



**MODEL 43 — Portable Wattmeter**

**Power Range** 100 mW - 10 kW using Bird® Plug-in Elements.\*  
**Frequency Range** 450 kHz - 2.7 GHz (depending on element)  
**Insertion VSWR** with N Connectors 1.05 max. to 1000 MHz  
**Accuracy** ±5% of full scale  
**Connectors** QC Type (Female N normally supplied)  
**Finish** Light Gray powder coat  
**Nominal Size** 6 7/8" H x 5 1/8" W x 3 5/8" D,  
 (includes connectors) (175 mm x 130 mm x 92 mm)  
**Weight** 3 lbs. (1.4 kg)  
**Elements** Tables 1, 2, 3, 3A, 4, 6 (pages 37-40)



**MODEL 43P — Portable Wattmeter**

**PEAK POWER RETROFIT KIT 4300-400 — Portable Wattmeter**

**Power Range** 100 mW - 10 kW using Bird® Plug-in Elements.\*  
**Frequency Range** 450 kHz - 2.7 GHz (depending on element)  
**Accuracy** CW Mode: ±5% full scale, Peak mode: ±8% full scale  
**Modulation** Normal voice audio; or (Peak Mode) Rectangular Pulses  
 Duty cycle: 2% (min), Repetition rate: 100 pps (min), Pulse width: 200 µs (min)  
**Battery Life** 48 hours typical  
**Weight** Adds 1 lb. to Model 43



**VARIABLE RF TAP 4431 — Portable Wattmeter**

**Power and Frequency Range** 5 kW max. 2 - 30 MHz, 1 kW max. 30 - 1000 MHz\*\* using Bird® Plug-in Elements\* with N Connectors 1.07 max.\*\* to 1000 MHz  
**Insertion VSWR** ±5% of full scale  
**Accuracy** 0.1 dB max. (2-512 MHz), 0.2 dB max. (512-1000 MHz)\*  
**Insertion Loss** Variable -15 to -70 dB from BNC (Female) port  
**RF Sample Output** QC Type (Female N normally supplied)  
**Connectors** QC Type (Female N normally supplied)  
**Finish** Gray powder coat  
**Nominal Size** 6 7/8" H x 5 1/8" W x 3 5/8" D,  
 (includes connectors) (175 mm x 130 mm x 92 mm)  
**Weight** 3 1/2 lbs. (1.6 kg)  
**Elements** Tables 1, 2, 3, 3A, 4, 6 (pages 37-38) (within power/frequency range limits stated above)  
**Accessories** Case (page 43)



**WATTMETER 4314B — Portable Wattmeter**

**Power Range** 100 mW - 10 kW using Bird® Plug-in Elements.\*  
**Frequency Range** 450 kHz - 2.7 GHz (depending on element)  
**Insertion VSWR** with N Connectors 1.05 max. to 1000 MHz  
**Accuracy** ±5% of full scale CW, ±8% PEP  
**Pulse Parameters** (min.) Pulse width 0.4 µs (100-2300 MHz), 1.5 µs (26-99 MHz) and 15 µs (2-25 MHz); repetition rate 30 pps and duty factor 1 x 10<sup>-1</sup> min.  
**Battery** Two 9-Volt alkaline transistor batteries  
**AC Power** 120 VAC, 60 Hz or 220 VAC, 60 Hz (using Bird® adapter)  
**Connectors** QC Type (Female N normally supplied)  
**Finish** Light Gray powder coat  
**Nominal Size** 6 7/8" H x 5 1/8" W x 3 5/8" D,  
 (includes connectors) (175 mm x 130 mm x 92 mm)  
**Weight** 3 lbs. (1.4 kg)  
**Elements** Tables 1, 2, 3, 3A, 4, 5, 6 (pages 37-40)  
**Accessories** Case (page 43), spare batteries (page 42), extra QC connectors (page 41).



**HIGH-POWER WATTMETER 4305A — Portable Wattmeter**

**Power Range** 50 W - 25 kW using Bird® Plug-in Elements.\*  
**Frequency Range** 450 kHz - 2.3 GHz (depending on element)  
**Insertion VSWR** with N Connectors 1.05 max.  
**Accuracy** ±5% of full scale  
**Connectors** QC Type (Female N normally supplied)  
**Finish** Gray powder coat  
**Nominal Size** 6 5/16" H x 5 1/8" W x 4 1/4" D,  
 (includes connectors) (161 mm x 131 mm x 108 mm)  
**Weight** 3 1/4 lbs. (1.5 kg)  
**Elements** 4305A element table below and 1 5/8AA table (page 39)  
**Accessories** Case (page 43)



4305A Elements	Frequency (MHz)	2-30	50-125	100-250	400-1000	1100-1800
Power	.45-2.5	—	—	—	—	—
50 W	—	—	—	—	—	50K7
2500 W	—	—	2500B7	2500C7	2500E7	—
5000 W	—	—	5000B7	—	—	—
10 kW	—	10KH7	—	—	—	—
25 kW	25KP7	—	—	—	—	—

**MODEL 4304A FIXED 25-1000 MHz 5-500 WATT ELEMENT — Portable Wattmeter**

**Power Ranges** 5, 15, 50, 150, 500 W, with no scale limitations except power limited to 150 W from 800-1000 MHz  
**Frequency Range** 25 MHz - 1.0 GHz  
**Insertion VSWR** 25-521 MHz, 1.05 max. (with UHF female conn.), 512-1000 MHz, 1.07 max.  
**Insertion Loss** 25-512 MHz, 0.10 dB max. with UHF female conn., 512-1000 MHz range, 0.13 dB max.  
**Accuracy** 25-100 MHz, ±7% of full scale, using correction charts. 100-512 MHz, ±6 of full scale, no correction needed. 512-1000 MHz, ±7% of full scale, no correction needed.  
**Connectors** QC Type (Female N normally supplied)  
**Finish** Light Gray powder coat  
**Nominal Size** 6 7/8" H x 5 1/8" W x 3 5/8" D,  
 (includes connectors) (175 mm x 130 mm x 92 mm)  
**Weight** 3 lbs. (1.36 kg)  
**Accessories** Case (page 43)



\*Quoted accuracy only when used with other Bird® Products  
 \*\*Applies only when coupling is less than 30 dB