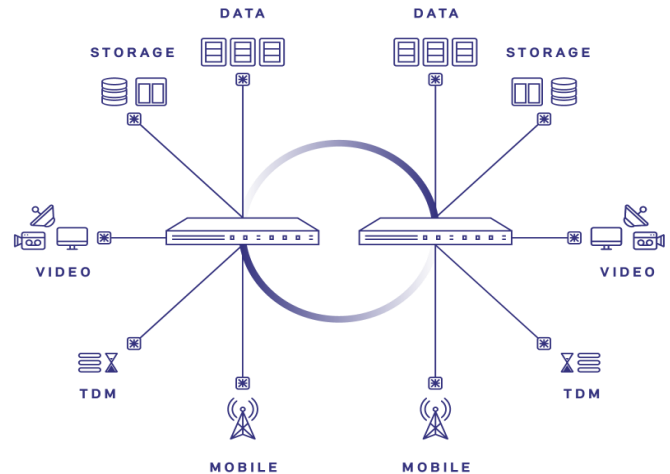# Optical Infrastructure Solutions

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
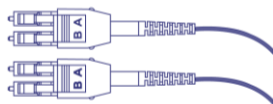- FTTX
- Mobile Fronthaul

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.

CABLE PORTFOLIO

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Patch cords

Rec./Std: SMF: ITU-T G.657A
MMF: TIA-492-AAAD (OM4)
RoHS / REACH materials compliant
LSZH cable jacket
Connector design complies with IEC 61754-20
Connectors excluded from total length

Temp., Operation: -5 – 70°C
Temp., Storage: -40 – 85°C
Humidity: 5 – 85%
Connector: LC / MPO
Other connectors upon request

Type	Fibre	Temp	Color[1]	Connectors[2,5]	Length [meter][3]	Product Number[4]
Patch Cables						
Simplex	G.657A	C	Yellow	1xLC/UPC to 1xLC/UPC	0.25/0.5/1/2/3/5/7/10/15/20	01LCULCU657SYxxx
Duplex	G.657A	C	Yellow	2xLC/UPC to 2xLC/UPC	0.25/0.5/1/2/3/5/7/10/15/20	02LCULCU657DYxxx
Uniboot	G.657A	C	Yellow	2xLC/UPC to 2xLC/UPC	0.25/0.5/1/2/3/5/7/10/15/20	02LCULCU657UYxxx
Duplex	OM4	C	Aqua	2xLC/UPC to 2xLC/UPC	0.25/0.5/1/2/3/5/7/10/15/20	02LCULCUOM4DAxxx
Uniboot	OM4	C	Aqua	2xLC/UPC to 2xLC/UPC	0.25/0.5/1/2/3/5/7/10/15/20	02LCULCUOM4UAxxx
Duplex	G.657A	C	Yellow	2xSC/APC to 2xLC/UPC	0.25/0.5/1/2/3/5/7/10/15/20	02SCALCU657DYxxx
Duplex	G.657A	C	Yellow	2xSC/UPC to 2xLC/UPC	0.25/0.5/1/2/3/5/7/10/15/20	02SCULCU657DYxxx
Duplex	G.657A	C	Yellow	2xSC/APC to 2xSC/APC	0.25/0.5/1/2/3/5/7/10/15/20	02SCASCA657DYxxx
Duplex	G.657A	C	Yellow	2xSC/UPC to 2xSC/UPC	0.25/0.5/1/2/3/5/7/10/15/20	02SCUSCU657DYxxx
12 Fibres patch cables						
Type A, Straight	G.657A	C	Yellow	1xMPO(F)/APC to 1xMPO(F)/APC	1/2/3/5/7/10/15/20	12MPAMPA657AYxxx
Type B, Cross	G.657A	C	Yellow	1xMPO(F)/APC to 1xMPO(F)/APC	1/2/3/5/7/10/15/20	12MPAMPA657BYxxx
Type A, Straight	OM4	C	Aqua	1xMPO(F)/UPC to 1xMPO(F)/UPC	1/2/3/5/7/10/15/20	12MPUMPUOM4AAxxx
Type B, Cross	OM4	C	Aqua	1xMPO(F)/UPC to 1xMPO(F)/UPC	1/2/3/5/7/10/15/20	12MPUMPUOM4BAxxx
8 Fibres break-out						
Duplex, Straight	G.657A	C	Yellow	1xMPO(F)/APC to 4xLC/UPC	2.5m to 20m total length 0.5 to 2.5m fan-out length	08MPALCU657AYxxx-yy
Duplex, Straight	OM4	C	Aqua	1xMPO(F)/UPC to 4xLC/UPC	2.5m to 20m total length 0.5 to 2.5m fan-out length	08MPULCUOM4AAxxx-yy
Duplex, Cross	G.657A	C	Yellow	1xMPO(F)/APC to 4xLC/UPC	2.5m to 20m total length 0.5 to 2.5m fan-out length	08MPALCU657DYxxx-yy
Duplex, Cross	OM4	C	Aqua	1xMPO(F)/UPC to 4xLC/UPC	2.5m to 20m total length 0.5 to 2.5m fan-out length	08MPULCUOM4DAxxx-yy

Footnotes:

[1]: Colour scheme is according to industrial convention and TIA-598C:

  SMF: Yellow, **OM1/OM2**: Orange, **OM3**: Aqua, **OM4**: Violet (industrial convention) or Aqua (as defined in TIA-598C), **OM5**: Lime green

[2]: Attenuation < 0.5 dB
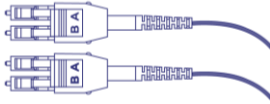
[3]: Other length on request

[4]: xxx: Total length

  yy: Fan-out length

  zz Nº of fibres

[5]: Other connectors on request (FC[UPC/APC], FC[UPC/APC], ST[UPC], E2000[UPC/APC], Open-Ended).

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Trunk patch cords

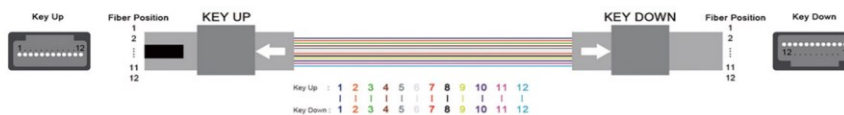|	
Rec./Std:	SMF: ITU-T G.657A
	MMF: TIA-492-AAAD (OM4)
	RoHS / REACH materials compliant
LSZH cable jacket	
Connector design complies with IEC 61754-20	
Connectors excluded from total length	

Temp., Operation:	-5 – 70°C
Temp., Storage:	-40 – 85°C
Humidity:	5 – 85%
Connector:	LC / MPO
Other connectors upon request	

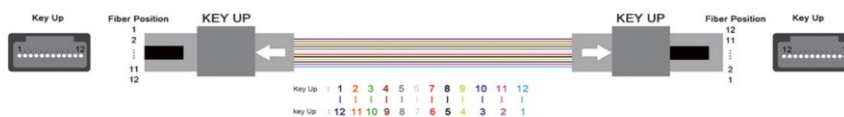| Type	Fibre	Temp	Color[1]	Connectors[2]	Length [meter][3]	Product Number[4]
Trunk cables						
Simplex	G.657A	C	Yellow	zz x LC/APC to zz x LC/APC	2.5m to 200m total length 0.5 to 2.5m fan-out length	zzLCALCA657SYxxx-yy
Simplex	G.657A	C	Yellow	zz x LC/UPC to zz x LC/UPC	2.5m to 200m total length 0.5 to 2.5m fan-out length	zzLCULCU657SYxxx-yy
Simplex	OM4	C	Aqua	zz x LC/UPC to zz x LC/UPC	2.5m to 200m total length 0.5 to 2.5m fan-out length	zzLCULCUOM4SAxxx-yy
Duplex	G.657A	C	Yellow	zz x LC/APC to zz x LC/APC	2.5m to 200m total length 0.5 to 2.5m fan-out length	zzLCALCA657DYxxx-yy
Duplex	G.657A	C	Yellow	zz x LC/UPC to zz x LC/UPC	2.5m to 200m total length 0.5 to 2.5m fan-out length	zzLCULCU657DYxxx-yy
Duplex	OM4	C	Aqua	zz x LC/UPC to zz x LC/UPC	2.5m to 200m total length 0.5 to 2.5m fan-out length	zzLCULCUOM4DAxxx-yy
Simplex	G.657A	C	Yellow	zz x SC/APC to zz x LC/APC	2.5m to 200m total length 0.5 to 2.5m fan-out length	zzSCALCA657SYxxx-yy
Simplex	G.657A	C	Yellow	zz x SC/UPC to zz x LC/UPC	2.5m to 200m total length 0.5 to 2.5m fan-out length	zzSCULCU657SYxxx-yy
Simplex	OM4	C	Aqua	zz x SC/UPC to zz x LC/UPC	2.5m to 200m total length 0.5 to 2.5m fan-out length	zzSCULCUOM4SAxxx-yy
Duplex	G.657A	C	Yellow	zz x SC/APC to zz x LC/APC	2.5m to 200m total length 0.5 to 2.5m fan-out length	zzSCALCA657DYxxx-yy
Duplex	G.657A	C	Yellow	zz x SC/UPC to zz x LC/UPC	2.5m to 200m total length 0.5 to 2.5m fan-out length	zzSCULCU657DYxxx-yy
Duplex	OM4	C	Aqua	zz x SC/UPC to zz x LC/UPC	2.5m to 200m total length 0.5 to 2.5m fan-out length	zzSCULCUOM4DAxxx-yy

Please refer to end notes on page 2.

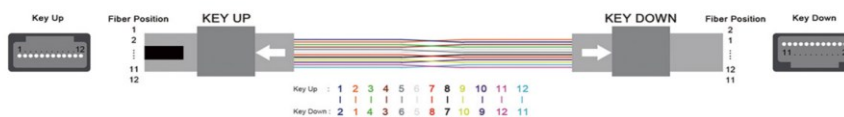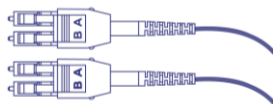Below figure illustrates the various polarity types of the MPO-12 cable.

Connectivity powered by Itectra™

Special patch accessories

Rec./Std:	SMF: ITU-T G.657A	Temp., Operation: -5 – 70°C
	MMF: TIA-492-AAAD (OM4)	Temp., Storage: -40 – 85°C
	RoHS / REACH materials compliant	Humidity: 5 – 85%
LSZH cable jacket		Connector: LC / MPO
Connector design complies with IEC 61754-20		Other connectors upon request
Connectors excluded from total length		

Type	Fibre	Temp	Color[1]	Connectors[2]	Length [meter]	Product Number[4]
Adapter						
LC/LC, SMF, Simplex	SMF	C	Blue	LC/UPC to LC/UPC		AD-LCU-SM-SX000
LC/LC, SMF, Simplex	SMF	C	Green	LC/APC to LC/APC		AD-LCA-SM-SX000
LC/LC, MMF, Simplex	MMF	C	Beige	LC/PC to LC/PC		AD-LCP-MM-SX000
LC/LC, SMF, Duplex	SMF	C	Blue	LC/UPC to LC/UPC		AD-LCU-SM-DX00
LC/LC, SMF, Duplex	SMF	C	Green	LC/APC to LC/APC		AD-LCA-SM-DX00
LC/LC, MMF, Duplex	MMF	C	Beige	LC/PC to LC/PC		AD-LCP-MM-DX000
Attenuators						
Attenuator, xxdB	SMF	C	Blue	LC/UPC		ATT-P-LC-xx-UPC
Attenuator, xxdB	SMF	C	Blue	SC/UPC		ATT-P-SC-xx-UPC
Mode Condition Patch Cords (MCPC)[1]						
MCPC, SC/LC [5]	OM1/SMF	C	Orange / Yellow	SC/UPC to LC/UPC	2 meters	LCSC-OM1-DX-MC-002
MCPC, ST/LC [5]	OM1/SMF	C	Orange / Yellow	ST/UPC to LC/UPC	2 meters	LCST-OM1-DX-MC-002
MCPC, SC/LC [5]	OM2/SMF	C	Orange / Yellow	SC/UPC to LC/UPC	2 meters	LCSU-SM-DX-MC-002
MCPC, ST/LC [5]	OM2/SMF	C	Orange / Yellow	ST/UPC to LC/UPC	2 meters	LCST-OM2-DX-MC-002
Multi-Plane Light Conversion (MPLC) cords[1]						
AROONA Connect [5]	SMF/OM2	C	Yellow / Orange/	LC/UPC to LC/UPC	2 meters	C1SAMAM2
AROONA Connect [5]	SMF/OM2	C	Yellow / Orange	LC/UPC to ST/UPC	2 meters	C1SAMDM2
AROONA Connect [5]	SMF/OM2	C	Yellow / Orange	SC/APC to LC/UPC	2 meters	C1SBMAM2
AROONA Star-2 [5]	SMF/OM1	C	Yellow / Orange	ST/UPC to open-ended	2 meters	S2DM1
AROONA Star-2 [5]	SMF/OM1	C	Yellow / Orange	SC/UPC to open-ended	2 meters	S2CM1
AROONA Star-2 [5]	SMF/OM1	C	Yellow / Orange	SC/APC to open-ended	2 meters	S2BM1
AROONA Star-2 [5]	SMF/OM2	C	Yellow / Orange	ST/UPC to open-ended	2 meters	S2DM2
AROONA Star-2 [5]	SMF/OM2	C	Yellow / Orange	SC/UPC to open-ended	2 meters	S2CM2
AROONA Star-2 [5]	SMF/OM2	C	Yellow / Orange	SC/APC to open-ended	2 meters	S2BM2

End notes:

[1]: Colour scheme is according to industrial convention and TIA-598C:

   SMF: Yellow, **OM1/OM2**: Orange, **OM3**: Aqua, **OM4**: Violet (industrial convention) or Aqua (as defined in TIA-598C), **OM5**: Lime green

[2]: Attenuation < 0.5 dB

[3]: Other length on request

[4]: xxx: Total length

   yy: Fan-out length

   zz   Nº of fibres

[5]: Please refer to the Itectra Whitepaper 'Increasing capacity on multimode fibre'.

Specifications are subject to change without notice.

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About Itectra

Since 2008 Itectra has designed, delivered, and serviced business-critical IT infrastructure for Danish datacentres, public companies, enterprises, and service provider networks. Itectra 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.

Itectra 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

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

Service and Support

Itectra 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 Itectra offers different services from Advanced Hardware Replacement to four hours SLA and Professional Deployment Services from selected vendors.

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