0 to 7.0 | -26 | -5 | LC | 70km | 5.0W | Q2BQ7070C00F |
| 100GBase-ZR4 | 1294-1310 / 1273-1288 | C | WDM/APD | 1.0 to 7.0 | -26 | -5 | LC | 70km | 5.0W | Q2BQ9070C00F |
| 100GBase | | | | | | | | | | |
| 100GBase-SR1.2 | 850/900 | C | VCSEL/PIN | -6.2 to 4 | -8 | 4 | LC | 150m ¹² | 3.5W | Q2B85M70C00F |
| 100GBase-DR1 | ^{8 10} 1311 | C | WDM/PIN | -2.9 to 4 | -1.9 | 4 | LC | 500m | 4.5W | Q2C31P50C00F |
| 100GBase-FR1 | ^{8 10} 1311 | C | WDM/PIN | 2.4 to 4 | -2.5 | 4.5 | LC | 2km | 4.5W | Q2C31002C00F |
| 100GBase-LR1 | ^{8 10} 1311 | C | WDM/PIN | -1.4 to 4 | -4.1 | 4.5 | LC | 10km ¹¹ | 4.5W | Q2C31010C00F |
| 100GBase-SR4 | ² 850 | C | VCSEL/PIN | -8.4 to 2.4 | -10.3 | 2.4 | MPO-12 | 100m | 3.5W | Q2885P10C0PF |
| 100GBase-SR4 | ³ 850 | C | VCSEL/PIN | -8.4 to 2.4 | -10.3 | 2.4 | MPO-12 | 300m | 3.5W | Q2885P30C0PF |
| 100GBase-PSM4 | ⁴ 1310 | C | DFB/PIN | -9.4 to 2 | -12.66 | 2 | MPO-12 | 500m | 3.5W | Q2813P50C0PD |
| 100GBase-CWDM4 | ⁵ 1271-1331 | C | DFB/PIN | -0.5 to 8.5 | -11.5 | 2.5 | LC | 2km | 3.5W | Q28QL002C00F |
| 100GBase-IR4 | ⁴ 1310 | C | DFB/PIN | -5.5 to 2 | -8.8 | 2 | MPO-12 | 2km | 3.5W | Q2813002C0PD |
| 100GBase-LR4 | ⁸ 1295-1310 | C | WDM/PIN | 1.7 to 10.5 | -6.8 | 4.5 | LC | 10km | 4.5W | Q28QD010C00D |
| 100GBase-LR4 | ⁸ 1295-1310 | C | WDM/PIN | 3.5 to 10.5 | -6.8 | 4.5 | LC | 20km | 4.5W | Q28QD020C00D |
| 100GBase-ER4L | ⁶ 1295-1310 | C | EML/PIN+SOA | 3.5 to 8.9 | -21.4 | -3.5 | LC | 40km | 5.0W | Q28QD040C05F |
| 100GBase-ER4 | ⁸ 1295-1310 | C | WDM/PIN+SOA | -2.9 to 2.9 | -20.9 | -3.5 | LC | 40km | 5.0W | Q28QD040C05D |
| 100GBase-ZR4 | ^{5 9} 1295-1310 | C | EML/PIN+SOA | 1 to 6.5 | -26.4 | 5.5 | LC | 80km | 5.0W | Q28QD080C05F |
| 100GBase-ZR4+ | ⁵ 1295-1310 | C | EML/PIN+SOA | 3 to 7 | -29 | 5.5 | LC | 95km | 5.5W | Q28QDB31C0YF |
| 100GBase DWDM | | | | | | | | | | |
| 100GBase-DWDM | ^{8 10} 14 – 61 | C | WDM/PIN | -8 to 4 | -30 | 3 | LC | 80km | 5.5W | Q2DTUSCF0100 |
| QSFP28 to SFP28 converter | | | | | | | | | | |
| 100G converter | - | C | - | - | - | - | LC | - | - | Q2S000002500 |

- ¹: Per line
- ²: OM4: 100 m / OM3: 70 m
- ³: OM4: 300 m / OM3: 200 m
- ⁴: Parallel SingleMode (PSM4)
- ⁵: With Forward Error Correction (FEC)
- ⁶: 40 km w/FEC / 30 km w/o FEC, values given w/FEC implemented
- ⁷: Average Rx Sensitivity, each lane (min) is informative and not the principal indicator of signal strength
- ⁸: WDM laser is either DML, EML or DFB type. Please consult Itectra if there are special requirements
- ⁹: Operating temperature range 0°C to 65°C
- ¹⁰: Utilizes PAM-4
- ¹¹: Available on 1270nm, 1290nm, 1310nm, or 1330nm
- ¹²: OM5: 150m, OM4: 100m, OM3: 70m
- ¹³: Utilises two fibres

Specifications are subject to change without notice.

200G / n×100G / 400G (QSFP-DD)



Standard: 100/200/400GBase
 MSA: SFF-8636 / SFF-8679
 Size: 8.55 × 18.35 × 93.3 mm
 All optical modules feature DOM
 Distances based on IEEE 802.3bs-2017 fibres

Temp., Operation: C: Commercial: 0 – 70°C
 E: Extended: -20 – 85°C
 I: Industrial: -40 – 85°C
 Temp., Storage: -20 – 85°C
 Humidity: 5 – 85%

| Standard | Wavelength [nm] | Temp | Laser/ Receiver | Tx Power ¹ [dBm] | Rx Sensitivity ^{1,2} [dBm] | Rx Overload ¹ [dBm] | Conn | Distance | Effect [Watt] | Product Number |
|-------------------|----------------------------|------|-----------------|-----------------------------|-------------------------------------|--------------------------------|--------|----------|---------------|----------------|
| 4×100GBase | | | | | | | | | | |
| 4×100GBase-LR1 | ^{5 7} 1310 | C | WDM/PIN | -2.7 to 5.1 | -8.2 | 4.8 | MPO-12 | 10km | 12W | QBP13010E0PF |
| 2×100GBase | | | | | | | | | | |
| 2×100GBase-FR4 | 1271–1331 | C | DFB/PIN | -6.5 to 2.5 | -11.5 | 2.5 | CS | 2km | 8W | QAPQL002D03F |
| 2×100GBase-LR4 | 1271–1331 | C | DFB/PIN | -6.5 to 2.5 | -13.0 | 2.5 | CS | 10km | 8W | QAPQL010D03F |
| 2×100GBase-LR4 | ⁷ 1295–1309 | C | WDM/PIN | -4.3 to 4.5 | -10.6 | 4.5 | CS | 10km | 8W | QAPQD010D03D |
| 200GBase | | | | | | | | | | |
| 200GBase-LR4 | ⁷ 1295–1309 | C | WDM/PIN | -3.4 to 5.3 | -9.7 | 5.3 | LC | 10km | 10.8W | QBPQD010D00F |
| 200GBase-ER4 | ^{5 7 8} 1295–1309 | C | WDM/APD | 6.4 to 12.6 | -13.3 | -3.4 | LC | 40km | 10.8W | QBPQD040D00F |
| 400GBase | | | | | | | | | | |
| 400GBase-SR4.2 | 850/908 | C | VCSEL/PIN | -6.5 to 4.0 | -8.4 | 4.0 | MPO-12 | 100m | 11W | QBP85P10E0PF |
| 400GBase-SR8 | ^{3 5} 850 | C | VCSEL/PIN | -6.5 to 4.0 | -8.4 | 4.0 | MPO-16 | 100m | 12W | QBP85P10E0QF |
| 400GBase-DR4 | ^{4 5 7} 1310 | C | CWDM/PIN | -2.9 to 4.0 | -5.9 | 4.0 | MPO-12 | 500m | 12W | QBP13P50E0PF |
| 400GBase-DR4+ | ^{4 5 7} 1310 | C | WDM/PIN | -2.4 to 4.0 | -6.4 | 4.5 | MPO-12 | 2km | 12W | QBP13002E0PF |
| 400GBase-FR4 | ^{5 7} 1271–1331 | C | CWDM/PIN | -3.3 to 3.5 | -7.3 | 3.5 | LC | 2km | 13W | QBPQL002E00F |
| 400GBase-FR8 | ^{5 7} 1273–1309 | C | WDM/PIN | -3.5 to 5.3 | -7.5 | 5.3 | LC | 2km | 13W | QBPOD002E00F |
| 400GBase-LR4 | ^{5 7} 1271–1331 | C | CWDM/PIN | -2.8 to 4.0 | -9.1 | 4.0 | LC | 10km | 13W | QBPQL010E00F |
| 400GBase-LR8 | ^{5 7} 1273–1309 | C | WDM/PIN | -2.8 to 5.3 | -9.1 | 5.3 | LC | 10km | 14.5W | QBPOD010E00F |
| 400GBase-ER8 | ^{5 7} 1273–1309 | C | WDM/APD | -0.6 to 5.6 | -18.6 | -4.4 | LC | 40km | 15.4W | QBPOD040E00F |
| DWDM | | | | | | | | | | |
| 400G ZR | ^{10 11} Tuneable | C | MZM/APD | -10 to -6 | -20 | 1 | LC | 120km | 18.3W | QBTDUSES0801 |
| 400G OpenZR+ | ^{9 11} Tuneable | C | MZM/APD | -10 to -6 | -23 | 1 | LC | 1300km | 21.3W | QBTDUMES0902 |

- 1: Per line
- 2: Average Rx Sensitivity, each lane (min) is informative and not the principal indicator of signal strength
- 3: OM4: 100 m
- 4: Parallel SingleMode (PSM4), APC
- 5: Utilizes PAM-4
- 6: QSFP56
- 7: WDM laser is either DML, EML or DFB type. Please consult Itectra if special requirements
- 8: Utilizes 4×26.5625 Gb with PAM4 Serial Electrical Interface (200GAUI-4) or 8×26.5625 Gb with NRZ Serial Electrical Interface (200GAUI-8)
- 9: Supports 400Gbps (OFEC-16QAM, Rx range: -23 – 1 [dBm], OSNR ≤ 22.7 [dB]), 300Gbps (OFEC-8QAM, Rx range: -23 – 1 [dBm], OSNR ≤ 19.3 [dB]), 200Gbps (OFEC-QPSK, Rx range: -30 – 1 [dBm], OSNR ≤ 15 [dB]), 100Gbps (OFEC-QPSK, Rx range: -32 – 1 [dBm], OSNR ≤ 11 [dB])
- 10: Utilizes 8×26.5625 Gb PAM4 Serial Electrical Interface (400GAUI-8, RS (544/514) FEC)
- 11: Optimal OSNR performance at less than 40 km

Specifications are subject to change without notice.

100G / 200G (CFP2)



Standard: 100/200GBase
 MSA: CFP MSA compliant
 Size: 41.5 × 12.4 × 107.5 mm
 All optical modules feature DOM
 Distances based on IEEE 802.3-2012 fibres

Temp., Operation: C: Commercial: 0 – 70°C
 E: Extended: -20 – 85°C
 I: Industrial: -40 – 85°C
 Temp., Storage: -40 – 85°C
 Humidity: 5 – 85%

| Standard | Wavelength [nm] | Temp | Laser/ Receiver | Tx Power ¹ [dBm] | Rx Sensitivity ¹ [dBm] | Rx Overload ¹ [dBm] | Conn | Distance | Effect [Watt] | Product Number |
|---------------------------------|-----------------|------|-----------------|-----------------------------|-----------------------------------|--------------------------------|------|----------|---------------|----------------|
| 100GBase/200GBase | | | | | | | | | | |
| 100GBase-LR4 | 1295-1309 | C | EML/PIN | -4.3 to 4.5 | -10.6 | 4.5 | LC | 10km | 8.0W | CF2QD010C00D |
| 100GBase-ER4 | 1295-1309 | C | EML/PIN+SOA | -2.9 to 2.9 | -20.9 | 4.5 | LC | 40km | 9.0W | CF2QD040C00D |
| 100G/200G ACO ^{2 3} | Tuneable | C | MZM/APD | -15 to 1 | -25 to -13 | 0 | LC | 2000km | 12W | C2DTUACOMR01 |
| 100G/200G DCO ^{2 3} | Tuneable | C | MZM/APD | -15 to 1 | -25 | 0 | LC | 2000km | 16W | C2DTUDCOMR02 |
| CPF2 to QSFP28 converter | | | | | | | | | | |
| 100G converter | - | C | - | - | - | - | LC | - | - | C2Q00000C00D |

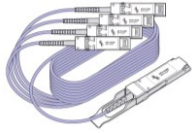
¹: Per line

²: 100 Gb DP-QPSK / 200Gb DP-8QAM/16QAM. Please contact Itectra for distances and further technical details

³: 191.100 THz – 196.150 THz (50 GHz spacing) Tuneable

Specifications are subject to change without notice.

DAC (Direct Attached Cable) / AOC (Active Optical Cable)



Standard: 10/40/100/200GBase
 MSA: SFF-8431/SFF-8436 (SFP+/SFP28)
 SFF-8661/SFF-8665 (QSFP+/QSFP28)
 Size: 8.55 × 13.70 × 56.5 mm (SFP)
 8.55 × 18.35 × 72.4 mm (QSFP)

Temp., Operation: C: Commercial: 0 – 70°C
 Temp., Storage: -40 – 85°C
 Humidity: 5 – 85%

| Standard | Medium | Temp | Method | Type | Length [meter] ¹ | Effect [Watt] | Product Number |
|------------------------|--------------------|------|-------------|-------------------|-----------------------------|---------------|----------------|
| 10GBase (SFP+) | | | | | | | |
| 10GBase | Copper | C | Passive DAC | SFP+ to SFP+ | 1/2/3/5/7 | 1.0W | DAPSSMxx1000 |
| 10GBase | ² 850nm | C | AOC | SFP+ to SFP+ | 1/3/5/7/10 | 0.7W | DOASSMxx100D |
| 25GBase (SFP28) | | | | | | | |
| 25GBase | Copper | C | Passive DAC | SFP28 to SFP28 | 1/2/3/5/7 | 1.0W | DAPSSMxx2500 |
| 25GBase | ² 850nm | C | AOC | SFP28 to SFP28 | 1/3/5/7/10 | 0.7W | DOASSMxx250D |
| 40G (QSFP+) | | | | | | | |
| 40GBase | Copper | C | Passive DAC | QSFP+ to QSFP+ | 1/2/3/5/7 | 0.5W | DAPQQMxx4000 |
| 40GBase | Copper | C | Passive DAC | QSFP+ to 4×SFP+ | 1/2/3/5/7 | 0.5W | DAPQSMxx4000 |
| 40GBase | ² 850nm | C | AOC | QSFP+ to QSFP+ | 1/3/5/7/10 | 1.5W | DAOQQMxx400D |
| 40GBase | ² 850nm | C | AOC | QSFP+ to 4×SFP+ | 1/3/5/7/10 | 1.5W | DAOQSMxx400D |
| 100G (QSFP28) | | | | | | | |
| 100GBase | Copper | C | Passive DAC | QSFP28 to QSFP28 | 1/2/3/5/7 | 0.5W | DAPQQMxxC000 |
| 100GBase | Copper | C | Passive DAC | QSFP28 to 4×SFP28 | 1/2/3/5/7 | 0.5W | DAPQSMxxC000 |
| 100GBase | ² 850nm | C | AOC | QSFP28 to QSFP28 | 1/3/5/7/10 | 2.5W | DAOQQMxxC00D |
| 100GBase | ² 850nm | C | AOC | QSFP28 to 4×SFP28 | 1/3/5/7/10 | 2.5W | DAOQSMxxC00D |

¹: Please contact Itectra if other lengths are required

²: Features DOM

Specifications are subject to change without notice.

About Ipectra

Since 2008 Ipectra has designed, delivered, and serviced business-critical IT infrastructure for Danish datacentres, public companies, enterprises, and service provider networks. Ipectra is specialized in the optical domain with focus on delivery of optical components, WDM systems and consultancy based on a solid knowledge of optical networks, physical optical behaviour, and future evolution of the optical market.

Ipectra has gained the Danish Børsen Gazelle Award in three continuous years (2016 – 2018) and has successively been Bisnode Triple-A rated since 2014.

This success is founded in a close cooperation with our customers and a deep professional understanding of their infrastructure challenges and needs. We follow the technology closely and ensure that our customers benefit from the latest technologies with the most suitable solution.

Quality in all aspects

Ipectra aims for the highest quality in all aspects from optical network design to the selection of vendors and components to each specific project. All Ipectras vendors are carefully selected among the leaders in the optical world and have all the same clear view on “Quality in all aspects” as Ipectra.

Service and Support

Ipectra offers a selection of service and support options to secure operational efficiency and resolve critical problems smoothly and with minimum impact on the operational infrastructure. To accommodate this Ipectra offers different services from Advanced Hardware Replacement to four hours SLA and Professional Deployment Services from selected vendors.

Contacts

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