

MI-3320 Family of Coaxial and Waveguide Multiplexers

Features & Benefits

- Economically converts a single receiver into a multi-channel measuring system
- Covers most common microwave and millimeter wave frequency bands from 0.1 to 75 GHz
- Designed for broadband operation
- Multiplex transmit or receive signals
- Fast switching speeds
- High channel-to-channel isolation
- Used with the MI-1797 Microwave Receiver and MI Technologies' Automated Microwave Measurement Systems



MI-3325 Multiplexer

Description

The MI-3320 Family of Multiplexers simplify and reduce the cost of RF transmit and receive systems by economically switching a common RF port between one of two or more other RF ports.

With the aid of one of the MI-3320 Coaxial or Waveguide Multiplexers, operators of test and measurement systems can switch a single RF source through the multiplexer to one of several outputs. Therefore, instead of using separate receivers for each RF port, a single receiver can be used with a multiplexer to connect to each port in sequence.

When connected to the MI Technologies' MI-1797 Microwave

Receiver, the MI-3320 multiplexers can be used on either the transmit or receive side of the measurement system. A single pole, double throw multiplexer is commonly used to switch between the vertical and horizontal polarization ports of an antenna under test. In addition, no external power source is required to operate the multiplexers when used with the MI-1797 Receiver. DC power is delivered over the control cable from the receiver's LO/IF Distribution Unit.

The MI-3320 Multiplexer ports are bi-directional with the open ports typically terminated into a 50 Ohm load. Multiplexers that operate

below 40 GHz have coaxial connectors for their RF connections while those that operate above 40 GHz have waveguide flanges.

MI-3320 series multiplexers are shipped in operational condition along with an instruction manual and control cable; no special installation procedures are required. In addition, no special cooling is required when operating the MI-3320 series multiplexers. However, for best results, the multiplexers should be operated in a temperature-controlled environment.



1-800-854-3660
www.mi-technologies.com

Product Specifications

MI-3320 Series Multiplexers RF Specifications

Model	Frequency Range (GHz)	Type	Input Power (dBm CW, max)	Insertion Loss (dBm, max)	Isolation (dBm, min)	Open Port Behavior
MI-3321	0.1 - 0.5 0.5 - 20	SPDT	20	7	80 100	Absorptive
MI-3322	0.1 - 0.5 0.5 - 20	SP4T	20	7	80 100	Absorptive
MI-3323	0.1 - 0.5 0.5 - 18 18 - 20	SP8T	30	9 9 11	80 90 90	Absorptive
MI-3324	18 - 26.5 26.5 - 40	SPDT	30	7	65 55	Reflective
MI-3325	18 - 26.5 26.5 - 40	SP4T	30	12	65 55	Reflective
MI-3326	40 - 60	SPDT	20	8	40	Absorptive
MI-3326A	33 - 50	SPDT	20	8	40	Absorptive
MI-3326B	50 - 75	SPDT	20	8	40	Absorptive

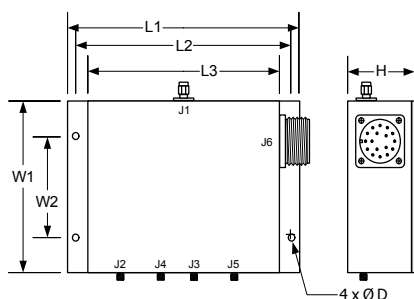
MI-3320 Series Multiplexer Connectors, Flanges and Dimensions

Multiplexer	RF Common Port	Switched Ports	Flange Compatibility	L1 (in)	L2 (in)	L3 (in)	W1 (in)	W2 (in)	H (in)	D (in)	Weight (lbs)
MI-3321	K Male	K Female	n/a	7.1	6.6	5.9	4.9	4.1	2.06	0.2	1.8
MI-3322	K Male	K Female	n/a	7.1	6.6	5.9	4.9	4.1	2.06	0.2	1.8
MI-3323	K Female	K Female	n/a	9.5	9.0	8.5	7.5	6.0	3.44	0.28	5.5
MI-3324	K Male	K Female	n/a	7.1	6.6	5.9	4.9	4.1	2.06	0.2	1.8
MI-3325	K Male	K Female	n/a	8.6	8.1	7.4	4.9	2.9	2.31	0.2	2.4
MI-3326	WR-19	WR-19	UG-383/U (MOD)	7.75	7.375	7.0	5.0	4.5	2.25	0.16	2.8
MI-3326A	WR-22	WR-22	UG-383/U	7.75	7.375	7.0	5.0	4.5	2.63	0.16	2.8
MI-3326B	WR-15	WR-15	UG-385/U	7.75	7.375	7.0	5.0	4.5	2.63	0.16	2.8

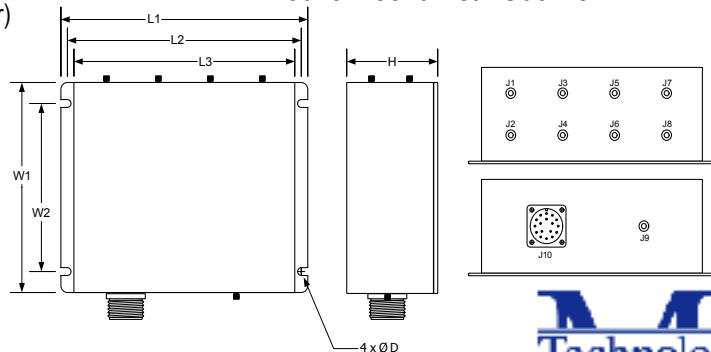
Note: All models use an MS 3102E20-29P Control Connector.

MI-3322 Mechanical Outline

(MI-3321, MI-3324, MI-3326, MI-3326-A, MI-3326B are similar)



MI-3323 Mechanical Outline



Specifications subject to change without notice.

The export of the equipment or components thereof, described herein, or export of the technical data associated with such items, may require the advance approval of the U.S. Government.

1125 Satellite Boulevard, Suite 100 Suwanee, GA 30024

Tel: 800-854-3660 Fax: 678-542-2601 E-mail: sales@mi-technologies.com