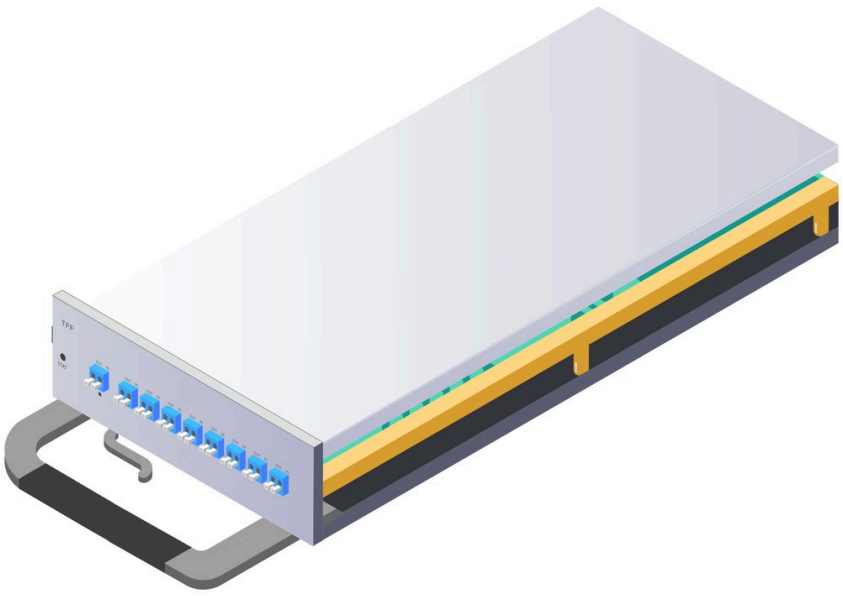
Fixed OADM Card for DCI Chassis

The Fixed OADM Card for DCI Chassis is a passive optical add/drop multiplexer based on thin-film filter (TFF) technology. It multiplexes DWDM channels onto a single fibre, or separates a combined DWDM signal back into its individual channels, on the ITU grid at 100GHz spacing. Available in 4-channel or 8-channel versions, each fixed to a specific centre-frequency band selected at ordering, with a LINE port that carries the remaining channels onward to the next TFF card for cascading.



HIGHLIGHTS

Passive thin-film-filter multiplexing

No power required: multiplexes or demultiplexes DWDM channels purely optically, with low insertion loss and high channel isolation.

4 or 8 fixed channels per card

Each card covers a specific, factory-fixed band of the ITU 100GHz grid (1528–1568nm); 15 standard dual-fibre band options are available, see Ordering Information.

Cascadable via LINE port

The LINE port carries the channels not added or dropped by this card onward to the next TFF

Line-port monitoring

Standard optical power monitoring and status indicator on the LINE port.

card in the chain, so multiple cards can be linked to cover more than 8 channels.

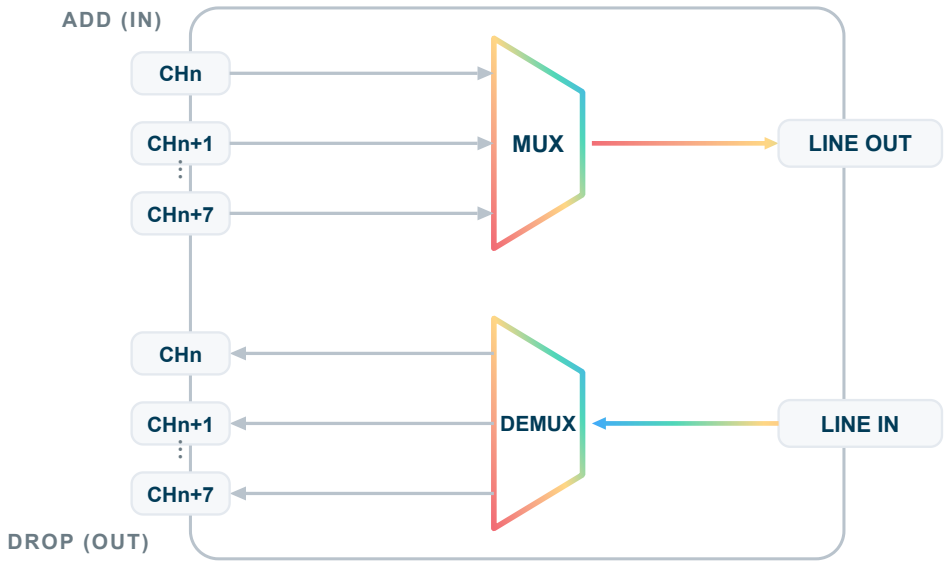
Single-fibre option available

Single-fibre bidirectional (S series) band options are also available, used in complementary pairs with a compatible single-fibre bidirectional OA card; see Ordering Information.

Compact single-slot footprint

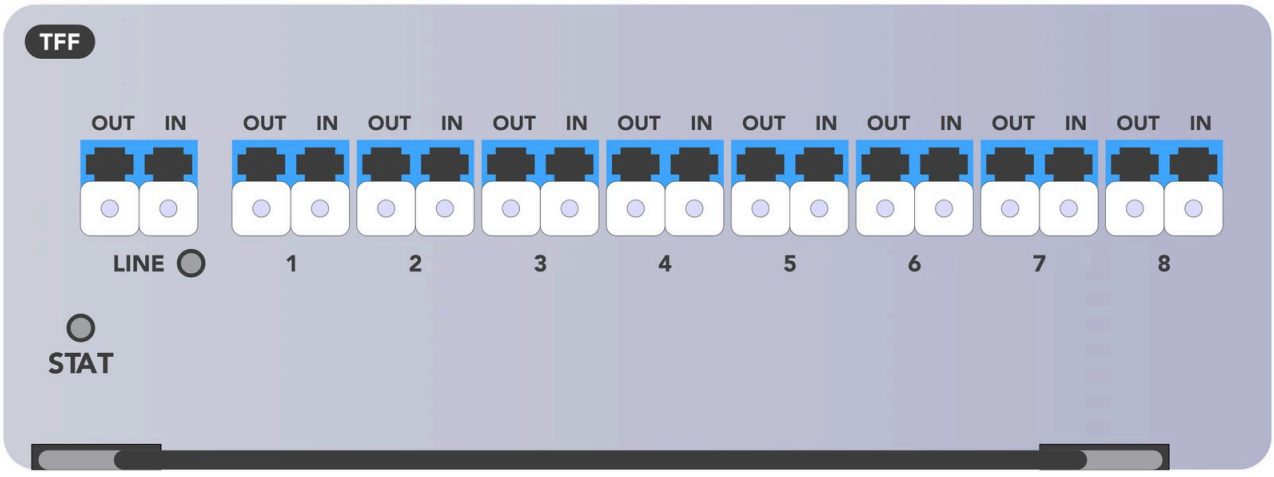
A single-slot card compatible with the OTN DCI platform range, with no active cooling or power requirements.

FUNCTIONAL STRUCTURE



CH = ITU-T channel number; n = first channel of the selected model (see Ordering Information).

FRONT PANEL



FORMAT

CARD FOR DCI CHASSIS 1 SLOT

SPECIFICATIONS

Specification	4-channel	8-channel
Function	Multiplexing and demultiplexing of DWDM optical signals	
Number of Channels	4 channels @100GHz (191.4–196.1 THz)	8 channels @100GHz (192.1–196.0 THz)
Channel Insertion Loss	≤2dB	≤3dB
3dB Spectrum Width	>75GHz	
Adjacent Channel Isolation	>25dB	
Non-Adjacent Channel Isolation	>35dB	
Technology	Thin-film filter (TFF), ITU grid, 100GHz channel spacing	
Wavelength Range	1528–1568nm	
Power Monitoring	LINE port optical power monitoring	
Indicator Lights	LINE port optical power status indicator	
Extended Functionality	Cascading to additional TFF cards supported via the LINE port	
Slots Occupied	1 (compatible with the OTN DCI platform range)	

4-Channel Band Options

Model	Channels	Centre frequency (THz)
5659	CH56 to CH59	195.60–195.90
5255	CH52 to CH55	195.20–195.50
4750	CH47 to CH50	194.70–195.00
4346	CH43 to CH46	194.30–194.60
3841	CH38 to CH41	193.80–194.10
3437	CH34 to CH37	193.40–193.70
2932	CH29 to CH32	192.90–193.20
2528	CH25 to CH28	192.50–192.80
2023	CH20 to CH23	192.00–192.30
1619	CH16 to CH19	191.60–191.90

8-Channel Band Options

Model	Channels	Centre frequency (THz)
5360	CH53 to CH60	195.30–196.00
4552	CH45 to CH52	194.50–195.20
3744	CH37 to CH44	193.70–194.40
2936	CH29 to CH36	192.90–193.60
2128	CH21 to CH28	192.10–192.80

4-Channel Single-Fibre Band Options

Model	Add channels	Drop channels	Add freq. (THz)	Drop freq. (THz)
S2242	CH22 to CH25	CH39 to CH42	192.20–192.50	193.90–194.20
S4222	CH39 to CH42	CH22 to CH25	193.90–194.20	192.20–192.50
S2646	CH26 to CH29	CH43 to CH46	192.60–192.90	194.30–194.60
S4626	CH43 to CH46	CH26 to CH29	194.30–194.60	192.60–192.90

Single-fibre models are used in complementary pairs (e.g. S2242 with S4222) and require a compatible single-fibre bidirectional OA card.

8-Channel Single-Fibre Band Options				
Model	**Add channels**	**Drop channels**	**Add freq. (THz)**	**Drop freq. (THz)**
S2246	CH22 to CH29	CH39 to CH46	192.20–192.90	193.90–194.60
S4622	CH39 to CH46	CH22 to CH29	193.90–194.60	192.20–192.90

Single-fibre models are used in complementary pairs (e.g. S2242 with S4222) and require a compatible single-fibre bidirectional OA card.

ORDERING INFORMATION

NAME	Fixed OADM Card for DCI Chassis
DESCRIPTION	TFF fixed optical add/drop multiplexer card, 1 slot. Passive thin-film-filter (TFF) multiplexing and demultiplexing of DWDM channels on the ITU grid, 100GHz spacing, 1528-1568nm; 4-channel or 8-channel versions, each factory-fixed to a specific centre-frequency band; LINE-port power monitoring and status indicator; cascadable via the LINE port.
PART NUMBER	DCI-TFF-**{Model}**-1S

{Model} Band option, required - a dual-fibre code (e.g. 5659 = 4-channel, CH56 to CH59, 195.60–195.90 THz) or a single-fibre code (e.g. S2242, used in a complementary pair); see the band tables above