Optical Circulators

AFL's optical circulators are designed to increase capacity on existing fibre infrastructure. Available in two configurations, a single wavelength (1310 nm or 1550 nm) and dual wavelength OCW model (1310 nm and 1550 nm), they halve the numbers of link fibres required per wavelength.

Designed to be Plug and Play, they can be quickly and easily deployed with minimal service interruption to existing circuits.

Features

- Plug and Play design
- Optimise fibre utilisation
- Scaleable modular design or 1RU variations
- Customisation also available

Applications

- LAN/SAN



1RU Optical Circulator

Circulator Specifications

Wavelength (nm)	1310 or 1500 +/- 30 nm
Insertion loss* (dB)	0.6
Isolation - Port 2-1, Port 3-2 (dB)	≥ 50
Return loss (dB)	≥ 50
Polarisation dependent loss (dB)	< 1.0
PMD (ps)	< 1.0
Power handling (mW)	300
Fibre type	G652.D

* Insertion loss excludes connectors



1RU OCW

OCW Specifications

Wavelength (nm)	1310 or 1550 +/- 15 nm
Insertion loss* (dB)	1.3
Tx / Rx Port Isolation (dB)	≥ 50
Return loss (dB)	≥ 50
Polarisation dependent loss (dB)	< 1.0
PMD (ps)	< 1.0
Power handling (mW)	300

* Insertion loss excludes connectors

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Environmental Specifications

Operating temperature (°C)	-0 - +70
Storage temperature (°C)	-40 - +85

CONNECTOR PERFORMANCE				
LC, SC, ST and FC connectors*				
	SINGLEMODE			
	UPC @ 1310 and 1550 nm		APC @ 1310 and 1550 nm	
	Average	Max / Min	Average	Max / Min
Insertion loss (dB)	0.10	0.25 Max	0.15	0.25 Max
Return loss (dB)	58	55 Min	70	65 Min

* Please contact AFL for performance on other connectors

Ordering Information

Circulator Module

DESCRIPTION	PART NUMBER
6 x Circulator, 1310 nm, SCA/SC, 1RU Rackmount	FPD-OC113SCASC6-X1
6 x Circulator, 1550 nm, SCA/SC, 1RU Rackmount	FPD-OC115SCASC6-X1
8 x Circulator, 1310 nm, SCA/LC, 1RU Rackmount	FPD-OC113SCALC8-X1
8 x Circulator, 1550 nm, SCA/LC, 1RU Rackmount	FPD-OC115SCALC8-X1

Circulator HD Module

DESCRIPTION	PART NUMBER
4 x Circulator, 1310 nm, SCA/SC, HD Module	FPD-OC113SCASC4-H1
6 x Circulator, 1310 nm, SCA/LC, HD Module	FPD-OC113SCALC6-H1
4 x Circulator, 1550 nm, SCA/SC, HD Module	FPD-OC115SCASC4-H1
6 x Circulator, 1550 nm, SCA/LC, HD Module	FPD-OC115SCALC6-H1
3 x Circulator, 1310 nm / 3 x Circulator, 1550nm, SCA/LC, HD Module	FPD-OC11315SCALC3-H1

Circulator XHD Module

DESCRIPTION	PART NUMBER
8 x Circulator, 1310 nm, LCA/LC, XHD Module	FPD-OC113LCALC8-XHD1
8 x Circulator, 1550 nm, LCA/LC, XHD Module	FPD-OC115LCALC8-XHD1

Circulator IFDF Module

DESCRIPTION	PART NUMBER
12 x Circulator, 1310 nm, SCA/LC, IFDF Module	FPD-OC113SCALC12-F1
12 x Circulator, 1550 nm, SCA/LC, IFDF Module	FPD-OC115SCALC12-F1
8 x Circulator, 1310 nm, LCA/LC, XHD Module	FPD-OC113LCALC8-XHD1
8 x Circulator, 1550 nm, LCA/LC, XHD Module	FPD-OC115LCALC8-XHD1

OCW HD Module

DESCRIPTION	PART NUMBER
2 x OCW, 1310/1550 nm, SCA/SC, HD Module	FPD-OCW1SCASC2-H1
4 x OCW, 1310/1550 nm, SCA/LC, HD Module	FPD-OCW1SCALC4-H1
4 x OCW, 1310/1550 nm, SCA/LC, IFDF	FPD-OCW1SCALC4-F1

OCW Rackmount

DESCRIPTION	PART NUMBER
4 x OCW, 1310/1550 nm, SCA/SC, 1RU Rackmount	FPD-OCW1SCASC4-X1
6 x OCW, 1310/1550 nm, SCA/LC, 1RU Rackmount	FPD-OCW1SCALC6-X1

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