

POWER REQUIREMENTS

Operating power for the Models 4381, 4382, 4383 and 4384 is derived from rechargeable nickel-cadmium cells inside the portable unit or from an ac operated charger-adaptor which attaches to the unit via a 6 foot (1.8 meter) cord. All panel mount units (Models 4385, 4386, 4387 and 4388) are ac operated only. A voltage selector slide switch, for 115 or 230Volt operation is located on the back panel of the units.

SPECIFICATIONS

Specifications for the Power Analyst are given in Table 1. Refer to Figure 1.1, 1.2, or 1.3 for outline dimensions.

Table 1. Specifications.

Power Range¹	
Model 4381/83/85/87	100mW to 10kW full scale
4382/84/86/88	250W to 250kW full scale
Usable Over-Range	To 120% of full scale on CW, PEP, SWR and return loss functions. To 400% of scale (PEP) on dBm and % modulation.
Frequency Range¹	
Model 4381/83/85/87	450KHz to 2.3GHz
4382/84/86/88	2MHz to 1000 MHz
Sampling Rate	2-3 readings per second
Accuracies	
Power Readings	±5% of full scale
SWR	±10% of reading
% Modulation ²	±5%
Return Loss	±0.3dB to corresponding SWR value (accuracy not guaranteed with components not supplied by Bird)
Modulation Frequency ³	50-10,000Hz
Impedance	50 ohms
Weight	
Model 4381	4.0 lbs. (1.8kg)
4382/83/84	2-1/4 lbs. (1.0kg)
Dimensions (Panel mount)	
Model 4385	19" x 6-21/32" (48.3 x 165mm)
4386/87/88	19" x 5-7/32" (48.3 x 133mm)
Power Requirements	
Battery - Models 4381/82/83/84	(Rechargeable Ni-Cad) Approx. 8 hours per charge
ac (Using adaptor/charger)	115V, 50-60Hz 6W or 230V, 50-60Hz 6W
ac (panel units)	115V, 50-60Hz 8W or 230V, 50-60Hz 8W switchable.

¹Frequency band and power range is determined by Plug-in Element selected. See Bird Catalog for availability. Some modes require two elements in a 10:1 power ratio.

²For CW power levels greater than one third of full scale, accuracy of the % modulation mode is ±5% from 0 to 90% and +10% from 90 to 100%.

³For pulse modulation the minimum parameters are: 50 microseconds pulse width, 100 pps repetition rate and 1% duty cycle.