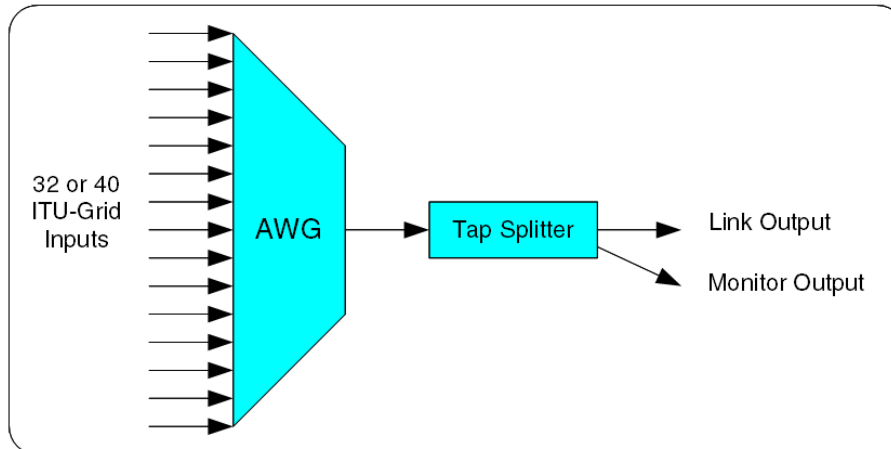


**Purpose:**

To describe Fiberdyne's Dense Wavelength Division Multiplexer (DWDM) modules, which use Arrayed Waveguide (AWG) technology. The module can also provide a splitter (i.e. tap), for sampling and monitoring link traffic.

**Conceptual Usage:****Features:**

- 100-GHz channel spacing
- Wide-band design – maximizes uniformity in passband
- Athermal design for non-powered distribution nodes
- Standard Fiber Connectors: SC, ST, FC, LC, MT-RJ
- Connector Polish: UPC or APC (as applicable)
- Pigtail modules also available

**Options:**

- Number of ITU Grid channels: 32 or 40
- Alternate fiber-optic components (e.g. tap splitters) can be combined for enhanced capabilities.
- Multiple packaging options
  - Rackmount modules, 19/23-inch, 1U high
  - Aerial and Pedestal enclosures for OSP (Outside Plant) applications
- Other module configurations with pigtails

**Standard Module Configurations:**

- Rack-mountable:
  - 1U high (1.72 inches or 44 mm)
  - Module dimensions: 17.0" W x 5.94" D (432 x 151 mm)
  - Reversible tabs for 19-inch or 23-inch rack frames

Port Qty	Rack-mount Connections
1x32	SC, ST, FC, LC, or pigtails
1x40	LC or pigtails

- OSP Applications:
  - Aerial or Pedestal enclosures (*contact Fiberdyne for details*)
  - Pigtails for splicing (typical)

**Specifications:**

Parameter	Unit	Value
Channel Spacing	GHz	100
Channel Quantity	#	32 or 40
Channel Numbers (Reference ITU-T G.694.1)	#	1x32: Ch 21 – 52 1x40: Ch 20 – 59
Passband Width (@ -1 dB)	nm	0.4
Insertion Loss *	dB	< 5.5
Uniformity	dB	< 1.2
Ripple	dB	< 0.7
Return Loss	dB	> 40
Isolation - Adjacent Channels - Non-adjacent Channels	dB	> 25 > 40
PDL (Polarization Dep. Loss)	dB	< 0.5
PMD (Polarization Mode Disp.)	ps	< 0.5
Chromatic Dispersion	ps/nm	-20 to +20
Temperature, Operating	°C	-30 to +70
Temperature, Storage	°C	-40 to +85

**Note:** \* Insertion Loss values do not include connector losses.