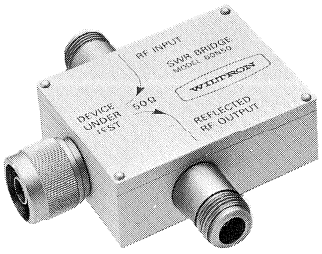
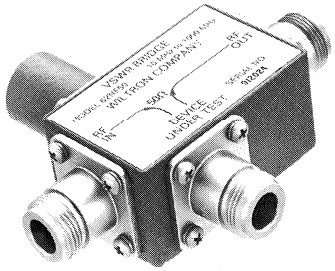
SWR Bridges & Autotesters

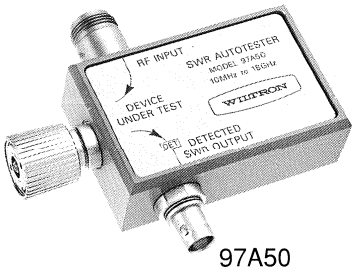
Model 60, 62 Series, 5 to 2000 MHz and Model 97 Series, 10 MHz to 18 GHz



60N50



62NF50



97A50

60 and 62 Series RF SWR Bridge Highlights

- *5 to 2000 MHz Frequency Coverage*
- *Up to 46 dB Directivity*
- *Built-in Reference Termination*
- *GPC-7, Type N or BNC Test Port Connectors*

The 60 and 62 series RF SWR Bridges are precision devices designed to make very accurate measurement 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 impedence. For optimium performance, a 73 or 74 series RF Detector is recommended.

Model	Frequency Range (MHz)	Test Port Connector	Directivity (dB)	Input Impedance (Ohms)	Accuracy[1][2]
60A50 60A50-1	5-2000	GPC-7	40 46	50	$0.01 + 0.09\rho^2$
60N50 60N50-1	5-2000	N Male	40 46	50	$0.01 + 0.09\rho^2$
60NF50 60NF50-1	5-2000	N Female	40 46	50	$0.01 + 0.09\rho^2$
62B50 62BF50	10-1000	BNC Male BNC Female	40	50	$0.01 + 0.12\rho^2$
62B75 62BF75	10-1000	BNC Male BNC Female	40	75	$0.01 + 0.12\rho^2$
62FF75	10-1000	F Female	40	75	$0.01 + 0.12\rho^2$
62N50 62NF50	10-1000	N Male N Female	40	50	$0.01 + 0.12\rho^2$
62N75 62NF75	10-1000	N Male N Female	40	75	$0.01 + 0.12\rho^2$

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: 60 Series
6.7 x 5.1 x 2.54 cm (2-5/8 x 2 x 7/8 in.) plus connectors
62 Series
5.7 x 3.5 x 2.86 cm
(2-1/4 x 1-3/8 x 1-1/8 in.) plus connectors
Weight: 60 Series 340 g (12 oz.)
62 Series 170 g (6 oz.)
Companion Equipment: 5400-71N50, 562 Network Analyzer and 6600B Sweep Generator.

[1] Where ρ is the measured reflection coefficient.
[2] Includes the effects of test port reflections and directivity.

97 Broadband SWR Autotester Highlights

- *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 Connector*

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 for every model.

Model	Test Port Connector	Directivity (dB)	Accuracy[1][2]	
			10 MHz-8 GHz	8-18 GHz
97A50	GPC-7	36	$0.016 + 0.06\rho^2$	$0.016 + 0.10\rho^2$
97A50-1	GPC-7	40	$0.010 + 0.06\rho^2$	$0.010 + 0.10\rho^2$
97N50 97NF50	Type N Male Type N Female	37	$0.018 + 0.08\rho^2$	$0.018 + 0.08\rho^2$
97N50-1 97NF50-1	Type N Male Type N Female	38	$0.013 + 0.08\rho^2$	$0.013 + 0.12\rho^2$
97S50 97SF50	WSMA Male WSMA Female	35	$0.018 + 0.08\rho^2$	$0.018 + 0.08\rho^2$
97S50-1 97SF50-1	WSMA Male WSMA Female	38	$0.013 + 0.08\rho^2$	$0.013 + 0.12\rho^2$

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.)

Companion Equipment: 562 Network Analyzer, 6600B Sweep Generator, 28 Series Termination, and 18 Series Air Line

[1] Including effects of test port reflections and directivity.
[2] Where ρ is the measured reflection coefficient.
[3] Typically 8.5 dB at 18 GHz from RF input port to test port.