

Features

- Enables deployments of new FTTH applications
- Single compact plug-in module for NC4000 series Optical Nodes
- Totally passive module
- High density fiber interface with MPO connectors
- Low insertion loss

Optical 1550nm Broadcast Splitter with 1310/1550 Diplex Filters



Ideally suited for FTTH applications, Aurora Networks' OP4138 plug-in module for NC4000 series Optical Nodes provides a combined optical splitter for 1550nm broadcast signals together with 1310/1550 diplex filters. This compact design, with MPO connectors, eliminates most fiber jumpers and associated losses which are normally created by broadcast splitting and/or 1310/1550 mux/demux functions.

A single 1550nm broadcast signal injected into the "A INP" port can be equally split eight ways, or each of two independent broadcast signals injected into the "B1 INP" and "B2 INP" ports can be split four ways. The 8-way splitter (or dual 4-way splitters) distributes the 1550nm downstream signal to eight output fibers. The forward/return optical diplexer separates the eight downstream 1550nm signals from the eight upstream 1310nm signals.

OP4138

Product Specifications

Physical:

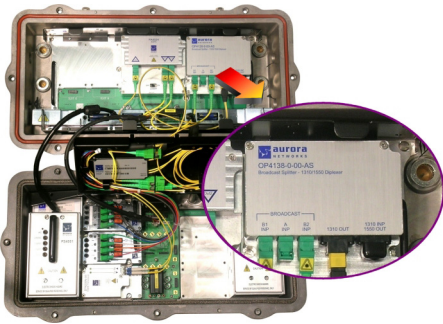
- Dimensions: 4.0" D x 4.5" H x 2.0" W (10.2 cm x 11.4 cm x 5.1 cm)
- Weight: 1.5 lbs (0.68 kg)

Environmental:

- Operating temperature range: -40° to +85°C (-40° to 185°F)
- Storage temperature range: -40° to +85°C (-40° to 185°F)
- Humidity: 5% to 95% non-condensing

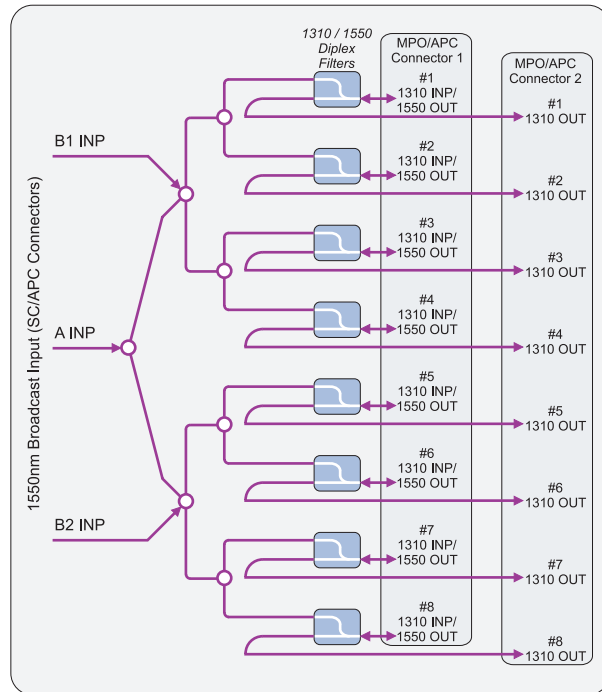
Optical Interface

- Optical connectors:
 SC/APC for 1550nm broadcast inputs
 MPO (female) for 8 combined 1550nm broadcast outputs and 1310nm inputs
 MPO (female) for 8 1310nm outputs
- Inputs:
 1550nm Broadcast: A, B1, and B2
 1310nm: via MPO Connector #1
- Outputs:
 1550nm Broadcast: via MPO Connector #1
 1310nm: via MPO Connector #2



Optical:

- Optical return loss: 45 dB min (> 50 dB typ)
- Polarization Dependent Loss (PDL): 0.25 dB max (< 0.2 typ)
- Isolation: 60 dB min (> 65 dB typ)
- Passbands @ 0.5 dB: ±20 nm centered on 1310nm, and ±20 nm centered on 1550nm
- Insertion loss (including connectors):
 A to #n 1550 OUT: 11.0 dB max (<10.0 dB typ)
 B1 or B2 to #n 1550 OUT: 7.6 dB max (<7.0 dB typ)
 #n 1310 INP to #n 1310 OUT: 1.5 dB max (<1.1 dB typ)
- Uniformity: 1.0 dB max (difference between max and min output power across the eight output ports)



Ordering Information

OP4138-0-00-AS

Optical Broadcast Splitter
with 1310/1550 Diplexer

AS = SC/APC Connector



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