

# Optical splitters and Wavelength division multiplexers

An essential part of complete CFO fibre optic platform are the COM series accessories. In this range the COM is a common nominator for the passive optical units within CFO OP-X CWDM platform.



A typical COM series Optical Splitter has a split ratio of 50/50 and supports the 1310 nm and 1550 nm (CWDM) optical operation.

Splitters for any other split ratio are available upon request.

There are two different variants available for the optical wavelength division multiplexing.

The 1310/CWDM variant has been designed for combining an existing legacy 1310 nm system with CWDM based optical system (ch11...ch18).

The 1310/1550 nm variant is for combining standard wideband optical signals in the second and third optical window into a single fibre.

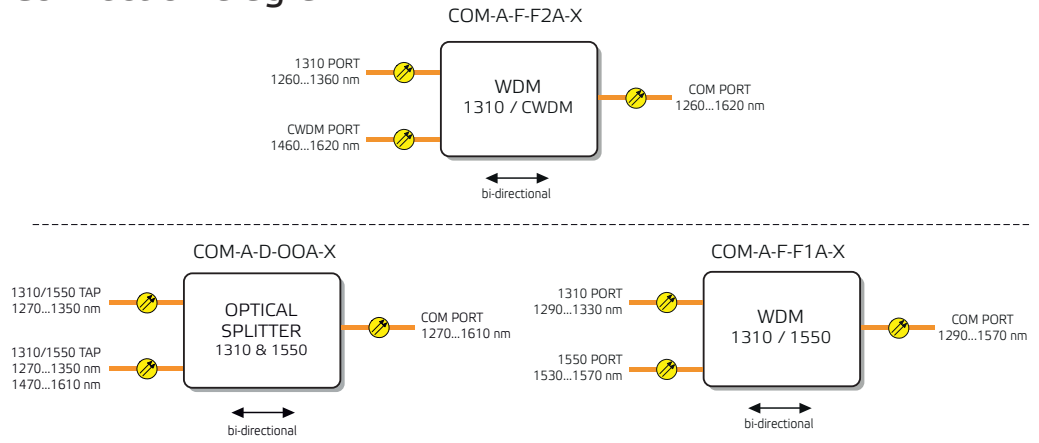
The units are fully compatible with CFO system and it can be installed in a standard CSR installation frame or alternatively stand-alone CMA wall mount adapter.

As with all CFO platform products, the unit meets all international EMC and environmental requirements.

# Features

- Bi-directional operation
- High performance
- Same units for rack mount or stand-alone
- Mechanically compact and ruggedised
- Environmental conformance
- Compatible with all CFO installation systems

# Connection diagram



# Technical specifications *(Typical values unless otherwise stated)*

Optical splitter units			Optical wavelength division multiplexing units		
<b>Optical - dual window (1310 &amp; 1550)</b>			<b>Optical 1310/CWDM</b>		
Fibre type	9/125 µm	singlemode	Fibre type	9/125 µm	singlemode
<u>Wavelength window</u>			<u>Wavelength</u>		
1310 nm	1270...1350 nm		1310 port	1260...1360 nm	reflect channel
1550 nm	1470...1610 nm		CWDM port	1460...1620 nm	pass channel
Split ratio	50/50%	other ratios upon request	<u>Insertion loss</u>		
Insertion loss	3.6/3.6 dB	50/50%	1310 <-> com port	0.8 dB	
Uniformity	0.8 dB		CWDM <-> com port	0.8 dB	
Directivity	50 dB		Pass band ripple	0.3 dB	
Connectors	3 x SC/APC 8° female		Pass channel isolation	40 dB	CWDM@1310
<b>General</b>			Reflect channel isolation	40 dB	1310@CWDM
Power consumption	-	passive unit	Directivity	50 dB	
Supply voltage	-	passive unit	Return loss	45 dB	
Dimensions (H x W x D)	3U ● 15HP ● 190 mm		Polarization dependent loss	0.1 dB	
Weight	0.5 kg		Connectors	3 x SC/APC 8° female	
Operating temperature range	-40...+85 °C		<b>Optical 1310/1550</b>		
Storage temperature range	-40...+85 °C		Fibre type	9/125 µm	singlemode
Humidity	95 %	non-condensing	<u>Wavelength</u>		
			1310 port	1290...1330 nm	
			1550 port	1530...1570 nm	
			<u>Insertion loss</u>		
			1310 <-> com port	0.25 dB	
			1550 <-> com port	0.25 dB	
			Pass band ripple	0.3 dB	
			Isolation	>16 dB	
			Directivity	50 dB	
			Polarization dependent loss	0.1 dB	
			Connectors	3 x SC/APC 8° female	
<b>General</b>			<b>General</b>		
Power consumption	-	passive unit	Power consumption	-	passive unit
Supply voltage	-	passive unit	Supply voltage	-	passive unit
Dimensions (H x W x D)	3U ● 5HP ● 190 mm		Dimensions (H x W x D)	3U ● 5HP ● 190 mm	
Weight	0.5 kg		Weight	0.5 kg	
Operating temperature range	-34...+74 °C	1310/1550	Operating temperature range	-34...+74 °C	1310/1550
	-5...+65 °C	1310/CWDM		-5...+65 °C	1310/CWDM
Storage temperature range	-40...+85 °C		Storage temperature range	-40...+85 °C	
Humidity	95%	non-condensing	Humidity	95%	non-condensing