

SWR BRIDGES & AUTOTESTERS

Model 60, 62 Series 97 Series

5 to 2000 MHz

10 MHz to 18 GHz



60N50



62NF50



97A50

The 60 and 62 series RF SWR Bridges are precision directional devices designed to make very accurate measurements of SWR. All models contain a built-in reference termination and preserve phase and amplitude of the reflected signal. For extremely low values of SWR, the RF output can be amplified before detection. The 62 series are available with a choice of 50 or 75 ohm impedance. For optimum performance, a 73 or 74 series RF Detector is recommended.

RF SWR Bridge Features

- 5 to 2000 MHz frequency coverage
- Up to 46 dB directivity
- Built-in reference termination
- GPC-7, Type N or BNC test port connectors

Specifications

Model	Frequency range (MHz)	Test port connector	Directivity (dB)	Impedance (Ohms)	Accuracy ^{①②}
60A50 60A50-1	5-2000	GPC-7	40 46	50	0.01 + 0.09p ²
60N50 60N50-1	5-2000	N Male	40 46	50	0.01 + 0.09p ²
60NF50 60NF50-1	5-2000	N Female	40 46	50	0.01 + 0.09p ²
62B50 62BF50	10-1000	BNC Male BNC Female	40	50	0.01 + 0.12p ²
62B75 62BF75	10-1000	BNC Male BNC Female	40	75	0.01 + 0.12p ²
62FF75	10-1000	F Female	40	75	0.01 + 0.12p ²
62N50 62NF50	10-1000	N Male N Female	40	50	0.01 + 0.12p ²
62N75 62NF75	10-1000	N Male N Female	40	75	0.01 + 0.12p ²

	60 Series	62 Series
Insertion loss	6.5 dB nominal from input to test port	
Maximum input power	0.5 W	
Input and output connector	Type N Female on 62N, 62NF and 60 Series BNC Female on 62B, 62BF, and 62FF	
Dimensions	6.7 x 5.1 x 2.54 cm (2-5/8 x 2 x 7/8 in.) plus connectors	5.7 x 3.5 x 2.86 cm (2-1/4 x 1-3/8 x 1- 1/8 in.) plus connectors
Weight	340 g (12 oz.)	170 g (6 oz.)

① Where p is the measured reflection coefficient.

② Includes the effects of test port reflections and directivity.

These precision SWR Autotesters integrate in one small package a broadband microwave bridge, a precision termination, a detector, and a GPC-7, Type N, or WSMA test port connector. With high directivity and low test port reflections, the 97 Series provides accurate return loss (SWR) measurements over the 10 MHz to 18 GHz range. An accuracy equation is provided with every model.

Broadband SWR Autotester Features

- High 40 dB directivity
- Low test port reflections
- Broadband 10 MHz to 18 GHz frequency range
- Small package including bridge, termination, and detector
- Selection of GPC-7, WSMA, or Type N test port connectors

Specifications

Model	Test port connector	Directivity (dB)	Accuracy ^{①②}	
			10 MHz-8 GHz	8-18 GHz
97A50	GPC-7	36	0.016 + 0.06p ²	0.016 + 0.10p ²
97A50-1	GPC-7	40	0.010 + 0.06p ²	0.010 + 0.10p ²
97N50 97NF50	Type N Male Type N Female	37	0.018 + 0.08p ²	0.018 + 0.08p ²
97N50-1 97NF50-1	Type N Male Type N Female	38	0.013 + 0.08p ²	0.013 + 0.12p ²
97S50 97SF50	WSMA Male WSMA Female	35	0.018 + 0.08p ²	0.018 + 0.08p ²
97S50-1 97SF50-1	WSMA Male WSMA Female	38	0.013 + 0.08p ²	0.013 + 0.12p ²

Frequency range	10 MHz to 18 GHz
Frequency sensitivity	±1.5 dB maximum
Insertion loss	6.5 dB nominal ^③
Detector polarity	Negative
SWR output time constant	2 μs
Maximum input power	0.5 W
Input connector	Type N Female stainless steel
Detector output connector	BNC Female
Dimensions	7.6 x 5 x 2.8 cm (3 x 2 x 1-1/8 in.) plus connectors
Weight	340 g (12 oz.)

① Including effects of test port reflections and directivity.

② Where p is the measured reflection coefficient.

③ Typically 8.5 dB at 18 GHz from RF input port to test port.