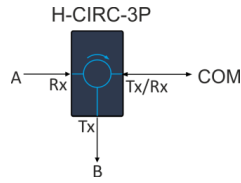
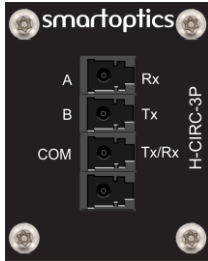


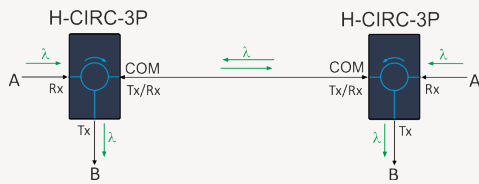
H-CIRC-3P

3-port 1550nm Optical Circulator



OVERVIEW

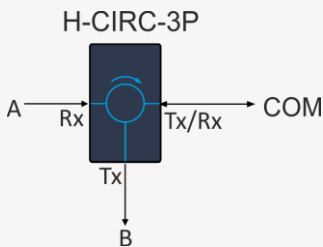
The H-CIRC-3P is an optical circulator that allows light to travel through in only one direction. A wavelength entering port A will only propagate to port COM. A signal entering port COM will only propagate to port B. The typical application is to enable single-fiber operation using the same wavelength to provide a bi-directional link. The normal technique is to use two different wavelengths to avoid interference between up- and down-link.



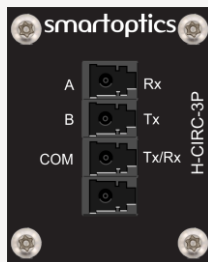
The optical circulator can be used in combination with e.g. the Smartoptics DCP-M systems to provide up to 40 DWDM channels over a single-fiber configuration.

The H-Series supports the industrial temperature range of -40°C to +85°C (-40°F to +185°F) which gives an extended application range into sites without temperature control. The H-Series filters are mounted in a 1 RU mounting bracket solution, and the filter module sizes vary depending on type of filter.

FUNCTIONAL OVERVIEW AND PORT DESCRIPTION



Signals entering the filter is denoted "Rx".
Signals exiting the filter is denoted "Tx".

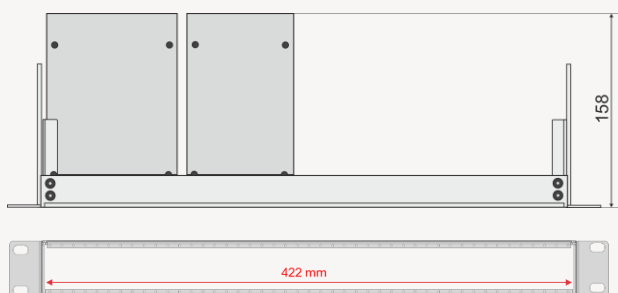


A Rx
B Tx
COM Tx/Rx
NC

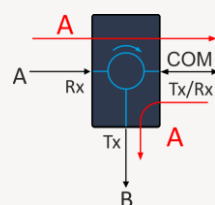
TECHNICAL SPECIFICATIONS

Parameter	Min	Max
Operating wavelength range	1530nm	1570nm
Insertion loss (A) ¹⁾		1.2 dB (max)
Isolation; COM Tx/Rx => A Rx / B Tx => COM Tx/Rx	40 dB @ 23°C	
Ripple; A Rx => COM Tx/Rx / COM Tx/Rx => B Tx		0.4 dB
Directivity	45 dB	
Return loss	40 dB	
Polarization dependent loss		0.2 dB
Polarization mode dispersion		0.20 ps
Connector type		LC/UPC
Module width		35 mm
Operating temperature	-40°C	+85°C
Storage temperature	-40°C	+85°C
Mounting bracket		H-Chassi-1RU (19"), 422 mm slot width
Mounting depth (flush mount)		158 mm

¹⁾ Typical value is for information only. Max value is recommended to be used in actual designs.



Mounting bracket dimensions with two example filters.



¹⁾ Insertion loss

ORDER INFORMATION

The table below shows part number and a short description.

Part number	Description
H-CIRC-3P	H-Series: Optical circulator 3-port 1550nm, 35mm, Insertion loss=1.2dB, LC/UPC