

AT-WG100 Series Diplexers



AT-WG101-13

Diplexer with 1310TX/1550RX

AT-WG101-15

Diplexer with 1550TX/1310RX
(AT-WG101-13 and AT-WG101-15 must be ordered together)

AT-WG102-13

Diplexer with 1310TX/1310RX
(Product must be ordered in pairs)

AT-WG102-15

Diplexer with 1550TX/1550RX
(Product must be ordered in pairs)

AT-WG103-13

Diplexer with 1310TX/1310RX
(Product must be ordered in pairs)

AT-WG103-15

Diplexer with 1550TX/1550RX
(Product must be ordered in pairs)

Double the Fiber Capacity

As stand-alone passive optical components, the AT-WG100 Series diplexers enable the doubling of fiber capacity by combining dual fiber strands onto a single fiber strand.

AT-WG100 Series diplexers are used for multiplexing and de-multiplexing broadband and narrowband wavelengths across a single fiber strand. By consolidating transmission and receiving paths, existing fiber pairs have the potential to double the usable capacity.

Application

The AT-WG100 diplexer plugs directly into existing single-mode fiber SC ports using 1310nm or 1550nm wavelengths. Most

commonly used in back-to-back scenarios, the AT-WG100 Series can be used with a variety of network equipment. A typical back-to-back set up is depicted to the right.

Connectors

Single-mode SC

Performance

AT-WG101-13 & AT-WG101-15	Typical	Maximum
Insertion Loss	0.8dB	1.4dB
Crosstalk from TX to RX	-60dB	-50dB
Crosstalk from common to TX	-40dB	-35dB

AT-WG102-13 & AT-WG102-15	Typical	Maximum
Insertion Loss	3.5dB	4.0dB
Crosstalk from TX to RX	-60dB	-48dB

AT-WG103-13 & AT-WG103-15	Typical	Maximum
Insertion Loss	3.5dB	4.0dB
Crosstalk from TX to RX	-60dB	-55dB

Environmental Specifications

Operating Temperature:	
AT-WG101-13 & AT-WG101-15	-25°C to 75°C
AT-WG102-13 & AT-WG102-15	-40°C to 85°C
AT-WG103-13 & AT-WG103-15	-40°C to 85°C
Relative Humidity	5% to 95% non-condensing
Operating Altitude	0 to 10,000 feet

Physical Characteristics

AT-WG101-13 & AT-WG101-15	10mm x 24mm x 64mm
AT-WG102-13 & AT-WG102-15	19mm x 36mm x 92mm
AT-WG103-13 & AT-WG103-15	19mm x 36mm x 92mm

Weight:

AT-WG101-13 & AT-WG101-15	26 grams
AT-WG102-13 & AT-WG102-15	32 grams
AT-WG103-13 & AT-WG103-15	32 grams

Key Features

- Reduce fiber requirements up to 50%
- Protocol & rate independent
- Passive with low insertion loss
- Multiplex & de-multiplex
- Broadband or narrowband wavelengths
- Lightweight
- Simple to install

Ordering Information

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Diplexer with 1310TX/1550RX

AT-WG101-15

Diplexer with 1550TX/1310RX
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AT-WG102-13

Diplexer with 1310TX/1310RX
(Product must be ordered in pairs)

AT-WG102-15

Diplexer with 1550TX/1550RX
(Product must be ordered in pairs)

AT-WG103-13

Diplexer with 1310TX/1310RX
(Product must be ordered in pairs)

AT-WG103-15

Diplexer with 1550TX/1550RX
(Product must be ordered in pairs)

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