



PRODUCT FEATURES

- Rigid Line Wattmeters are offered with a choice of meter scales
- Available with or without a forward/reflected power switch
- Scale choices include 15/30/60 kW, 5/10/25 kW and 8/80 kW

Rigid Line Wattmeters
6810 SERIES

The 6810 Series of 100μA Rigid Line RF Wattmeters forms a complete power measurement system when combined with the appropriate rigid line section and plug-in elements.

Elements must be ordered according to the desired frequency and power ranges, the meter scales and size of the line section selected for use with the meter.

6810 SERIES	TYPE	SCALES	DC CABLE	USES LINE SECTION
6810-220	4.5 in rectangular meter in housing with FWD and RFL switch	5/10/25 kW	10 ft	Double socket
6810-230	4.5 in rectangular meter in housing with FWD and RFL switch	15/30/60 kW	10 ft	Double socket
6810-250	4.5 in rectangular meter in housing with FWD and RFL switch	8/80 kW	10 ft	Double socket
6810-265	4.5 in rectangular meter in housing	8/80 kW	10 ft	Single socket
6810-307	4.5 in rectangular meter in housing	15/30/60 kW	10 ft	Single socket
6810-309-7	4.5 in rectangular meter in housing	5/10/25 kW	10 ft	Single socket



Rigid Line Sections

THRULINE® WATTMETER COMPONENTS

Bird manufactures 50 Ohm 7/8 in, 1-5/8 in, 3-1/8 in, 4-1/16, and 6-1/8 in RF Line Sections. Each line section is equipped with one or two sockets where Plug-In Elements, in the desired power and frequency range, are inserted. Double-socket line sections are for simultaneous measurement of forward and reflected power. Designed for insertion between a RF transmitter and antenna or load.

LINE SECTION SELECTION GUIDE

7/8 inch	RF CONNECTOR	ELEMENT SOCKETS	LINE SIZE	LENGTH	WEIGHT
4230-006-1	QC (not included)	1	7/8 in	4 in	1 lb
4230-018	N-Type(F)	1	7/8 in	5.5 in	1.33 lb
4230-057	N-Type(F)	1 w/ Bracket	7/8 in	5.13 in	1.34 lb
4230-059	QC (not included)	1 w/ Bracket	7/8 in	4 in	1.25 lb
4522-002-5	QC (not included)	2 - Panel Mount	7/8 in	6.22 in	1.25 lb
1-5/8 inch	CONNECTOR TYPE	ELEMENT SOCKETS	LINE SIZE	LENGTH	WEIGHT
4715-000	EIA Flanged	2	1-5/8 in	6.75 in	3.25 lb
4723-000	Unflanged (Rec. 0.438 in)	2	1-5/8 in	6.38 in	1.5 lb
4723-020	Unflanged (Flush)	2	1-5/8 in	6.38 in	1.5 lb
3-1/8 inch	CONNECTOR TYPE	ELEMENT SOCKETS	LINE SIZE	LENGTH	WEIGHT
4610-000	EIA Flanged	2	3-1/8 in	7.03 in	7.25 lb
4801-100	Unflanged (Rec. 0.688 in)	2	3-1/8 in	6.5 in	4.25 lb
4802-000	Unflanged (Flush)	2	3-1/8 in	6.5 in	4.25 lb
4-1/16 inch	CONNECTOR TYPE	ELEMENT SOCKETS	LINE SIZE	LENGTH	WEIGHT
4642-010	Flanged (MYAT)	2	4-1/16 in	8.13 in	8.88 lb
6-1/8 inch	CONNECTOR TYPE	ELEMENT SOCKETS	LINE SIZE	LENGTH	WEIGHT
4905-000	EIA Flanged	2	6-1/8 in	10.22 in	17 lb
4909-000	Unflanged (Rec. 0.968 in)	2	6-1/8 in	9.63 in	12.75 lb



ELEMENT SELECTION GUIDE

MODEL	TABLE(S)
3127A	1 5/8 A, 3 1/8 A, 6 1/8 A
3127-040	1 5/8 A, 3 1/8 A, 4 1/16 A, 6 1/8 A
3127-075	1 5/8 B
6810-220	1 5/8 A, 3 1/8 A, 6 1/8 A
6810-230	1 5/8 B

Plug-In Elements

FOR RIGID LINE SECTIONS

TABLE 1 5/8 A STANDARD ELEMENTS 100 μ A

POWER RANGE	FREQUENCY BANDS (MHz)		
	2 to 30	50 to 125	100 to 250
100 W	—	100B1	100C1
250 W	—	250B1	250C1
500 W	—	500B1	500C1
1000 W	1000H1	1000B1	1000C1
2500 W	2500H1	2500B1	2500C1
5000 W	5000H1	5000B1	5000C1
10 kW	10KH1	10KB1	10KC1
25 kW	25KH1	25KB1	—

TABLE 1 5/8 AA STANDARD ELEMENTS 30 μ A

POWER RANGE	FREQUENCY BANDS (MHz)		
	2 to 30	50 to 125	100 to 250
100 W	—	100B12	100C12
250 W	—	250B12	250C12
500 W	500H12	500B12	—
1000 W	1000H12	1000B12	1000C12
2500 W	2500H12	2500B12	2500C12
5000 W	5000H12	5000B12	—
10 kW	10KH12	10KB12	—
25 kW	25KH12	—	—

TABLE 1 5/8 B STANDARD ELEMENTS 100 μ A

POWER RANGE	FREQUENCY BANDS (MHz)	
	2 to 30	50 to 125
300 W	—	300B1
600 W	—	600B1
1500 W	1500H1	1500B1
3000 W	3000H1	3000B1
6000 W	6000H1	6000B1
15 kW	15KH1	15KB1
50 kW	50KH1	—