

Table 1. SWR Autotester Performance Specifications

Models	Directivity (dB)	Accuracy ^①	Input Z (ohms)	Test Port Connector	Physical
59 Series Comparison SWR Autotester, 10 MHz to 18 GHz					
59A50	36	0.01–8 GHz: 0.016 ±0.06ρ ² ②③ 8–18 GHz: 0.016 ±0.1ρ ²	50	GPC–7	Dimensions: 7.6 x 5.1 x 2.8 cm (3 x 2 x 1 ⅛ in.) plus connectors Weight: 340 g (12 oz)
63 Series SWR Autotesters, 10 MHz to 4 GHz					
63A50	40④	0.01 ±0.06ρ ²	50	GPC7	Dimensions: 6.7 x 5.1 x 2.54 cm (2 ⅝ x 2 x 1 in.) plus connectors Weight: 340 g (12 oz)
63N50				Type N Male	
63NF50				Type N Female	
97 Series SWR Autotesters, 10 MHz to 18GHz					
97A50	36	<u>0.01–8 GHz</u> <u>8–18 GHz</u> 0.016 ±0.06ρ ² 0.016 ±0.1ρ ²	50	GPC–7	Dimensions: 7.6 x 5.1 x 2.8 cm (3 x 2 x 1 ⅛ in.) plus connectors Weight: 340 g (12 oz)
97A50-1	40	0.01 ±0.06ρ ² 0.01 ±0.1ρ ²			
97S50	35	0.018 ±0.08ρ ² 0.018 ±0.12ρ ²		WSMA Male	
97SF50				WSMA Female	
97S50-1	38	0.013 ±0.08ρ ² 0.013 ±0.12ρ ²		WSMA Male	
97SF50-1				WSMA Female	
97N50	35	0.018 ±0.08ρ ² 0.018 ±0.12ρ ²		Type N Male	
97NF50				Type N Female	
97N50-1	38	0.013 ±0.08ρ ² 0.013 ±0.12ρ ²		Type N Male	
97NF50-1				Type N Female	
<u>All Models</u> Insertion Loss (from input to test port): 6.5 dB nominal Detector Output Polarity: Negative Output Time Constant: 2 μs Maximum Power Input: 0.5 watts (+27 dBm) Input Connector: Type N Female Detector Output Connector: BNC Female					

① Where ρ is the reflection coefficient being measured. Accuracy includes the effects of test port reflections and directivity.

② When used with 28A50-1 Precision Termination. The effective directivity of the SWR Autotester can be increased to 60 dB by using the Ripple Extraction return loss measurement technique with the 18A50 Air Line and 29A50-20 Offset Termination.

③ See paragraph 4 for explanation of accuracy and other terms.

④ 46 dB directivity available as Option 1. Option 1 accuracy: $0.005 \pm 0.06\rho^2$.