Chapter 7

Specifications

These specifications include data covering the Bird 43, 43P, 4305A, 4431, 4521, 4522, 4523, 4525, 4526, and 4527. Specifications for models not listed are identical to the Bird 43.

Impedance, Nominal	50 ohm	
VSWR, Max.		
All models except 4431	1.05:1	
4431	1.07:1 (when coupling is less than 30 dB)	
Connectors		
Primary Line	Bird "QC" (N Female normally supplied)	
RF Sampling (on applicable models)	Female BNC	
Power and Frequency Range (element dependent)		
43,43P,4521/22/23/25/26	100 mW – 10 kW 0.45 – 2700 MHz	
4305	25 kW max, 0.45 – 2.5 MHz 10 kW max, 2 – 30 MHz	

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Bird Model	43	Wattmeter
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4431*	5000 W max, 2 – 30 MHz 1000 W max, 30 – 1000 MHz
4527	1000 W max, 2 – 200 MHz 500 W max, 200 – 512 MHz
RF Coupling	
4527 (approximate)	–53 dB, 512 – 10 MHz –70 dB, 10 – 2 MHz
4431 (adjustable)	15 – 70 dB
Insertion Loss (4431 only)*	
2 – 512 MHz	0.1 dB max
512 – 1000 MHz	0.1 dB max
Accuracy	
CW (all models)	± 5% of full scale
Peak Power (43P only)	± 8% of full scale
Power Requirement (43P only)	Two 9V alkaline batteries (NEDA 1604)
Battery Life (43P only)	48 hours typical
Dimensions, Nominal	
43, 43P	3-5/8"L x 4"W x 6-7/8"H (92 x 102 x 175 mm)
4305A	4-1/4"L x 3-7/8"W x 6-7/8"H (108 x 99 x 175 mm)

Specifications

4431	3-7/8"L x 4"W x 6-7/8"H (99 x 102 x 175 mm)
4521/22/23/25/26/27	19"W x 5-1/4"H x 1-3/4"D (483 x 134 x 45 mm)
Weight, Nominal	
43, 4521/22/23/25/26/27	3 lb. (1.36 kg)
43P	4 lb. (1.8 kg)
4431	3.5 lb. (1.59 kg)
4305A	3.25 lb. (1.47 kg)
Operating Position	Any
Finish	Grey Powder Coat

* Applicable only for maximum coupling less than 30 dB. This requires a minimum decoupling of four full turns counterclockwise above 200 MHz, and seven full turns above 800 MHz

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