

PRODUCT CATALOG

Termination Loads
Dry - Oil - Water - Air



Line Sections & Elements



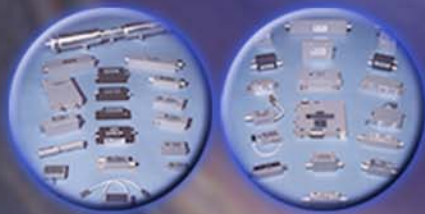
*Wattmeters
& Meters*



Accessories
...and more



Custom OEM Products
Filters - Couplers - Switches



Digital Broadcast Equipment
Watchman - High Power Meters - Elements



EXCELLENCE IN RF INSTRUMENTATION



Coaxial Dynamics

A CDI INDUSTRIES, INC. COMPANY

SPECIALISTS IN RF TEST EQUIPMENT & COMPONENTS

6800 Lake Abram Drive, Middleburg Hts., Ohio 44130, USA
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RF Wattmeters for HDTV, DTV & DAB Broadcasting ***High Power 'Digital Wattmeters'***

These High Power, Remote Wattmeters are designed for the accurate measurement of complex RF Waveforms such as CDMA (Code Division Multiple Access), DAB (Digital Audio Broadcast), DTV (Digital TV) and HDTV (High Definition TV), as well as CW, AM and FM.

Several different models are available to measure Forward and/or Reflected power in 50-ohm coaxial transmission line systems with either 5/10/25 or 15/30/60 scales. Line Section and Element(s) are sold separately.



DIGITAL BROADCAST WATTMETERS

MODEL	DESCRIPTION	MODEL	DESCRIPTION
98952-A	DIGITAL HIGH POWER WATTMETER WITH 5/10/25 SCALES INCLUDES (2) 10-FOOT CABLES AND AC ADAPTER. REQUIRES APPROPRIATE SINGLE SOCKET LINE SECTION AND ELEMENT LISTED ON BACK.	98958-A	DIGITAL HIGH POWER WATTMETER WITH 15/30/60 SCALES INCLUDES (2) 10-FOOT CABLES AND AC ADAPTER. REQUIRES APPROPRIATE SINGLE SOCKET LINE SECTION AND ELEMENT LISTED ON BACK.
98954-A	DIGITAL HIGH POWER WATTMETER WITH 5/10/25 SCALES INCLUDES FWD/RFL SWITCH, (4) 10-FOOT CABLES AND AC ADAPTER. REQUIRES APPROPRIATE DUAL SOCKET LINE SECTION AND ELEMENTS LISTED ON BACK.	98959-A	DIGITAL HIGH POWER WATTMETER WITH 15/30/60 SCALES INCLUDES FWD/RFL SWITCH, (4) 10-FOOT CABLES AND AC ADAPTER. REQUIRES APPROPRIATE DUAL SOCKET LINE SECTION AND ELEMENTS LISTED ON BACK.

'Digital Wattchman'[®] Station Monitor/Alarm



The 'Digital Wattchman' Rack Mounted Station Monitor/Alarm is similar in function and appearance to our 81090 series except it is designed for the accurate measurement of complex RF Waveforms such as CDMA, DAB, DTV and HDTV, as well as CW, AM and FM.

The 'Digital Wattchman' monitors both Forward and Reflected power and protects your transmitter. Abnormal conditions quickly cause transmitter shutdown in less than 15 milliseconds (including control relay). An audible alarm and light indicate fault. Line Section and Elements are sold separately.

DIGITAL WATTCHMAN[®] RF STATION MONITOR/ALARM

MODEL	DESCRIPTION
91090	DIGITAL WATTCHMAN POWER MONITOR/ALARM SYSTEM. 19-INCH RACK MOUNTED UNIT CONSISTS OF (2) METERS WITH 5/10/25 SCALES THAT INCLUDES BOTH FORWARD AND REFLECTED FRONT PANEL TRIP LEVEL ADJUSTMENTS, AMPLIFIED DC OUTPUTS AND 110/220 VAC, 50/60 HZ INPUT SWITCH. COMES COMPLETE WITH 6-FOOT AC POWER CORD AND (4) 25-FOOT CABLES. REQUIRES APPROPRIATE DUAL SOCKET LINE SECTION AND ELEMENTS LISTED ON BACK.
91091	DIGITAL WATTCHMAN POWER MONITOR/ALARM SYSTEM. 19-INCH RACK MOUNTED UNIT CONSISTS OF (2) METERS WITH 15/30/60 SCALES THAT INCLUDES BOTH FORWARD AND REFLECTED FRONT PANEL TRIP LEVEL ADJUSTMENTS, AMPLIFIED DC OUTPUTS AND 110/220 VAC, 50/60 HZ INPUT SWITCH. COMES COMPLETE WITH 6-FOOT AC POWER CORD AND (4) 25-FOOT CABLES. REQUIRES APPROPRIATE DUAL SOCKET LINE SECTION AND ELEMENTS LISTED ON BACK.

DIGITAL BROADCAST ELEMENTS & LINE SECTIONS

*Elements and Line Sections are sold separately
and should be selected from the tables below.*

1-5/8" LINE SECTIONS FOR 50-OHM SYSTEMS

MODEL	DESCRIPTION	MODEL	DESCRIPTION
88501	SINGLE SOCKET EIA SWIVEL FLANGED LINE SECTION	88514	DUAL SOCKET EIA SWIVEL FLANGED LINE SECTION
88502	SINGLE SOCKET UNFLANGED FLUSH LINE SECTION	88515	DUAL SOCKET UNFLANGED FLUSH LINE SECTION
88502-2	SINGLE SOCKET UNFLANGED RECESSED LINE SECTION	88515-2	DUAL SOCKET UNFLANGED RECESSED LINE SECTION

DIGITAL BROADCAST ELEMENTS FOR 1-5/8" LINE SYSTEMS (5/10/25 SCALES)

POWER RATING	54 MHZ - 108 MHZ	100 MHZ - 216 MHZ	470 MHZ - 608 MHZ	614 MHZ - 806 MHZ
100 W	92110	92118	92126	92134
250 W	92111	92119	92127	92135
500 W	92112	92120	92128	92136
1,000 W	92113	92121	92129	92137
2,500 W	92114	92122	92130	92138
5,000 W	92115	92123	92131	92139
10,000 W	92116	92124	92132	92140

DIGITAL BROADCAST ELEMENTS FOR 1-5/8" LINE SYSTEMS (15/30/60 SCALES)

POWER RATING	54 MHZ - 108 MHZ	100 MHZ - 216 MHZ	470 MHZ - 608 MHZ	614 MHZ - 806 MHZ
300 W	92160	92166	92172	92178
600 W	92161	92167	92173	92179
1500 W	92162	92168	92174	92180
3,000 W	92163	92169	92175	92181
6,000 W	92164	92170	92176	92182

3-1/8" LINE SECTIONS FOR 50-OHM SYSTEMS

MODEL	DESCRIPTION	MODEL	DESCRIPTION
88503	SINGLE SOCKET EIA SWIVEL FLANGED LINE SECTION	88516	DUAL SOCKET EIA SWIVEL FLANGED LINE SECTION
88504	SINGLE SOCKET UNFLANGED FLUSH LINE SECTION	88517	DUAL SOCKET UNFLANGED FLUSH LINE SECTION
88504-2	SINGLE SOCKET UNFLANGED RECESSED LINE SECTION	88517-2	DUAL SOCKET UNFLANGED RECESSED LINE SECTION

DIGITAL BROADCAST ELEMENTS FOR 3-1/8" LINE SYSTEMS (5/10/25 SCALES)

POWER RATING	54 MHZ - 108 MHZ	100 MHZ - 216 MHZ	470 MHZ - 608 MHZ	614 MHZ - 806 MHZ
1,000 W	92313	92322	92331	92340
2,500 W	92314	92323	92332	92341
5,000 W	92315	92324	92333	92342
10,000 W	92316	92325	92334	92343
25,000 W	92317	92326	92335	92344
50,000 W	92318	92327	92336	92345

DIGITAL BROADCAST ELEMENTS FOR 3-1/8" LINE SYSTEMS (15/30/60 SCALES)

POWER RATING	54 MHZ - 108 MHZ	100 MHZ - 216 MHZ	470 MHZ - 608 MHZ	614 MHZ - 806 MHZ
1500 W	92362	92370	92378	92386
3,000 W	92363	92371	92379	92387
6,000 W	92364	92372	92380	92388
15,000 W	92365	92373	92381	92389
30,000 W	92366	92374	92382	92390

DIGITAL BROADCAST ELEMENTS & LINE SECTIONS

*Elements and Line Sections are sold separately
and should be selected from the tables below.*

4-1/16" LINE SECTIONS FOR 50-OHM SYSTEMS

MODEL	DESCRIPTION	MODEL	DESCRIPTION
88505	SINGLE SOCKET EIA SWIVEL FLANGED LINE SECTION	88518	DUAL SOCKET EIA SWIVEL FLANGED LINE SECTION
88506	SINGLE SOCKET UNFLANGED FLUSH LINE SECTION	88519	DUAL SOCKET UNFLANGED FLUSH LINE SECTION
88506-2	SINGLE SOCKET UNFLANGED RECESSED LINE SECTION	88519-2	DUAL SOCKET UNFLANGED RECESSED LINE SECTION

DIGITAL BROADCAST ELEMENTS FOR 4-1/16" LINE SYSTEMS (5/10/25 SCALES)

POWER RATING	54 MHZ - 108 MHZ	100 MHZ - 216 MHZ	470 MHZ - 608 MHZ	614 MHZ - 806 MHZ
2,500 W	92413	92422	92431	92440
5,000 W	92414	92423	92432	92441
10,000 W	92415	92424	92433	92442
25,000 W	92416	92425	92434	92443
50,000 W	92417	92426	92435	92444
100,000 W	92418	92427	92436	92445

DIGITAL BROADCAST ELEMENTS FOR 4-1/16" LINE SYSTEMS (15/30/60 SCALES)

POWER RATING	54 MHZ - 108 MHZ	100 MHZ - 216 MHZ	470 MHZ - 608 MHZ	614 MHZ - 806 MHZ
3,000 W	92462	92470	92478	92486
6,000 W	92463	92471	92479	92487
15,000 W	92464	92472	92480	92488
30,000 W	92465	92473	92481	92489
60,000 W	92466	92474	92482	92490

6-1/8" LINE SECTIONS FOR 50-OHM SYSTEMS

MODEL	DESCRIPTION	MODEL	DESCRIPTION
88507	SINGLE SOCKET EIA SWIVEL FLANGED LINE SECTION	88520	DUAL SOCKET EIA SWIVEL FLANGED LINE SECTION
88508	SINGLE SOCKET UNFLANGED FLUSH LINE SECTION	88521	DUAL SOCKET UNFLANGED FLUSH LINE SECTION
88508-2	SINGLE SOCKET UNFLANGED RECESSED LINE SECTION	88521-2	DUAL SOCKET UNFLANGED RECESSED LINE SECTION

DIGITAL BROADCAST ELEMENTS FOR 6-1/8" LINE SYSTEMS (5/10/25 SCALES)

POWER RATING	54 MHZ - 108 MHZ	100 MHZ - 216 MHZ	470 MHZ - 608 MHZ	614 MHZ - 806 MHZ
2,500 W	92613	92622	92631	92640
5,000 W	92614	92623	92632	92641
10,000 W	92615	92624	92633	92642
25,000 W	92616	92625	92634	92643
50,000 W	92617	92626	92635	92644
100,000 W	92618	92627	92636	92645

DIGITAL BROADCAST ELEMENTS FOR 6-1/8" LINE SYSTEMS (15/30/60 SCALES)

POWER RATING	54 MHZ - 108 MHZ	100 MHZ - 216 MHZ	470 MHZ - 608 MHZ	614 MHZ - 806 MHZ
3,000 W	92662	92670	92678	92686
6,000 W	92663	92671	92679	92687
15,000 W	92664	92672	92680	92688
30,000 W	92665	92673	92681	92689
60,000 W	92666	92674	92682	92690



Coaxial Dynamics

**RF
Directional
Wattmeters**

**81000A
Series**

Models 81000-A/81001-A

The Model 81000-A Wattmeter... now you can measure RF power in 50 ohm coaxial cable and transmission lines, and accept plug in elements in the range of 0.1 to 10,000 watts full scale, and from 0.45 to 2300 MHz.

Complete with a built-in line section, our "Quick Match" RF connectors for 50 ohm cables and transmission lines offer the speed and reliability you expect from Coaxial Dynamics.

The 81000-A is easy to use. Simply connect the wattmeter between the power source and antenna or "dummy" load, plug in the appropriate measuring element and select forward or reflected direction. The RF power is visually identified directly on the 4½" three scale display.

Versatile and strong. The model 81000-A can be used with accessory cables up to 200' from the meter and is protected by a rugged, virtually indestructible shock-proof housing. For added convenience, two sockets for storage of additional elements are located on the back of the unit.

Our use of a rugged shock mounted meter with a mirrored-backed scale along with superior taut band technology, provides reliable and accurate readings, plus the integrity that satisfies both the US Navy and Canadian standards for bounce and vibration. This is your assurance of complete accuracy.

The 81001-A RF Wattmeter, identical to the 81000-A, has the added feature of an auxiliary DC input, providing the option of single meter measurement of several power sources. Line sections (eg, P/N 88525) are permanently installed at these measurement points, with model 81001-A connected to each as needed. The DC signal is coupled from the line section to the auxiliary DC input to provide the same measuring capabilities as the basic model 81000-A.

Your confidence in the quality and dependability of the 81000-A series is assured with the Coaxial Dynamics Two Year Limited Warranty.

*For more information on the Model 81000-A Series, Panel Mounted Wattmeters, WATTKITS and accessories consult factory.



CHECK THESE DISTINCT ADVANTAGES

FOR ACCURACY

- ☒ Shock Mounted "Taut Band" Meter
- ☒ 4½" Mirrored Scale

FOR VERSATILITY

- ☒ Quick Match Connectors
- ☒ Internal Line Section

FOR DURABILITY

- ☒ Hi Con Plated Plug-In Elements
- ☒ 2 Year Limited Warranty



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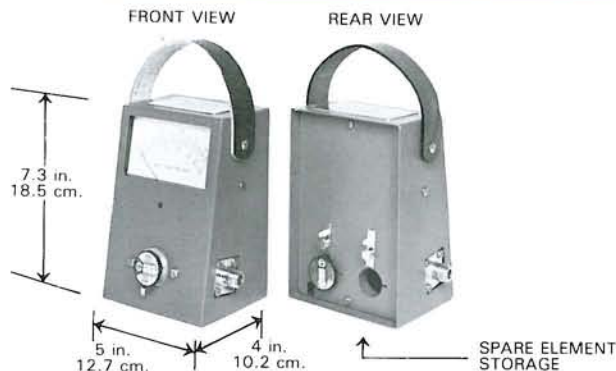
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Coaxial Dynamics



Specifications:

MODEL 81000-A & 81001-A

Power Range 100 mW - 10 kW
 Frequency Range 0.45 - 2300 MHz
 VSWR 1.05:1 max., with N connectors
 Accuracy $\pm 5\%$ of full scale
 Impedance 50 ohms
 RF Connectors Type N(F) Standard
Other "Quick Match" Connectors are available.
See 88000 Series Below
 Weight 3.6 lbs. (1.6 kg.)
 Element Weight 1.25 oz. (.035 kg.)

SCHEDULE (1)

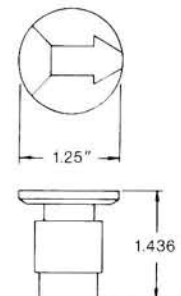
STANDARD ELEMENTS (CATALOG NUMBERS)

Power Range

Frequency (MHz)

	2-30	25-60	50-125	100-250	200-500	400-1000	950-1300	1.1-1.8 GHz
5 watts		82012	82020	82028	82036	82045	82068	82079
10 watts		82013	82021	82029	82037	82046	82069	82080
25 watts		82014	82022	82030	82038	82047	82070	82081
50 watts	82004	82015	82023	82031	82039	82048	82071	82082
100 watts	82005	82016	82024	82032	82041	82049	82072	
250 watts	82006	82017	82025	82033	82042	82050	82073	
500 watts	82007	82018	82026	82034	82043	82051	82074	
1000 watts	82008	82019	82027	82035	82044	82052	82075	
2500 watts	82009							
5000 watts	82010							

MODEL NUMBERS



SCHEDULE (2)

MILLIWATT ELEMENTS

100 mW	Cat. No.	250 mW	Cat. No.	500 mW	Cat. No.
20-23 MHz	820A022	70-80 MHz	820B075	25-30 MHz	820C028
44-50 MHz	820A047	72-76 MHz	820B074	65-90 MHz	820C078
62-70 MHz	820A066	105-120 MHz	820B113	72-76 MHz	820C074
72-76 MHz	820A074	310-350 MHz	820B330	105-120 MHz	820C113
105-120 MHz	820A113	416-436 MHz	820B426	130-170 MHz	820C150
135-165 MHz	820A150	800-900 MHz	820B850	300-350 MHz	820C325
190-205 MHz	820A198	900-950 MHz	820B925	800-900 MHz	820C850
310-350 MHz	820A330			900-950 MHz	820C925
416-436 MHz	820A426				
740-760 MHz	820A750				
800-900 MHz	820A850				

SCHEDULE (3)

LOW POWER ELEMENTS

1 watt	Cat. No.	2.5 watts	Cat. No.
28-44 MHz	820D036	60-80 MHz	820E070
40-50 MHz	820D045	80-140 MHz	820E110
44-70 MHz	820D057	95-150 MHz	820E123
70-120 MHz	820D095	150-250 MHz	820E200
108-118 MHz	820D113	200-300 MHz	820E250
108-181 MHz	820D145	225-400 MHz	820E313
150-250 MHz	820D200	275-450 MHz	820E363
200-300 MHz	820D250	340-560 MHz	820E450
275-450 MHz	820D363	800-950 MHz	820E875
310-350 MHz	820D330		
327-543 MHz	820D435		
425-850 MHz	820D638		
800-950 MHz	820D875		

NOTE: Special elements other than those listed can be custom designed, contact you local distributor or Coaxial Dynamics, Inc. for more information

88000 Series RF Quick Match 50 ohm Connectors

88000	N Female	88010	7/8" Swivel Flanged
88001	N Male	88011	TNC Female
88002	BNC Female	88012	TNC Male
88003	BNC Male	88013	HN Female
88004	UHF Female	88014	HN Male
88005	UHF Male	88020	SMA Female
88006	LC Female	88021	SMA Male
88007	LC Male	88026	Miniature UHF Female
88008	C Female	88027	SC Female
88009	C Male	88028	SC Male

FOR MORE INFORMATION CALL TOLL FREE 1-800-COAXIAL (262-9425)



NEW

**RF
Directional
Wattmeters**

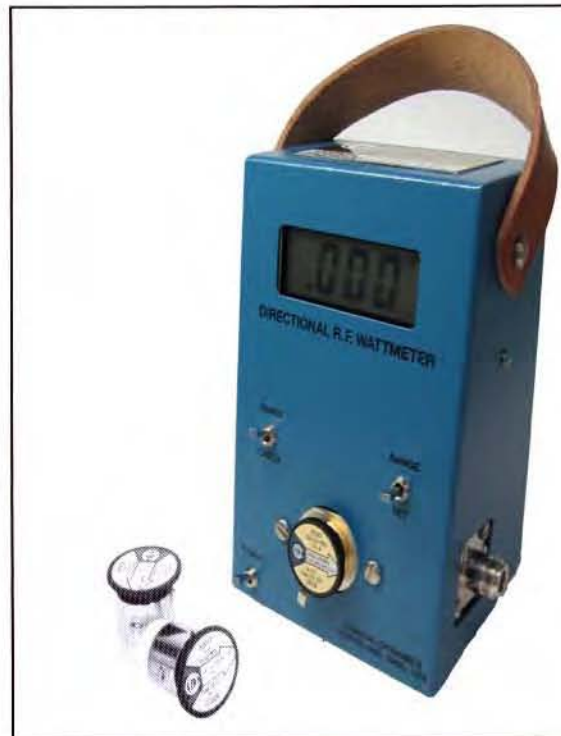
**81000A
Series**

Model 81030

The Model 81030.... Now you can measure RF power in 50-Ohm coaxial cables and transmission lines, and accept plug in elements in the range of 0.1 to 10,000 Watts and from 2-2300 MHz.

Complete with a built in line section, our "Quick Match" connectors for 50-Ohm cables and transmission lines offer the speed and reliability you expect from Coaxial Dynamics.

The Model 81030 is easy to use. Simply connect the Wattmeter between the power source and the antenna or "dummy" load, plug in the appropriate element, set the range switch on the front panel. Select either the forward or reflected direction and read the power on the advanced LCD display.



Versatile and strong, equipped with rechargeable batteries to provide many hours of use between charges.

CHECK THESE DISTINCT ADVANTAGES

FOR ACCURACY

☒ Advanced LCD Display

FOR DURABILITY

☒ Gold Plated Elements

☒ 2 Year Limited Warranty

FOR VERSATILITY

☒ Quick Match Connectors

☒ Internal Line Section

* For more information on the Model 81000 series, panel Wattmeters and accessories, Contact the factory.



Coaxial Dynamics

A CDI INDUSTRIES, INC. COMPANY

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FRONT VIEW

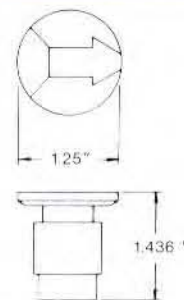
REAR VIEW

**Specifications:****Model 81030**

Power Range 100 mW - 10 kW
 Frequency Range 0.45 - 2300 MHz
 VSWR 1.05:1 max., with N connectors
 Accuracy $\pm 5\%$ of full scale
 Impedance 50 ohms
 RF Connectors Type N(F) Standard
*Other "Quick Match" Connectors are available.
 See 88000 Series Below*
 Weight 4.3 lbs. (2 kg.)
 Element Weight 1.25 oz. (.035 kg.)

SCHEDULE (1)**STANDARD ELEMENTS (CATALOG NUMBERS)****Power Range****Frequency (MHz)**

	2-30	25-60	50-125	100-250	200-500	400-1000	950-1300	1.1-1.8 GHz
5 watts		82012	82020	82028	82036	82045	82068	82079
10 watts		82013	82021	82029	82037	82046	82069	82080
25 watts		82014	82022	82030	82038	82047	82070	82081
50 watts	82004	82015	82023	82031	82039	82048	82071	82082
100 watts	82005	82016	82024	82032	82041	82049	82072	
250 watts	82006	82017	82025	82033	82042	82050	82073	
500 watts	82007	82018	82026	82034	82043	82051	82074	
1000 watts	82008	82019	82027	82035	82044	82052	82075	
2500 watts	82009							
5000 watts	82010							

MODEL NUMBERS**SCHEDULE (2)****MILLIWATT ELEMENTS**

100 mW	Cat. No.	250 mW	Cat. No.	500 mW	Cat. No.
20-23 MHz	820A022	70-80 MHz	820B075	25-30 MHz	820C028
44-50 MHz	820A047	72-76 MHz	820B074	65-90 MHz	820C078
62-70 MHz	820A066	105-120 MHz	820B113	72-76 MHz	820C074
72-76 MHz	820A074	310-350 MHz	820B330	105-120 MHz	820C113
105-120 MHz	820A113	416-436 MHz	820B426	130-170 MHz	820C150
135-165 MHz	820A150	800-900 MHz	820B850	300-350 MHz	820C325
190-205 MHz	820A198	900-950 MHz	820B925	800-900 MHz	820C850
310-350 MHz	820A330			900-950 MHz	820C925
416-436 MHz	820A426				
740-760 MHz	820A750				
800-900 MHz	820A850				

SCHEDULE (3)**LOW POWER ELEMENTS**

1 watt	Cat. No.	2.5 watts	Cat. No.
28-44 MHz	820D036	60-80 MHz	820E070
40-50 MHz	820D045	80-140 MHz	820E110
44-70 MHz	820D057	95-150 MHz	820E123
70-120 MHz	820D095	150-250 MHz	820E200
108-118 MHz	820D113	200-300 MHz	820E250
108-181 MHz	820D145	225-400 MHz	820E313
150-250 MHz	820D200	275-450 MHz	820E363
200-300 MHz	820D250	340-560 MHz	820E450
275-450 MHz	820D363	800-950 MHz	820E875
310-350 MHz	820D330		
327-543 MHz	820D435		
425-850 MHz	820D638		
800-950 MHz	820D875		

NOTE: Special elements other than those listed can be custom designed, contact your local distributor or Coaxial Dynamics, Inc. for more information

88000 Series RF Quick Match 50 ohm Connectors

88000	N Female	88010	$\frac{7}{8}$ " Swivel Flanged
88001	N Male	88011	TNC Female
88002	BNC Female	88012	TNC Male
88003	BNC Male	88013	HN Female
88004	UHF Female	88014	HN Male
88005	UHF Male	88020	SMA Female
88006	LC Female	88021	SMA Male
88007	LC Male	88026	Miniature UHF Female
88008	C Female	88027	SC Female
88009	C Male	88028	SC Male

FOR MORE INFORMATION CALL TOLL FREE 1-800-COAXIAL (262-9425)

COAXIAL DYNAMICS

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**Broad Band,
Directional,
Multi-Range**

**RF
Directional
Wattmeters**

**MODEL
81050**

RF WATTMETER

**500 Watts F.S.
25 MHz - 1000 MHz**

Model 81050

With the New Model 81050 Directional Wattmeter you can now measure RF Power in 50 ohm coaxial cable and transmission lines without the need for additional plug in elements.

Model 81050 comes complete with the same 4 1/2" taut-band meter movement, "Quick Match" RF Connectors, and precision line section that are used in our 81000-A/83000-A Wattmeter Series.

These features plus a special non-removable Broad Band Element allow Full-Scale Power measurement on any one of 5 selectable ranges of 5, 15, 50, 150 and 500 Watts across a frequency range of 25 to 1000 MHz.

Versatile and reliable, the Model 81050 is also easy to use. Simply connect the Wattmeter between the RF Power Source and the antenna or "dummy" load, select the appropriate power range on the 5 position switch, and read the power directly on the mirrored-backed meter when the frequency is between 100 and 1,000 MHz. Below 100 MHz, multiply the meter reading by the correction factor found on the chart on the back of the Wattmeter.

For more information on our line of peak and average reading Wattmeters contact the factory.



CHECK THESE DISTINCT ADVANTAGES

FOR ACCURACY

- ☒ SHOCK MOUNTED
"TAUT BAND" METER
- ☒ 4 1/2" MIRRORED SCALE
- ☒ NON-REMOVABLE
BROAD BAND ELEMENT

FOR VERSATILITY

- ☒ QUICK MATCH
CONNECTORS
- ☒ INTERNAL
LINE SECTION

FOR DURABILITY

- ☒ 2 YEAR LIMITED WARRANTY



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E-Mail coaxial@apk.net • Web Site <http://www.coaxial.com>

NOW ACCEPTING



SPECIFICATIONS:

Model 81050, Broadband Directional RF Wattmeter

Power Ranges	5, 15, 50, 150, 500 Watts, Full Scale. (150 Watts maximum from 800-1000 MHz)
Frequency Range	25 to 1000 MHz
Accuracy	25 to 100 MHz, $\pm 7\%$ of full scale using corrections chart 100 to 512 MHz, $\pm 6\%$ of full scale, no correction required 512 to 1000 MHz, $\pm 7\%$ of full scale, no correction required
Insertion Loss (with UHF female connectors)	0.10 dB max., 25 to 512 MHz 0.15 dB max., 512 to 1000 MHz
VSWR (with UHF female connectors)	1.08 max., 25 to 512 MHz 1.12 max., 512 to 1000 MHz
Element	Broadband (25 to 1000 MHz 500 Watt max.), rotatable for forward and reflected power measurements, non-removable
Nominal Dimensions (excluding connectors)	7.3" high, 5" wide, 4" deep
Weight	3.8 lbs.
Case Finish	Nitro-Blue



88000 Series RF Quick Match 50 ohm Connectors

88000	N Female	88010	7/8" Swivel Flanged
88001	N Male	88011	TNC Female
88002	BNC Female	88012	TNC Male
88003	BNC Male	88013	HN Female
88004	UHF Female	88014	HN Male
88005	UHF Male	88020	SMA Female
88006	LC Female	88021	SMA Male
88007	LC Male	88026	Miniature UHF Female
88008	C Female	88027	SC Female
88009	C Male	88028	SC Male

NEW



**Broad Band,
Directional
(Peak/Average)
Multi-Range**

**RF
Directional
Wattmeters**

**MODELS
81060/
83060**

RF WATTMETERS

**1500 Watts F.S.
25 MHz - 1000 MHz**

MODEL 81060 AVERAGE READING

With the New 81060 Directional Wattmeter you can now measure average RF Power in 50 ohm coaxial cable and transmission lines without the need for additional plug in elements.

Model 81060 comes complete with the same 4½" taut-band meter movement, "Quick Match" RF Connectors, and precision line section that are used in our 81000-A/83000-A Wattmeter Series.

These features plus a special non-removable Broad Band Element allow Full-Scale Power measurement on any one of 5 selectable ranges of 15, 50, 150, 500, and 1500 Watts across a frequency range of 25 to 1000 MHz.

Versatile and reliable, the Model 81060 is also easy to use. Simply connect the Wattmeter between the RF Power Source and the antenna or "dummy" load, select the appropriate power range on the 5 position switch, and read the power directly on the mirrored-backed meter when the frequency is between 100 and 1,000 MHz. Below 100 MHz, multiply the meter reading by the correction factor found on the chart on the back of the Wattmeter.

MODEL 83060 PEAK/AVERAGE READING

Similar in appearance and operation to our standard Model 81060 wattmeter. The 83060 converts from Average Reading to Peak Reading, with the Flip of a Switch, by inserting a peak reading amplifier between the element and the meter.

The Model 83060-A is designed to measure RF power in amplitude modulated systems such as television, telemetry, radar and peak envelope power (PEP) such as SSB and AM signals.



CHECK THESE DISTINCT ADVANTAGES

FOR ACCURACY

- ☒ SHOCK MOUNTED "TAUT BAND" METER
- ☒ 4½" MIRRORED SCALE
- ☒ NON-REMOVABLE BROAD BAND ELEMENT

FOR VERSATILITY

- ☒ QUICK MATCH CONNECTORS
- ☒ INTERNAL LINE SECTION

YOUR ASSURANCE OF DURABILITY

- ☒ 2 YEAR LIMITED WARRANTY



Coaxial Dynamics

A CDI INDUSTRIES, INC. COMPANY
SPECIALISTS IN RF TEST EQUIPMENT & COMPONENTS
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(440) 243-1100 • 1-800-COAXIAL • FAX: (440) 243-1101
E-Mail coaxial@apk.net • Web Site <http://www.coaxial.com>



SPECIFICATIONS:
Model 81060 , Broadband Average Reading
Directional RF Wattmeter

Power Ranges

15, 50, 150, 500, 1500 Watts, Full Scale.
(500 Watts maximum from 800-1000 MHz)

Frequency Range

25 to 1000 MHz

Accuracy

25 to 100 MHz, $\pm 7\%$ of full scale using corrections chart
100 to 512 MHz, $\pm 6\%$ full scale, no correction required
512 to 1000 MHz, $\pm 7\%$ of full scale, no correction required

Insertion Loss (with UHF female connectors)

0.10 dB max., 25 to 512 MHz
0.15 dB max., 512 to 1000 MHz

VSWR (with UHF female connectors)

1.08 max., 25 to 512 MHz
1.12 max., 512 to 1000 MHz

Element

Broadband (25 to 1000 MHz 1500 Watt max.), rotatable for forward and reflected power measurements, non-removable

Nominal Dimensions (excluding connectors)

7.3" high, 5" wide, 4" deep

Weight

3.8 lbs.

Case Finish

Nitro-Blue

SPECIFICATIONS:

Model 83060 , Broadband Peak/Average Reading
Directional RF Wattmeter

Power Ranges

15, 50, 150, 500, 1500 Watts, Full Scale.
(500 Watts maximum from 800-1000 MHz)

Frequency Range

25 to 1000 MHz

Accuracy

25 to 100 MHz, $\pm 7\%$ average mode of full scale using corrections chart
 $\pm 9\%$ peak mode
100 to 512 MHz, $\pm 6\%$ average mode full scale,
 $\pm 8\%$ peak mode, no correction required
512 to 1000 MHz, $\pm 7\%$ average mode of full scale,
 $\pm 9\%$ peak mode, no correction required

Insertion Loss (with UHF female connectors)

0.10 dB max., 25 to 512 MHz
0.15 dB max., 512 to 1000 MHz

VSWR (with UHF female connectors)

1.08 max., 25 to 512 MHz
1.12 max., 512 to 1000 MHz

Element

Broadband (25 to 1000 MHz 1500 Watt max.), rotatable for forward and reflected power measurements, non-removable

Nominal Dimensions (excluding connectors)

7.3" high, 5" wide, 4" deep

Weight

4.0 lbs.

Case Finish

Nitro-Blue

Power Requirements

ONE 9V alkaline "transistor" battery supplied

Pulse Parameters

Square Pulses: Minimum pulse width: .5 μ sec 100-1000 MHz
2 μ sec 26-99 MHz
Minimum repetition rate: 30 pps 15 μ sec 2-25 MHz

Gaussian Pulses: Minimum pulse width: .5 μ sec 25-1000 MHz
15 μ sec 2-24 MHz

Minimum repetition rate: 30 pps

88000 SERIES RF
QUICK MATCH 50 ohm
CONNECTORS

88000 N Female
88001 N Male
88002 BNC Female
88003 BNC Male
88004 UHF Female
88005 UHF Male
88006 LC Female

88007 LC Male
88008 C Female
88009 C Male
88010 7/8" Swivel Flanged
88011 TNC Female
88012 TNC Female
88013 HN Female

88014 HN Male
88020 SMA Female
88021 SMA Male
88026 Miniature UHF Female
88027 SC Female
88028 SC Male

RF Peak Reading Wattmeter

83000-A Series

Model 83000-A

When you need peak power measuring capability in the 2 to 2300 MHz frequency range and from 0.1 watt through 10 kw, then you need to get your hands on our Model 83000-A RF Peak Reading Wattmeter — only from Coaxial Dynamics, Inc.

Similar in appearance and operation to our standard Model 81000-A wattmeter. The 83000-A converts from average reading to Peak Reading, with the Flip of a Switch, by inserting a peak reading amplifier between the elements and the meter.

The Model 83000-A is designed to measure RF power in amplitude modulated systems such as television, telemetry, radar and peak envelope power (PEP) such as SSB and AM signals. The plug-in elements of the 83000-A are interchangeable with those of our model 81000-A (see schedules 1, 2, 3). Furthermore, peak only (high power) elements are also available (see schedule 9). To compliment each application and specific requirement, elements are selected separately. Special elements for higher power or extended frequency ranges are made by custom request.

Your confidence in the quality and dependability of the 83000-A is assured with the Coaxial Dynamics two year limited warranty. Our use of a rugged taut band shock mounted meter with a mirrored-backed scale is your further assurance of accuracy.

Self-contained and requiring no line power in either peak or average mode, the Model 83000-A is the right choice for portability and functionality. With peak reading circuitry that operates on one 9v replaceable "alkaline" transistor battery (supplied), normal, portable usage is possible for at least 90 days or the life of the battery. An optional, rechargeable battery is also available.

The Model 83000-A, from Coaxial Dynamics, is factory equipped with female type "N" connectors. Other quick-match connectors and additional options are also available. Your factory sales representative will be happy to discuss these with you.



* For additional information on our 83000-A series Peak Reading Wattmeter and accessories, consult the factory.

CHECK THESE COAXIAL FEATURES:

- ☒ 4½" MIRRORED SCALE
- ☒ QUICK MATCH CONNECTORS
- ☒ HI-CON PLATED PLUG - IN ELEMENTS
- ☒ 2 YEAR LIMITED WARRANTY



Coaxial Dynamics

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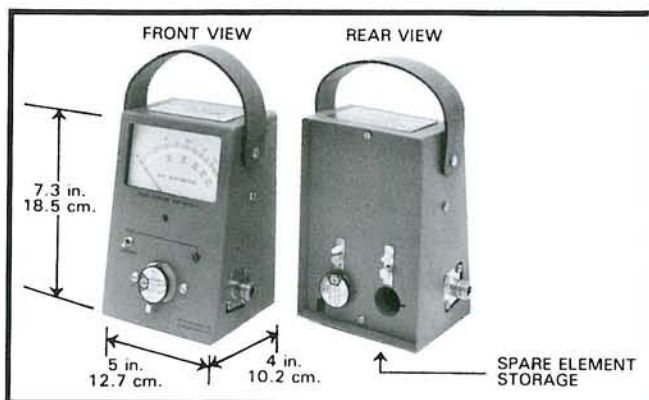
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RF PEAK READING WATTMETER Model 83000-A



SCHEDULE (1) STANDARD ELEMENTS (CATALOG NUMBERS)

Power Range	Frequency (MHz)							
	2-30	25-60	50-125	100-250	200-500	400-1000	950-1300	1.1-1.8 GHz
5 watts		82012	82020	82028	82036	82045	82068	82079
10 watts		82013	82021	82029	82037	82046	82069	82080
25 watts		82014	82022	82030	82038	82047	82070	82081
50 watts	82004	82015	82023	82031	82039	82048	82071	82082
100 watts	82005	82016	82024	82032	82041	82049	82072	
250 watts	82006	82017	82025	82033	82042	82050	82073	
500 watts	82007	82018	82026	82034	82043	82051	82074	
1000 watts	82008	82019	82027	82035	82044	82052	82075	
2500 watts	82009							
5000 watts	82010							

SCHEDULE (2) MILLIWATT ELEMENTS

100 mW	Cat. No.	250 mW	Cat. No.	500 mW	Cat. No.
20-23 MHz	820A022	70-80 MHz	820B075	25-30 MHz	820C028
44-50 MHz	820A047	72-76 MHz	820B074	65-90 MHz	820C078
62-70 MHz	820A066	105-120 MHz	820B113	72-76 MHz	820C074
72-76 MHz	820A074	310-350 MHz	820B330	105-120 MHz	820C113
105-120 MHz	820A113	416-436 MHz	820B426	130-170 MHz	820C150
135-165 MHz	820A150	800-900 MHz	820B850	300-350 MHz	820C325
190-205 MHz	820A198	900-950 MHz	820B925	800-900 MHz	820C850
310-350 MHz	820A330			900-950 MHz	820C925
416-436 MHz	820A426				
740-760 MHz	820A750				
800-900 MHz	820A850				

SCHEDULE (3) LOW POWER ELEMENTS

1 watt	Cat. No.	2.5 watts	Cat. No.
28-44 MHz	820D036	60-80 MHz	820E070
40-50 MHz	820D045	80-140 MHz	820E110
44-70 MHz	820D057	95-150 MHz	820E123
70-120 MHz	820D095	150-250 MHz	820E200
108-118 MHz	820D113	200-300 MHz	820E250
108-181 MHz	820D145	225-400 MHz	820E313
150-250 MHz	820D200	275-450 MHz	820E363
200-300 MHz	820D250	340-560 MHz	820E450
275-450 MHz	820D363	800-950 MHz	820E875
310-350 MHz	820D330		
327-543 MHz	820D435		
425-850 MHz	820D638		
800-950 MHz	820D875		

SCHEDULE (9) HIGH POWER ELEMENTS (PEAK ONLY)

Power Range	Frequency (MHz)					
	2-30	25-60	50-125	100-250	200-500	400-1000
2.5 kW		82053	82054	82055	82056	82057
5.0 kW		82058	82059	82060	82061	82062
10.0 kW	82011	82063	82064	82065	82066	82067

NOTE: Special elements other than those listed can be custom designed, contact your local distributor or Coaxial Dynamics, Inc. for more information.

88000 SERIES RF QUICK MATCH 50 ohm CONNECTORS

88000	N Female	88010	7/8" Swivel Flanged
88001	N Male	88011	TNC Female
88002	BNC Female	88012	TNC Male
88003	BNC Male	88013	HN Female
88004	UHF Female	88014	HN Male
88005	UHF Male	88020	SMA Female
88006	LC Female	88021	SMA Male
88007	LC Male	88026	Miniature UHF Female
88008	C Female	88027	SC Female
88009	C Male	88028	SC Male

SPECIFICATIONS: MODEL 83000-A

Power Range, Peak or Average 100mW - 10kW
 Peak Only 2.5kW, 5kW, and 10kW
 Frequency Range 2 - 2300 MHz
 Insertion VSWR 1.05: 1 Max, with type "N" Connectors
 Impedance 50 ohms
 Finish CDI Blue
 Weight . . 4.5 lbs. (1.35kg) Element Weight . . 1.25 oz. (.035 kg)
 Power Requirements ONE 9V alkaline "transistor" batteries supplied
 Battery Life EST 90 days normal use
 Accuracy Average (CW) mode $\pm 5\%$ of full scale
 Peak-Pulse or Envelope-Power mode $\pm 7\%$ of full scale

Pulse Parameters

Square Pulses: Minimum Pulse Width: .5 μ sec 100-1000 MHz
 2 μ sec 26-99 MHz
 15 μ sec 2-25 MHz
 Minimum Repetition Rate: 30 pps
Gaussian Pulses: Minimum Pulse Width: 5 μ sec 25-1000 MHz
 15 μ sec 2-24 MHz
 Minimum Repetition Rate: 30 pps

Panel Mount Wattmeters



The Coaxial Dynamics series of Panel Mount Wattmeters are designed to measure RF power in 50-Ohm coaxial cables and transmission lines. Elements are available in the range of 100mW to 10kW and from 2-2300 MHz.

Complete with built in 7/8" line sections that accept our Quick Match connectors to mate with your cable or transmission line. (Normally supplied with female 'N' connectors)



81002-A

Model 81002-A is a 19" panel with a single meter, Forward/Reflected switch and a dual socket line section.



81003-A

Model 81003-A is a 19" panel with a single meter and line section.



81006-A

Model 81006-A is a 19" panel with two meters and a dual socket line section.

The choice of forward or reflected power measurements is determined by the direction of the arrow on the element. By rotating the element, power is measured in the opposite direction. (Model 81003-A)

By using a Wattmeter with dual socket line sections, the reflected element may be selected to be more sensitive (up to a 10:1 ratio) for much more accurate measurement of reflected power.

Features:

4 1/2" Mirrored Scales

Compatible with Standard Elements

Built-in Line Sections

Two Year Limited Warranty



Coaxial Dynamics

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E-Mail coaxial@apk.net Web Site <http://www.coaxial.com>



Panel Meters



The Coaxial Dynamics series of Panel Mount Meters are designed to measure power in 50 Ohm 7/8" to 6-1/8" coaxial transmission lines. (When used with the appropriate elements).

Several different models are available with either 5/10/25 scales or 15/30/60 scales. The panel may be installed up to 200 feet from the line section with permanently attached DC cables (10-foot normally supplied).

Average Reading Models



81004-A

Model 81004-A panel with a single meter 5/10/25 scales and a FWD/RFL switch for use with dual socket line sections. (Model 81014-A For 15/30/60 scales)



81005-A

Model 81005-A panel with two meters (5/10/25 scales) for use with dual socket line sections. (Model 81015-A for 15/30/60 scales).



81007-B

Model 81007-B panel with two meters and a 2P5T switch for dual socket line sections. For monitoring up to 5 transmitters with additional cables.



81008-A

Model 81008-A panel with a single meter (5/10/25 scales) for use with single socket line sections. (Model 81016-A for 15/30/60 scales).



81018-A

Model 81018-A panel with two meters (5/10/25 scales) and two FWD/RFL switches for use with two dual socket line sections.



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Peak/Average Reading Panel Mount Meters



83010

Model 83010 is a panel with a single meter (5/10/25) scales for use with single socket line sections.
(For 15/30/60 scales, use Model 83015)



83011

Model 83011 is a panel with a single meter (5/10/25 scales) and a FWD/RFL switch for use with dual socket line sections.
(For 15/30/60 scales, use Model 83016)

Features:

4 1/2" Mirrored scales

Limited Two Warranty

Wide range of Elements Available

Uses Standard Line Sections

Directional RF Wattmeters

**81100-A -
81600-A
SERIES**

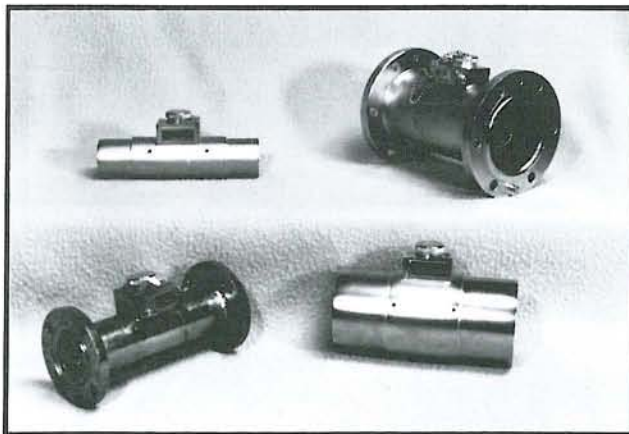
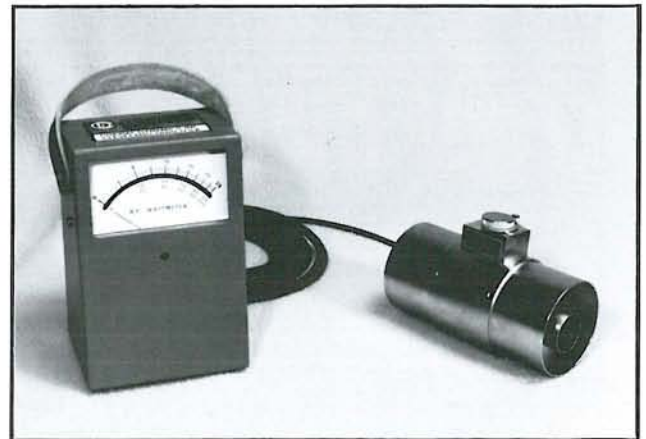
High Power Series

Coaxial Dynamics High Power Series of Directional R.F. Wattmeters are designed to measure R.F. power in 50 ohm Coaxial Transmission Lines.

To use the Wattmeter, simply connect it between the power source and an antenna or "dummy" load, plug in the appropriate measuring element and/or elements and read the R.F. power directly on the 4½" 3-scale meter.

Several different models are available. The external line section can be used with accessory cables (10' normally supplied) up to 200' from the meter. The meter unit is protected by a rugged, shock-proof housing. On the back of the housing are two sockets for storing additional measuring elements.

The high quality meter utilizes three computer generated scales and advanced taut band technology for reliability and accurate readings.



CHECK THESE COAXIAL FEATURES:

FOR ACCURACY

- ☒ SHOCK MOUNTED "TAUT BAND" METER
- ☒ 4½" MIRRORED SCALE

FOR DURABILITY

- ☒ GOLD PLATED PLUG-IN ELEMENTS
- ☒ 2 YEAR LIMITED WARRANTY



Coaxial Dynamics

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NOW ACCEPTING



SECTION B

1-5/8" WATTMETERS, LINE SECTIONS & ELEMENTS

81100-A SERIES DIRECTIONAL RF WATTMETERS

STANDARD 5/10/25 SCALES

Model No.	Description	Model No.	Description
81100-A	WATTMETER, W/10' CABLE, 1-5/8" SINGLE SOCKET FLANGED LINE SECTION (P/N 88501). WORKS WITH ELEMENTS FROM SECTION B.	81101-A	WATTMETER, W/10' CABLE, 1-5/8" SINGLE SOCKET UNFLANGED LINE SECTION (P/N 88502). WORKS WITH ELEMENTS FROM SECTION B.
81102-A	WATTMETER, W/2-10' CABLES, FWD/RFL SWITCH, 1-5/8" DUAL SOCKET FLANGED LINE SECTION (P/N 88514). WORKS WITH ELEMENTS FROM SECTION B.	81103-A	WATTMETER, W/2-10' CABLES, FWD/RFL SWITCH, AND 1-5/8" DUAL SOCKET UNFLANGED LINE SECTION (P/N 88515). WORKS WITH ELEMENTS FROM SECTION B.
81111-A	WATTMETER, W/10' CABLE, 1-5/8" SINGLE SOCKET UNFLANGED RECESSED LINE SECTION (P/N 88502-2). WORKS WITH ELEMENTS FROM SECTION B.	81113-A	WATTMETER, W/2-10' CABLES, FWD/RFL SWITCH, 1-5/8" DUAL SOCKET UNFLANGED RECESSED LINE SECTION (P/N 88515-2). WORKS WITH ELEMENTS FROM SECTION B.

81100-A SERIES DIRECTIONAL RF WATTMETERS

SPECIAL 15/30/60 SCALES

Model No.	Description	Model No.	Description
81106-A	WATTMETER, W/10' CABLE, 1-5/8" SINGLE SOCKET FLANGED LINE SECTION (P/N 88501). WORKS WITH SPECIAL 15/30/60 SCALE ELEMENTS FROM SECTION B.	81107-A	WATTMETER, W/10' CABLE, 1-5/8" SINGLE SOCKET UNFLANGED LINE SECTION (P/N 88502). WORKS WITH SPECIAL 15/30/60 SCALE ELEMENTS FROM SECTION B.
81108-A	WATTMETER, W/2-10' CABLES, FWD/RFL SWITCH, 1-5/8" DUAL SOCKET FLANGED LINE SECTION (P/N 88514). WORKS WITH SPECIAL 15/30/60 SCALE ELEMENTS FROM SECTION B.	81109-A	WATTMETER, W/2-10' CABLES, FWD/RFL SWITCH, AND 1-5/8" DUAL SOCKET UNFLANGED LINE SECTION (P/N 88515). WORKS WITH SPECIAL 15/30/60 SCALE ELEMENTS FROM SECTION B.

1 5/8" LINE SECTIONS

Model	Description	Model	Description
88501	1-5/8" 50 ohms, SINGLE SOCKET, SWIVEL FLANGED E.I.A.	88509	1-5/8" 50 ohms, 3 PORT SWIVEL FLANGED E.I.A. (4-1/8" LONG)
88502	1-5/8" 50 ohms, SINGLE SOCKET, UNFLANGED	88511	1-5/8" 50 ohms, 4 PORT SWIVEL FLANGED E.I.A.
88502-2	1-5/8" 50 ohms, SINGLE SOCKET, UNFLANGED RECESSED	88514	1-5/8" 50 ohms, DUAL SOCKET SWIVEL FLANGED E.I.A.
88515	1-5/8" 50 ohms, DUAL SOCKET, UNFLANGED	88515-2	1-5/8" 50 ohms, DUAL SOCKET UNFLANGED RECESSED

82100 SERIES (30 μ A) PLUG-IN ELEMENTS

FOR USE IN ALL 1 5/8" LINE SECTIONS

Power Range	2-30 MHz	25-60 MHz	50-125 MHz	100-250 MHz	200-500 MHz	400-1000 MHz
250		82106	82113	82120	82127	82134
500		82107	82114	82121	82128	82135
1000	82101	82108	82115	82122	82129	82136
2500	82102	82109	82116	82123	82130	82137
5000	82103	82110	82117	82124	82131	82138
10 kW	82104	82111	82118			
25 kW	82105	82112	82119			

SPECIAL 15/30/60 SCALE (30 μ A) ELEMENTS FOR 1-5/8" LINE SECTIONS

POWER RANGE	2-30 MHz	25-60 MHz	50-125 MHz	100-250 MHz	200-500 MHz	400-1000 MHz
300		82155	82162	82169	82174	82179
600		82156	82163	82170	82175	82180
1500	82150	82157	82164	82171	82176	82181
3000	82151	82158	82165	82172	82177	82182
6000	82152	82159	82166	82173	82178	82183
15 kW	82153	82160	82167			
30 kW	82154	82161	82168			

SECTION C

3-1/8" WATTMETERS, LINE SECTIONS & ELEMENTS

81300-A SERIES DIRECTIONAL RF WATTMETERS

STANDARD 5/10/25 SCALES

Model No.	Description	Model No.	Description
81300-A	WATTMETER, W/10' CABLE, 3-1/8" SINGLE SOCKET FLANGED LINE SECTION (P/N 88503). WORKS WITH ELEMENTS FROM SECTION C.	81301-A	WATTMETER, W/10' CABLE, 3-1/8" SINGLE SOCKET UNFLANGED LINE SECTION (P/N 88504). WORKS WITH ELEMENTS FROM SECTION C.
81302-A	WATTMETER, W/2-10' CABLES, FWD/RFL SWITCH, 3-1/8" DUAL SOCKET FLANGED LINE SECTION (P/N 88515). WORKS WITH ELEMENTS FROM SECTION C.	81303-A	WATTMETER, W/2-10' CABLES, FWD/RFL SWITCH, AND 3-1/8" DUAL SOCKET UNFLANGED LINE SECTION (P/N 88517). WORKS WITH ELEMENTS FROM SECTION C.
81311-A	WATTMETER, W/10' CABLE, 3-1/8" SINGLE SOCKET UNFLANGED RECESSED LINE SECTION (P/N 88504-2). WORKS WITH ELEMENTS FROM SECTION C.	81313-A	WATTMETER, W/2-10' CABLES, FWD/RFL SWITCH, 3-1/8" DUAL SOCKET UNFLANGED RECESSED LINE SECTION (P/N 88517-2). WORKS WITH ELEMENTS FROM SECTION C.

81300-A SERIES DIRECTIONAL RF WATTMETERS

SPECIAL 15/30/60 SCALES

Model No.	Description	Model No.	Description
81306-A	WATTMETER, W/10' CABLE, 3-1/8" SINGLE SOCKET FLANGED LINE SECTION (P/N 88503). WORKS WITH SPECIAL 15/30/60 SCALE ELEMENTS FROM SECTION C.	81307-A	WATTMETER, W/10' CABLE, 3-1/8" SINGLE SOCKET UNFLANGED LINE SECTION (P/N 88504). WORKS WITH SPECIAL 15/30/60 SCALE ELEMENTS FROM SECTION C.
81308-A	WATTMETER, W/2-10' CABLES, FWD/RFL SWITCH, 3-1/8" DUAL SOCKET FLANGED LINE SECTION (P/N 88515). WORKS WITH SPECIAL 15/30/60 SCALE ELEMENTS FROM SECTION C.	81309-A	WATTMETER, W/2-10' CABLES, FWD/RFL SWITCH, 3-1/8" DUAL SOCKET UNFLANGED LINE SECTION (P/N 88517). WORKS WITH SPECIAL 15/30/60 SCALE ELEMENTS FROM SECTION C.

3 1/8" LINE SECTIONS

Model	Description	Model	Description
88503	3-1/8" 50 ohms, SINGLE SOCKET, SWIVEL FLANGED E.I.A.	88512	3-1/8" 50 ohms, 4 PORT SOCKET SWIVEL FLANGED E.I.A.
88504	3-1/8" 50 ohms, SINGLE SOCKET, UNFLANGED	88513	3-1/8" 50 ohms, 3 PORT, SWIVEL FLANGED E.I.A.
88504-2	3-1/8" 50 ohms, SINGLE SOCKET, UNFLANGED RECESSED	88516	3-1/8" 50 ohms, DUAL SOCKET, SWIVEL FLANGED E.I.A.
88510	3-1/8" 50 ohms, 3 PORT, SWIVEL FLANGED E.I.A. (4-1/8" LONG)	88517	3-1/8" 50 ohms, DUAL SOCKET UNFLANGED
		88517-2	3-1/8" 50 ohms, DUAL SOCKET, UNFLANGED RECESSED

82300 SERIES (30 μ A) PLUG-IN ELEMENTS

FOR USE IN ALL 3 1/8" LINE SECTIONS

Power Range	2-30 MHz	25-60 MHz	50-125 MHz	100-250 MHz	200-500 MHz	400-1000 MHz
1000		82306	82311	82316	82321	82326
2500		82307	82312	82317	82322	82327
5000	82301	82308	82313	82318	82323	82328
10 kW	82302	82309	82314	82319	82324	82329
25 kW	82303	82310	82315	82320	82325	82330
50 kW	82304		82332	82333		

SPECIAL 15/30/60 SCALE (30 μ A) ELEMENTS FOR 3-1/8" LINE SECTIONS

POWER RANGE	2-30 MHz	25-60 MHz	50-125 MHz	100-250 MHz	200-500 MHz	400-1000 MHz
1500		82354	82360	82366	82372	82378
3000		82355	82361	82367	82373	82379
6000	82350	82356	82362	82368	82374	82380
15 kW	82351	82357	82363	82369	82375	82381
30 kW	82352	82358	82364	82370	82376	82382
60 kW	82353	82359	82365	82371	82377	82383

SECTION D

4-1/16" WATTMETERS, LINE SECTIONS & ELEMENTS

81400-A SERIES DIRECTIONAL RF WATTMETERS

STANDARD 5/10/25 SCALES

Model No.	Description	Model No.	Description
81400-A	WATTMETER, W/10' CABLE, 4-1/16" SINGLE SOCKET FLANGED LINE SECTION (P/N 88505). WORKS WITH ELEMENTS FROM SECTION D.	81401-A	WATTMETER, W/10' CABLE, 4-1/16" SINGLE SOCKET UNFLANGED LINE SECTION (P/N 88506). WORKS WITH ELEMENTS FROM SECTION D.
81402-A	WATTMETER, W/2-10' CABLES, FWD/RFL SWITCH, 4-1/16" DUAL SOCKET FLANGED LINE SECTION (P/N 88518). WORKS WITH ELEMENTS FROM SECTION D.	81403-A	WATTMETER, W/2-10' CABLES, FWD/RFL SWITCH, AND 4-1/16" DUAL SOCKET UNFLANGED LINE SECTION (P/N 88519). WORKS WITH ELEMENTS FROM SECTION D.
81411-A	WATTMETER, W/10' CABLE, 4-1/16" SINGLE SOCKET UNFLANGED RECESSED LINE SECTION (P/N 88506-2). WORKS WITH ELEMENTS FROM SECTION D.	81413-A	WATTMETER, W/2-10' CABLES, FWD/RFL SWITCH, 4-1/16" DUAL SOCKET UNFLANGED RECESSED LINE SECTION (P/N 88519-2). WORKS WITH ELEMENTS FROM SECTION D.

81400-A SERIES DIRECTIONAL RF WATTMETERS

SPECIAL 15/30/60 SCALES

Model No.	Description	Model No.	Description
81406-A	WATTMETER, W/10' CABLE, 4-1/16" SINGLE SOCKET FLANGED LINE SECTION (P/N 88505). WORKS WITH SPECIAL 15/30/60 SCALE ELEMENTS FROM SECTION D.	81407-A	WATTMETER, W/10' CABLE, 4-1/16" SINGLE SOCKET UNFLANGED LINE SECTION (P/N 88506). WORKS WITH SPECIAL 15/30/60 SCALE ELEMENTS FROM SECTION D.
81408-A	WATTMETER, W/2-10' CABLES, FWD/RFL SWITCH, DUAL SOCKET FLANGED LINE SECTION (P/N 88518). WORKS WITH SPECIAL 15/30/60 SCALE ELEMENTS FROM SECTION D.	81409-A	WATTMETER, W/2-10' CABLES, FWD/RFL SWITCH, 4-1/16" DUAL SOCKET UNFLANGED LINE SECTION (P/N 88519). WORKS WITH SPECIAL 15/30/60 SCALE ELEMENTS FROM SECTION D.

4 1/16" LINE SECTIONS

Model	Description	Model	Description
88505	4-1/16" 50 ohms, SINGLE SOCKET, SWIVEL FLANGED E.I.A.	88518	4-1/16" 50 ohms, DUAL SOCKET, SWIVEL FLANGED E.I.A.
88506	4-1/16" 50 ohms, SINGLE SOCKET, UNFLANGED	88519	4-1/16" 50 ohms, DUAL SOCKET, UNFLANGED
88506-2	4-1/16" 50 ohms, SINGLE SOCKET, UNFLANGED RECESSED	88519-2	4-1/16" 50 ohms, DUAL SOCKET, UNFLANGED RECESSED

82400 SERIES (30 μ A) PLUG-IN ELEMENTS

FOR USE IN ALL 4-1/16" LINE SECTIONS

Power Range	2-30 MHz	25-60 MHz	50-125 MHz	100-250 MHz	200-500 MHz	400-750 MHz
2500			82413	82419		82429
5000			82414	82420		82430
10 kW			82415	82421		82431
25 kW			82416	82422		82432
50 kW			82417	82423		82433
100 kW						

SPECIAL 15/30/60 SCALE (30 μ A) ELEMENTS FOR 4-1/16" LINE SECTIONS

Power Range	50-125 MHz	100-250 MHz	200-500 MHz	400-750 MHz
3000	82456	82461	82466	82471
6000	82457	82462	82467	82472
15 kW	82458	82463	82468	82473
30 kW	82459	82464	82469	82474
60 kW	82460	82465	82470	82475

SECTION E

6-1/8" WATTMETERS, LINE SECTIONS & ELEMENTS

81600-A SERIES DIRECTIONAL RF WATTMETERS

STANDARD 5/10/25 SCALES

Model No.	Description	Model No.	Description
81600-A	WATTMETER, W/10' CABLE, 6-1/8" SINGLE SOCKET FLANGED LINE SECTION (P/N 88507). WORKS WITH ELEMENTS FROM SECTION E.	81601-A	WATTMETER, W/10' CABLE, 6-1/8" SINGLE SOCKET UNFLANGED LINE SECTION (P/N 88508). WORKS WITH ELEMENTS FROM SECTION E.
81602-A	WATTMETER, W/2-10' CABLES, FWD/RFL SWITCH, 6-1/8" DUAL SOCKET FLANGED LINE SECTION (P/N 88520). WORKS WITH ELEMENTS FROM SECTION E.	81603-A	WATTMETER, W/2-10' CABLES, FWD/RFL SWITCH, 6-1/8" DUAL SOCKET UNFLANGED LINE SECTION (P/N 88521). WORKS WITH ELEMENTS FROM SECTION E.
81611-A	WATTMETER, W/10' CABLE, 6-1/8" SINGLE SOCKET UNFLANGED RECESSED LINE SECTION (P/N 88508-2). WORKS WITH ELEMENTS FROM SECTION E.	81613-A	WATTMETER, W/2-10' CABLES, FWD/RFL SWITCH, 6-1/8" DUAL SOCKET UNFLANGED RECESSED LINE SECTION (P/N 88521-2). WORKS WITH ELEMENTS FROM SECTION E.

81600-A SERIES DIRECTIONAL RF WATTMETERS

SPECIAL 15/30/60 SCALES

Model No.	Description	Model No.	Description
81606-A	WATTMETER, W/10' CABLE, 6-1/8" SINGLE SOCKET FLANGED LINE SECTION (P/N 88507). WORKS WITH SPECIAL 15/30/60 SCALE ELEMENTS FROM SECTION E.	81607-A	WATTMETER, W/10' CABLE, 6-1/8" SINGLE SOCKET UNFLANGED LINE SECTION (P/N 88508). WORKS WITH SPECIAL 15/30/60 SCALE ELEMENTS FROM SECTION E.
81608-A	WATTMETER, W/2-10' CABLES, FWD/RFL SWITCH, 6-1/8" DUAL SOCKET FLANGED LINE SECTION (P/N 88520). WORKS WITH SPECIAL 15/30/60 SCALE ELEMENTS FROM SECTION E.	81609-A	WATTMETER, W/2-10' CABLES, FWD/RFL SWITCH, 6-1/8" DUAL SOCKET UNFLANGED LINE SECTION (P/N 88521). WORKS WITH SPECIAL 15/30/60 SCALE ELEMENTS FROM SECTION E.

6 1/8" LINE SECTIONS

Model	Description	Model	Description
88507	6-1/8" 50 OHM, SINGLE SOCKET, SWIVEL FLANGED E.I.A.	88520	6-1/8" 50 OHM, DUAL SOCKET, SWIVEL FLANGED E.I.A.
88508	6-1/8" 50 OHM, SINGLE SOCKET, UNFLANGED	88521	6-1/8" 50 OHM, DUAL SOCKET, UNFLANGED
88508-2	6-1/8" 50 OHM, SINGLE SOCKET, UNFLANGED RECESSED	88521-2	6-1/8" 50 OHM, DUAL SOCKET UNFLANGED RECESSED

82600 SERIES (30 μ A) PLUG-IN ELEMENTS

FOR USE IN ALL 6-1/8" LINE SECTIONS

Power Range	2-30 MHz	25-60 MHz	50-125 MHz	100-250 MHz	200-500 MHz	400-1000 MHz
2500			82615	82622		82634
5000			82616	82623		82635
10 kW			82617	82624		82636
25 kW			82618	82625		82637
50 kW			82619	82626		82638
100 kW			82620	82627		82639

SPECIAL 15/30/60 SCALE (30 μ A) ELEMENTS FOR 6-1/8" LINE SECTIONS

Power Range	50-125 MHz	100-250 MHz	200-500 MHz	400-1000 MHz
3000	82656	82661	82666	82671
6000	82657	82662	82667	82672
15 kW	82658	82663	82668	82673
30 kW	82659	82664	82669	82674
60 kW	82660	82665	82670	82675

ADAPTERS TO ACCEPT QUICK MATCH CONNECTORS

Model No.	Description	Model No.	Description
88016	1-5/8" UNFLANGED	88018	1-5/8" E.I.A. FLANGED
88017	3-1/8" UNFLANGED	88019	3-1/8" E.I.A. FLANGED

Minimum Billing – \$50.00 Per Order (except for repair parts)

Prices and Specifications Subject to Change Without Notice

Please Inquire for OEM and Distributor Arrangements

Coaxial RF Meters, Couplers, Loads and Accessories are Designed for 50 Ohms

Formal Price Quotations are Valid for 60 Days

2 Year Limited Warranty on All Catalog Items

SHIPPING INSTRUCTIONS

UNLESS SPECIFIC INSTRUCTIONS ACCOMPANY THE ORDER, WE SHALL USE OUR JUDGEMENT AND SELECT THE BEST METHOD FOR YOUR SHIPMENT. IF REQUESTED, REPAIR PARTS OR OTHER ITEMS NEEDED QUICKLY WILL BE SHIPPED BY AIR.

EXPORT SHIPMENTS VIA AIR-FREIGHT SAVE TIME, AND IN MANY CASES ARE LESS EXPENSIVE THAN SURFACE MODES.

SPECIAL DATA

INDIVIDUAL SPECIAL PERFORMANCE DATA CAN BE PROVIDED FOR MOST C.D.I. PRODUCTS AT A MINIMUM CHARGE OF \$40.00 PER UNIT

ORDER BY NUMBER

PLEASE ORDER BY MODEL NUMBER OR PART NUMBER. WHENEVER POSSIBLE, INCLUDE THE NAME OF THE ITEM OR OTHER SIGNIFICANT SPECIFICATIONS. BE SURE TO INCLUDE IN YOUR ORDER ANY ACCESSORIES OR SPECIAL CALIBRATION REQUIRED.

TERMS

ALL PRICES ARE F.O.B. CLEVELAND, OHIO. TERMS ARE NET 30 DAYS FOR ESTABLISHED ACCOUNTS.

QUANTITY DISCOUNTS

AVAILABLE ON MOST EQUIPMENT WHEN 25 PIECES OR MORE OF THE SAME MODEL ARE ORDERED. PLEASE INQUIRE.

CUSTOMER SERVICE

C.D.I. MAINTAINS A COMPLETE REPAIR AND CALIBRATION DEPARTMENT IN CLEVELAND, OHIO. IT IS SET UP TO PROVIDE THE BEST POSSIBLE SERVICE OF C.D.I. EQUIPMENT. REPAIRS WILL PROCEED AS SOON AS THE INSTRUMENT IS RECEIVED WITH YOUR AUTHORIZATION. IF YOU REQUIRE A FIRM QUOTATION BEFORE REPAIRS PROCEED, PLEASE ADVISE US. ALL INSTRUMENTS RETURNED FOR REPAIR MUST BE SHIPPED PREPAID.

CONDITIONS OF SALE

DETERMINATION OF PRICE, TERMS AND CONDITIONS OF SALE AND FINAL ACCEPTANCE OF ORDERS ARE MADE ONLY AT OUR FACTORY IN CLEVELAND, OHIO.

FOR MORE INFORMATION CALL TOLL FREE 1-800-COAXIAL (262-9425)

COAXIAL DYNAMICS • 15210 Industrial Parkway, Cleveland, Ohio 44135 • (216) 267-2233 • Toll Free 1-800-COAXIAL (262-9425)

FAX: (216) 267-3142 • E-Mail coaxial@apk.net • Web Site <http://www.coaxial.com>

NOW ACCEPTING



A Wattchman Monitor/Alarm measures forward and reflected RF power simultaneously in 50 ohm transmission lines. It is compatible with our entire series of 7/8" thru 6 1/8" Line Sections and will accept plug in elements that range from 5 watts to 100,000 watts full scale from 0.45 MHz to 2.3 GHz.

One or both meters may incorporate a front panel adjustable set point which controls the trip point of the alarm. Model 81070's have our standard 5/10/25 scales and 81080's have 15/30/60 scales.

A station monitor/alarm system installation consists of a Wattchman, a dual socket line section and two elements for monitoring both forward and reflected power. The Wattchman is supplied with two 25' DC cable assemblies for connection to the line section, and a 6' AC power cord. Installation requires inserting the line section into the transmission line, and connecting the terminals of the transmitter interlock system(s) to the proper terminals on the Wattchman and providing AC power.

Abnormal load conditions will quickly cause transmitter shut-down in less than 15 milliseconds (including control relay). An audible single tone alarm will indicate system/transmitter malfunction. Relay contacts are provided for remote alarm and reset switching. Fail-Safe or Non-Fail-Safe mode is selected by a switch located on the rear of the instrument.

Element selection: Suggest using a 10:1 ratio.
Example: 10 kW forward and 1 kW reflected.

For additional information on our Wattchman Station Monitor/Alarm Systems and accessories, consult factory.

SPECIFICATIONS:

81070/81080 SERIES WATTCHMAN

METER SPECIFICATIONS

30 microamps full scale, $\pm 1\%$.
1400 ohms terminal resistance.
4 1/2" movement.

SYSTEM SPECIFICATIONS

$\pm 5\%$ O.F.S. accuracy when used with proper Coaxial Dynamics line sections and elements.

CONTROLS: FRONT PANEL
Push button reset.
Trip set adjustment.

REAR PANEL
Audible alarm switch.
Fail-safe mode switches.
110/220 VAC switch.

CONNECTIONS

Meter inputs.
*N.O./N.C. control connections.
Remote alarm turn on - N.O.

Remote reset connections.
AC power.

CONTACT RATINGS

5A at 120 VAC non-inductive.

RESPONSE TIME

Less than 15 milliseconds (including control relay function.)
*N.O./N.C. - Normally Opened/ Normally Closed.

RF Station Monitor / Alarm

81070/ 81080 SERIES



DIMENSION

19" L x 8" W x 5 1/4" H

WEIGHT

7 1/2 Lbs.

FINISH

Blue Textured Panel
Anodized Aluminum

POWER REQUIREMENTS

110/220 VAC, 50/60 CPS, 10 Watts Max



WATTCHMAN FEATURES:

- ☒ PROTECTS YOUR TRANSMITTER SYSTEM
- ☒ CONTINUOUS POWER DISPLAY FORWARD AND REFLECTED
- ☒ AUDIBLE AND VISUAL ALARMS
- ☒ FAST FAULT RESPONSE (15 MILLISECONDS)
- ☒ REMOTE RESET PROVISION
- ☒ 110/220 VAC INPUT SWITCH



Coaxial Dynamics

A CDI INDUSTRIES, INC. COMPANY

6800 Lake Abram Drive, Middleburg Hts., Ohio 44130, USA

(440) 243-1100 • 1-800-COAXIAL • FAX: (440) 243-1101

E-Mail coaxial@apk.net • Web Site <http://www.coaxial.com>

NOW ACCEPTING



MODEL	SPECIALIZED FEATURES
81070	The Original Transmitter Monitor/Alarm System with a forward power meter and a reflected power shut-down control monitor and meter for high reflected power. Model 81070 is designed to be used with all Coaxial Dynamics Dual Socket Line Sections and standard catalog elements.
81071	This Model has a control monitor and meter for an alarm on low forward power levels (via contact on the rear panel) as well as the transmitter shut-down on high reflected power levels of Model 81070 above. Model 81071 is also intended to be used with all C.D.I. Dual Socket Line Sections and standard catalog elements.
81073	Model 81073 has only one monitor and control meter intended to provide an alarm on low forward power only. No indication of reflected power is provided. Start up switching circuits are provided to avoid alarm when the transmitter first starts up. Model 81073 is used with all C.D.I. Single Socket Line Sections and standard elements.
81074	Model 81074 has only one monitor and control meter and is intended to provide an alarm and transmitter shut-down with high power levels. There is only one indication of power provided. This unit is generally used to monitor and protect against high reflected power levels. However, it may also be used to monitor and protect against high forward power levels by simply rotating the detector element 180 degrees. Model 81074 is designed to be used with all C.D.I. Single Socket Line Sections and standard elements.

MODEL	SPECIALIZED FEATURES
81081	Model 81081 is similar to Model 81070 except that the standard 30 microamp meters have special 15, 30 and 60 scales. Model 81081 is designed to be used with all C.D.I. Dual Socket Line Sections and special C.D.I. elements.
81082	Model 81082 is similar to Model 81071 except that the standard 30 microamp meters have special 15, 30 and 60 scales. Model 81082 is designed to be used with all C.D.I. Dual Socket Line Sections and special C.D.I. elements.

AVAILABLE "WATTCHMAN" OPTIONS

81070-200 Model 81070-200 is an amplified DC output option available for all Wattchman Models. This option provides a pair of adjustable amplified DC outputs that are available on the terminal strip on the rear of the unit. The outputs are proportional to the meter indication and are calibrated at the factory so that a full scale deflection will cause a DC voltage of 2.00 Volts to be present. The amplifiers are designed to work with any DC load impedance of 500 ohms or greater.

SECTION A

STANDARD ELEMENTS FOR 1-5/8" SYSTEM 82100 SERIES (30μA) PLUG-IN ELEMENTS

FOR USE IN ALL 1-5/8" LINE SECTIONS

Power Range	2-30 MHz	25-60 MHz	50-125 MHz	100-250 MHz	200-500 MHz	400-1000 MHz
250		82106	82113	82120	82127	82134
500		82107	82114	82121	82128	82135
1000	82101	82108	82115	82122	82129	82136
2500	82102	82109	82116	82123	82130	82137
5000	82103	82110	82117	82124	82131	82138
10 kW	82104	82111	82118			
25 kW	82105	82112	82119			

SPECIAL 15/30/60 SCALE (30μA) ELEMENTS FOR 1-5/8" LINE SECTIONS

Power Range	2-30 MHz	25-60 MHz	50-125 MHz	100-250 MHz	200-500 MHz	400-750 MHz
300		82155	82162	82169	82174	82179
600		82156	82163	82170	82175	82180
1500	82150	82157	82164	82171	82176	82181
3000	82151	82158	82165	82172	82177	82182
6000	82152	82159	82166	82173	82178	82183
15 kW	82153	82160	82167			
30 kW	82154	82161	82168			

STANDARD LINE SECTIONS

Model No.	Description
88514	1-5/8" 50 ohms, Dual Socket, Swivel Flanged E.I.A.
88515	1-5/8" 50 ohms, Dual Socket, Unflanged
88515-2	1-5/8" 50 ohms, Dual Socket, Unflanged Recessed

SECTION B

STANDARD ELEMENTS FOR 3-1/8" SYSTEM 82300 SERIES (30μA) PLUG-IN ELEMENTS

FOR USE IN ALL 3-1/8" LINE SECTIONS

Power Range	2-30 MHz	25-60 MHz	50-125 MHz	100-250 MHz	200-500 MHz	400-750 MHz
1000		82306	82311	82316	82321	82326
2500		82307	82312	82317	82322	82327
5000	82301	82308	82313	82318	82323	82328
10 kW	82302	82309	82314	82319	82324	82329
25 kW	82303	82310	82315	82320	82325	82330
50 kW	82304		82332	82333		

SPECIAL 15/30/60 SCALE (30μA) ELEMENTS FOR 3-1/8" LINE SECTIONS

Power Range	2-30 MHz	25-60 MHz	50-125 MHz	100-250 MHz	200-500 MHz	400-750 MHz
1500		82354	82360	82366	82372	82378
3000		82355	82361	82367	82373	82379
6000	82350	82356	82362	82368	82374	82380
15 kW	82351	82357	82363	82369	82375	82381
30 kW	82352	82358	82364	82370	82376	82382
60 kW	82353	82359	82365	82371	82377	82383

STANDARD LINE SECTIONS

Model No.	Description
88516	3-1/8" 50 ohms, Dual Socket, Swivel Flanged E.I.A.
88517	3-1/8" 50 ohms, Dual Socket, Unflanged
88517-2	3-1/8" 50 ohms, Dual Socket, Unflanged Recessed

NOTE: 4-1/16" AND 6-1/8" Standard Line Sections and Elements may also be used with Coaxial Dynamics Wattchman Series. Please consult the factory, or our price list for more information.

FOR MORE INFORMATION CALL TOLL FREE 1-800-COAXIAL (262-9425)



A Coaxial Dynamics, Wattchman rack mounted Monitor/Alarm measures forward and reflected RF power simultaneously in 50 ohm transmission lines. It is compatible with our entire series of 7/8" thru 6-1/8" Line Sections and will accept plug in elements that range from 5 watts to 100,000 watts full scale from 0.45 MHz to 2.3 GHz.

Similar in appearance to our 81070/80 series these units provide improved functionality at a reduced cost. Both models feature forward and reflected trip adjustments, a built in DC amplifier, and 110/220 Input voltage switches. Model 81090's meters have our standard 5/10/25 scales and Model 81091 has 15/30/60 scales.

A station monitor/alarm system installation consists of a Wattchman, a dual socket line section and two elements for monitoring both forward and reflected power. The Wattchman is supplied with two 25' DC cable assemblies for connection to the line section, and a 6' AC power cord. Installation requires inserting the line section into the transmission line, and connecting the proper terminals of the transmitter interlock system(s) to the proper terminals on the Wattchman and providing AC power.

Abnormal load conditions quickly cause transmitter shut-down within less than 15 milliseconds (including control relay). An audible single tone alarm will indicate system/transmitter malfunction. Relay contacts are provided for remote alarm and reset switching. Fail-Safe or Non-Fail-Safe mode is selected by a switch located on the rear of the instrument.

Element selection: Suggest using a 10:1 ratio.
Example: 10 kW forward and 1 kW reflected.

For additional information on our Wattchman Station Monitor/Alarm Systems and accessories consult factory.

SPECIFICATIONS: **81090/81091**

METER SPECIFICATIONS

30 microamps full scale, $\pm 1\%$.
1400 ohms terminal resistance.
4 1/2" movement.

ACCURACY

$\pm 5\%$ accuracy when used with proper Coaxial Dynamics line sections and elements.

CONTROLS: FRONT PANEL

Push button reset.
F & R Trip adjustments.

REAR PANEL

Audible alarm switch.
Fail-safe mode switches.
110/220 VAC input switch.

REAR PANEL CONNECTIONS

Meter inputs.	Remote reset.
NO/NC relay terminals.	AC Power Input.
Remote alarm contacts.	Amplified DC Outputs

CONTACT RATINGS

5A at 120 VAC non-inductive.

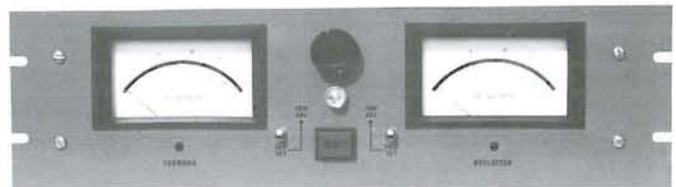
RESPONSE TIME

Less than 15 milliseconds (including control relay function.)

Coaxial Dynamics

RF Station Monitor/Alarm

**Models
81090
81091**



DIMENSION

19" L x 8" W x 5 1/4" H

WEIGHT

7 1/2 Lbs.

FINISH

Blue Textured Panel
Anodized Aluminum

POWER REQUIREMENTS

110/220 VAC, 50/60 CPS, 10 Watts Max.



WATTCHMAN FEATURES:

- ☒ PROTECTS YOUR TRANSMITTER SYSTEM
- ☒ CONTINUOUS POWER DISPLAY FORWARD AND REFLECTED
- ☒ AUDIBLE AND VISUAL ALARMS
- ☒ FAST FAULT RESPONSE (15 MILLISECONDS)
- ☒ REMOTE RESET PROVISION
- ☒ AMPLIFIED DC OUTPUTS



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SECTION A

STANDARD ELEMENTS FOR 1-5/8" SYSTEM

82100 SERIES (30 μ A) PLUG-IN ELEMENTS

FOR USE IN ALL 1-5/8" LINE SECTIONS

Power Range	2-30 MHz	25-60 MHz	50-125 MHz	100-250 MHz	200-500 MHz	400-1000 MHz
250		82106	82113	82120	82127	82134
500		82107	82114	82121	82128	82135
1000	82101	82108	82115	82122	82129	82136
2500	82102	82109	82116	82123	82130	82137
5000	82103	82110	82117	82124	82131	82138
10 kW	82104	82111	82118			
25 kW	82105	82112	82119			

SPECIAL 15/30/60 SCALE (30 μ A) ELEMENTS FOR 1-5/8" LINE SECTIONS

Power Range	2-30 MHz	25-60 MHz	50-125 MHz	100-250 MHz	200-500 MHz	400-750 MHz
300		82155	82162	82169	82174	82179
600		82156	82163	82170	82175	82180
1500	82150	82157	82164	82171	82176	82181
3000	82151	82158	82165	82172	82177	82182
6000	82152	82159	82166	82173	82178	82183
15 kW	82153	82160	82167			
30 kW	82154	82161	82168			

STANDARD LINE SECTIONS

Model No.	Description
88514	1-5/8" 50 ohms, Dual Socket, Swivel Flanged E.I.A.
88515	1-5/8" 50 ohms, Dual Socket, Unflanged
88515-2	1-5/8" 50 ohms, Dual Socket, Unflanged Recessed

SECTION B

STANDARD ELEMENTS FOR 3-1/8" SYSTEM

82300 SERIES (30 μ A) PLUG-IN ELEMENTS

FOR USE IN ALL 3-1/8" LINE SECTIONS

Power Range	2-30 MHz	25-60 MHz	50-125 MHz	100-250 MHz	200-500 MHz	400-750 MHz
1000		82306	82311	82316	82321	82326
2500		82307	82312	82317	82322	82327
5000	82301	82308	82313	82318	82323	82328
10 kW	82302	82309	82314	82319	82324	82329
25 kW	82303	82310	82315	82320	82325	82330
50 kW	82304		82332	82333		

SPECIAL 15/30/60 SCALE (30 μ A) ELEMENTS FOR 3-1/8" LINE SECTIONS

Power Range	2-30 MHz	25-60 MHz	50-125 MHz	100-250 MHz	200-500 MHz	400-750 MHz
1500		82354	82360	82366	82372	82378
3000		82355	82361	82367	82373	82379
6000	82350	82356	82362	82368	82374	82380
15 kW	82351	82357	82363	82369	82375	82381
30 kW	82352	82358	82364	82370	82376	82382
60 kW	82353	82359	82365	82371	82377	82383

STANDARD LINE SECTIONS

Model No.	Description
88516	3-1/8" 50 ohms, Dual Socket, Swivel Flanged E.I.A.
88517	3-1/8" 50 ohms, Dual Socket, Unflanged
88517-2	3-1/8" 50 ohms, Dual Socket, Unflanged Recessed

SECTION C

STANDARD D.C. METER CABLE ASSEMBLIES

Model No.	Description
88912	33" with DC Connectors (Both Ends)
88913	10 Ft. with DC Connectors (Both Ends)
88914	25 Ft. with DC Connectors (Both Ends)
88915	50 Ft. with DC Connectors (Both Ends)
88916	100 Ft. with DC Connectors (Both Ends)
88917	200 Ft. with DC Connectors (Both Ends)

FOR MORE INFORMATION CALL TOLL FREE 1-800-COAXIAL (262-9425)



NEW!
NEW!
NEW!



**RF
Station
Monitor/Alarm**

**Model
81095**

The Coaxial Dynamics microprocessor controlled rack mounted Watchman Monitor/Alarm measures and displays forward and reflected power simultaneously in 50 Ohm transmission systems. Using advanced LCD displays, it also provides direct reading of VSWR. It is compatible with our entire series of 7/8" to 6 1/8" Line Sections and will accept elements from less than 5 Watts to 100,000 Watts full scale from 2 MHz to 2300 MHz.

A station Monitor/Alarm system installation consists of the Watchman, a dual socket line section and two elements for monitoring both forward and reflected power. The Watchman is supplied with two 25' DC cable assemblies for connection to the line section and a 6' AC power cord.

Installation requires inserting the line section into the transmission line, connecting the proper terminals of the transmitter interlock system(s) to the proper terminals on the Watchman and providing AC power. Abnormal load conditions quickly cause transmitter shutdown within less than 15 milliseconds (including control relay). An audible single tone alarm will indicate system/transmitter malfunction. Relay contacts are provided for remote alarm and reset switching. Fail-Safe or Non-Fail-Safe mode is selected by a switch located on the rear panel.

Element selection: Suggest using a 10:1 ratio.
Example: 10 kW forward and 1 kW reflected.
For additional information on our Watchman Station Monitor/Alarm Systems and accessories, consult the factory.



DIMENSIONS
19" L x 8" W x 5 1/4" H

WEIGHT
7 1/2 Lbs

FINISH
Blue Textured Panel
Anodized Aluminum

POWER REQUIREMENTS
110/220 VAC, 50/60 CPS, 10 Watts Max.

LCD Display Watchman Features:

- ✓ PROTECTS YOUR TRANSMITTER SYSTEM
- ✓ CONTINUOUS POWER DISPLAY FORWARD AND REFLECTED
- ✓ DIRECT READING OF VSWR
- ✓ AUDIBLE AND VISUAL ALARMS
- ✓ FAST FAULT RESPONSE (15 MILLISECONDS)
- ✓ REMOTE RESET PROVISION
- ✓ AMPLIFIED DC OUTPUTS



Coaxial Dynamics

A CDI INDUSTRIES, INC. COMPANY
6800 Lake Abram Dr. Middleburg Hts., Ohio 44130, USA
(440) 243-1100 1-800-COAXIAL (262-9425) FAX (440) 243-1101
E-Mail coaxial@apk.net Web Site <http://www.coaxial.com>



SPECIFICATIONS:

81095

METER SPECIFICATIONS

3/4" LCD Display

1400 Ohm Terminal Resistance

ACCURACY

±5% accuracy when used with proper Coaxial Dynamics line sections and elements.

CONTROLS: FRONT PANEL

Push button reset.
F & R Trip adjustments.
Full Scale Display
VSWR

REAR PANEL

Audible alarm switch.
Fail-safe mode switches.
110/220 VAC input switch.

REAR PANEL CONNECTIONS

Display Inputs
NO/NC relay terminals.
Remote alarm contacts.

Remote reset.
AC Power Input.
Amplified DC Outputs

CONTACT RATINGS

5A at 120 VAC non-inductive.

RESPONSE TIME

Less than 15 milliseconds (including control relay function.)



DIMENSIONS

19" L x 8" W x 5 1/4" H

WEIGHT

7 1/2 Lbs

FINISH

Blue Textured Panel
Anodized Aluminum

POWER REQUIREMENTS

110/220 VAC, 50/60 CPS, 10 Watts Max.



PANEL METERS

Features

Advanced LCD Displays

Standard EIA 19" Panel Width

Compatible With Standard Elements

Two Year Limited Warranty



DIMENSIONS

19" L x 8" W x 5 1/4" H

FINISH

Blue Textured Panel
Anodized Aluminum

POWER REQUIREMENTS

110/220 VAC, 50/60 CPS, 10 Watts Max.



Description

The Coaxial Dynamics microprocessor controlled rack mounted Wattmeters with digital displays are designed to measure RF power in 50 Ohm transmission systems and accept plug-in elements in the range of 5 Watts to 100,000 Watts full scale from 2 MHz to 2300 MHz. Full scale ranges may be changed in the field to work with either 5/10/25 scales or 15/30/60 scales.

Several different models are available for use with single or dual socket line sections. Line sections may be mounted up to 200 feet from the panel with permanently attached DC cables (10 feet normally supplied).

The Expediter

power computer

MODEL 83550

The portable Model 83550 is a microprocessor controlled Directional RF Wattmeter with numerous quick responding features designed to examine RF Power transfer between a transmitter and an antenna or load.

Applications include analyzing 50 ohm systems for Continuous Wave (CW), Amplitude Modulation (AM), Frequency Modulation (FM) and Television Signals. Low insertion loss and VSWR is essential to measurement accuracy for these applications. With type N connectors the Expediter maintains a VSWR of less than 1.05:1 over its entire operating frequency range of 0.45 MHz to 2.3 GHz.

This multi-function Digital Wattmeter, with its internal line section, and a set of frequency/power discriminating plug-in sensing elements form an analytical RF Power measuring system. Capabilities include measurement of peak or average power, absolute or relative power, along with VSWR and return loss.

MODEL 83552

A Permanent panel-mounted version of the Expediter, Model 83552 is also available. It has a built in DC power supply, and may be used with one of the many dual socket line sections ranging in size from 7/8" to 6 1/8" at power levels of up to 50 kW.

**RF
AnaDigit
System**

**83500
SERIES**

MODEL 83550 - 83552



CHECK THESE COAXIAL FEATURES:

The Expediter™ power computer...you make the demands, it fills the requirements.

TWO MODES OF OPERATION

- ☒ 1-DIGITAL FOR ACCURATE PEAK OR AVERAGE POWER MEASUREMENT
- 2-ANALOG FOR FAST TUNING
- ☒ UP TO THREE MONTHS ON A SINGLE CHARGE
- ☒ ADVANCED 3/4" LIQUID CRYSTAL DISPLAY
- ☒ PROGRAMMABLE FORWARD AND REFLECTED POWER RANGES

- ☒ COMPATIBLE WITH THE ELEMENTS YOU NOW HAVE
- ☒ COMPATIBLE WITH ALL COAXIAL DYNAMICS LINE SIZES AND POWER RANGES
- ☒ AUTO-PROMPTING FOR YOUR CONVENIENCE
- ☒ AUTO-DIAGNOSING FOR YOUR CONFIDENCE
- ☒ ANNUNCIATORS FOR ALL FUNCTIONS, MODES, AND CONDITIONS
- ☒ 18 SCALES FROM 100mW to 50kW



Coaxial Dynamics

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SPECIALISTS IN RF TEST EQUIPMENT & COMPONENTS

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Coaxial Dynamics

SCHEDULE (1)

STANDARD ELEMENTS (CATALOG NUMBERS)

Power Range Watts	Frequency (MHz)							
	2-30	25-60	50-125	100-250	200-500	400-1000	950-1300	1100-1800
5		82012	82020	82028	82036	82045	82068	82079
10		82013	82021	82029	82037	82046	82069	82080
25		82014	82022	82030	82038	82047	82070	82081
50	82004	82015	82023	82031	82039	82048	82071	82082
100	82005	82016	82024	82032	82041	82049	82072	
Power Range Watts	Frequency (MHz)							
	2-30	25-60	50-125	100-250	200-500	400-1000	950-1300	1100-1800
250	82006	82017	82025	82033	82042	82050	82073	
500	82007	82018	82026	82034	82043	82051	82074	
1000	82008	82019	82027	82035	82044	82052		
2500	82009							
5000	82010							

HIGH POWER APPLICATION: MODEL 83552

FOR AVAILABLE LINE SECTION & ELEMENT INFORMATION CONSULT FACTORY

SCHEDULE (2)

MILLIWATT ELEMENTS

100 mW	Cat. No.	250 mW	Cat. No.	500 mW	Cat. No.
20-23 MHz	820A022	70-80 MHz	820B075	25-30 MHz	820C028
44-50 MHz	820A047	72-76 MHz	820B074	65-90 MHz	820C078
62-70 MHz	820A066	105-120 MHz	820B113	72-76 MHz	820C074
72-76 MHz	820A074	310-350 MHz	820B330	105-120 MHz	820C113
105-120 MHz	820A113	416-436 MHz	820B426	130-170 MHz	820C150
135-165 MHz	820A150	800-900 MHz	820B850	300-350 MHz	820C325
190-205 MHz	820A198	900-950 MHz	820B925	800-900 MHz	820C850
310-350 MHz	820A330			900-950 MHz	820C925
416-436 MHz	820A426				
740-760 MHz	820A750				
800-900 MHz	820A850				

SCHEDULE (3)

LOW POWER ELEMENTS

1 watt	Cat. No.	2.5 watts	Cat. No.
28-44 MHz	820D036	60-80 MHz	820E070
40-50 MHz	820D045	80-140 MHz	820E110
44-70 MHz	820D057	95-150 MHz	820E123
70-120 MHz	820D095	150-250 MHz	820E200
108-118 MHz	820D113	200-300 MHz	820E250
108-181 MHz	820D145	225-400 MHz	820E313
150-250 MHz	820D200	275-450 MHz	820E363
200-300 MHz	820D250	340-560 MHz	820E450
275-450 MHz	820D363	800-950 MHz	820E875
310-350 MHz	820D330		
327-543 MHz	820D435		
425-850 MHz	820D638		
800-950 MHz	820D875		

SCHEDULE (9)

HIGH POWER ELEMENTS (PEAK ONLY)

Power Range	Frequency (MHz)					
	2-30	25-60	50-125	100-250	200-500	400-1000
2.5 kW		82053	82054	82055	82056	82057
5.0 kW		82058	82059	82060	82061	82062
10.0 kW	82011	82063	82064	82065	82066	82067

NOTE: Special elements other than those listed can be custom designed, contact your local distributor or Coaxial Dynamics, Inc. for more information.

SPECIFICATIONS: MODEL 83550

Power Range 0.1 watt to 10 kW max, CW or Peak
Frequency Range 2-2300 MHz
Insertion VSWR 1.05: 1 Max, with Type "N" Connectors
Impedance 50 ohms
Accuracy Average (CW) mode $\pm 5\%$ of full scale
Peak-Pulse or Envelope-Power mode $\pm 7\%$ of full scale

Pulse Parameters

Square Pulses: Minimum Pulse Width: .5 μ sec 100-1000 MHz
2 μ sec 26-99 MHz
15 μ sec 2-25 MHz
Minimum Repetition Rate: 30 pps
Gaussian Pulses: Minimum Pulse Width: 5 μ sec 25-1000 MHz
15 μ sec 2-24 MHz
Minimum Repetition Rate: 30 pps

88000 SERIES RF QUICK MATCH 50 ohm CONNECTORS

88000	N Female	88010	$\frac{7}{8}$ " Swivel Flanged
88001	N Male	88011	TNC Female
88002	BNC Female	88012	TNC Male
88003	BNC Male	88013	HN Female
88004	UHF Female	88014	HN Male
88005	UHF Male	88020	SMA Female
88006	LC Female	88021	SMA Male
88007	LC Male	88026	Miniature UHF Female
88008	C Female	88027	SC Female
88009	C Male	88028	SC Male

FOR MORE INFORMATION CALL TOLL FREE 1-800-COAXIAL (262-9425)





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RF RELATIVE FIELD STRENGTH METER

Coaxial Dynamics Model 7601 Relative Field Strength Meter is used for measuring the relative strengths of radiating fields of patterns from a transmitting antenna system, making relative RF power measurements, or peaking and adjusting fixed or portable transceivers and antennas.

The Model 7601 is usable over a frequency range of 1 to 3000 MHz with superior performance characteristics and with greater sensitivity. A one watt CW source from a unity gain antenna at 150 MHz will typically cause full scale deflection at a distance of 10 feet with the gain control set at maximum. The large easy to read meter is plainly visible from many feet away.

The detachable antenna feature allows the user to select from two available antennas. The instrument is normally supplied with a Rubber Duck style antenna. An optional telescoping antenna (Model 7600-008) with a range of 4 to 19 inches is also available for even greater sensitivity.

Your confidence in the quality and dependability of the Model 7601 Relative Field Strength Meter is assured with the Coaxial Dynamics Two Year Limited Warranty.

NOTE: Model 7601 can also be connected directly to an existing base or mobile antenna.

Frequency Range: 1 to 3000 MHz
Battery: One 9 volt alkaline (supplied)
Weight: 8 oz (.23 kg)
Dimensions: 3.13" x 5.0" x 2.13"

MODEL 7601



CHECK THESE COAXIAL FEATURES:

- ☒ SUPERIOR SENSITIVITY
- ☒ BROADBAND OPERATION
- ☒ ADJUSTABLE GAIN CONTROL
- ☒ LOW POWER CONSUMPTION
- ☒ INTERNAL BATTERY TEST CIRCUIT
- ☒ DETACHABLE ANTENNA
- ☒ RUGGED ALUMINUM CASE

VARIABLE SIGNAL SAMPLER

7900 SERIES

MODELS 7998 AND 7999



Model 7998



Model 7999

Now, you can extract a low signal level from a Coaxial system with our **Models 7998 and 7999 series Adjustable Signal Samplers** new from Coaxial Dynamics.

Models 7998 and 7999 are essential tools for spectrum analysis, R.F. Signal scope observation or frequency counting control. The adjustable signal samplers exhibit a **very low VSWR** throughout their wide frequency and coupling range.

Our user-oriented design features an easy access knob which enables fine adjustments of the coupling magnitude (Once the desired level is reached, the setting can be locked).

Model 7998 produces at the BNC port a non-directional R.F. sample adjustable over a 15 dB range which is 35 to 65 dB below the main line signal. It is usable between 20 and 1000 MHz and up to 1000 Watts.

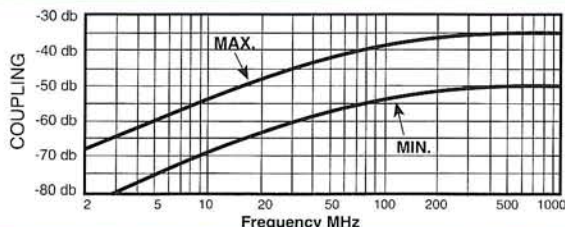
The main line connectors are coaxial quick-match type with more than sixteen choices available.

For low frequency R.F. sampling, select Model 7999 for R.F. signals between 1.5 and 35 MHz, adjustable over a 18 dB range, 40 to 68 dB below the main signal. All other features are identical to Model 7998.

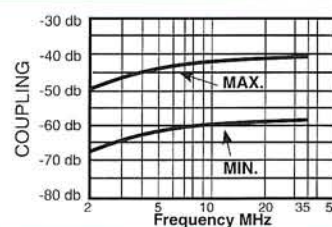
Models 7998-4 and 7999-4 are designed for direct mating to any Coaxial Dynamics product having quick match connectors. Mount your desired connector configuration to one side of the block. Mount the other side directly to the Quick Match interface, thus eliminating one connector pair while providing on-the-spot sampling.

The coupling is shown by the curves below. Order Model 7998 for 20 to 1000 MHz and Model 7999 for 1.5 to 35 MHz applications.

Model 7998



Model 7999



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MODEL 7998 AND 7999 VARIABLE SIGNAL SAMPLERS

SPECIFICATIONS MODEL 7998

Frequency range:	20 TO 1000MHz
Max. Power:	1000 watts
Insertion VSWR:	1.1 Max. 2-512 MHz 1.25 Max.512-1000 MHz (with "N" connectors)
Insertion loss:	0.1 db Max. 2-512 MHz 0.2 db Max. 512-1000MHz
Coupling:	Adjustable as shown +/- 3db
Connectors:	QM Type as specified
Weight:	7 oz. Nominal
Finish:	Silver Plate
Size: Nominal	2 51/64 x 2 7/8 x 1 1/4 (71 x 73 x 32mm)

CONNECTORS MODEL 7998

MODEL NUMBER	QM CONNECTORS
7998	Type N: Two Female
7998-1	Type N: Male/ Female
7998-2	UHF: Two Female
7998-3	UHF: Male/ Female
7998-4	Mount to QM Interface
7998-5	Choose connectors from table

SPECIFICATIONS MODEL 7999

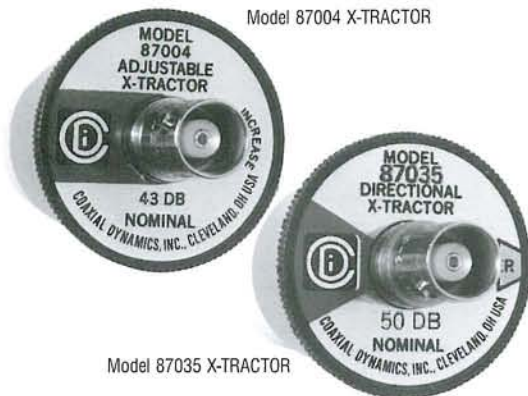
Frequency range:	1.5 - 35MHz
Max. Power:	5000 watts
Insertion VSWR:	1.07 Max. 1.5 to 35 MHz (with "N" connectors)
Insertion loss:	0.1 db Max. 1.5 to 35 MHz
Coupling:	Adjustable as shown +/- 3db
Connectors:	QM Type as specified
Weight:	7 oz. nominal
Finish:	Silver Plate
Size (Nominal):	2 51/64 x 2 7/8 x 1 1/4 (71 x 73 x 32mm)

CONNECTORS MODEL 7999

MODEL NUMBER	QM CONNECTORS
7999	TYPE N: Two Female
7999-1	Type N: Male/Female
7999-2	UHF: Two Female
7999-3	UHF: Male/Female
7999-4	Mount to QM Interface
7999-5	Choose connectors from table

88000 SERIES RF QUICK MATCH 50 ohm CONNECTORS

88000 N Female	88007 LC Male	88013 HN Female	88024 QM Connector Coupling Block
88001 N Male	88008 C Female	88014 HN Male	88026 Miniature UHF Female
88002 BNC Female	88009 C Male	88020 SMA Female	88027 SC Female
88003 BNC Male	88010 7/8" Swivel Flanged	88021 SMA Male	88028 SC Male
88004 UHF Female	88011 TNC Female	88022 1 5/8" Swivel Flange	88029 European 7/16" IEC Female
88005 UHF Male	88012 TNC Male	88023 1 5/8" Fixed Flange	88030 Open Terminal (#10-32 Nut)
88006 LC Female			



Model 87004 X-TRACTOR

Model 87035 X-TRACTOR

Coaxial Dynamics

RF Adjustable & Directional Coupler Elements

**87000
SERIES**

Adjustable X-TRACTORS

Coaxial Dynamics ADJUSTABLE X-TRACTORS are nondirectional, adjustable amplitude, RF Signal Sampling Elements. Designed to permit easy coupling into a coaxial line for counting of frequency, spectrum analysis or scope display. They are extremely small, convenient to carry and may be used in conjunction with the Coaxial Dynamics Model 81000-A RF Wattmeter, its own auxiliary line section (Coaxial Dynamics Model 88536), or any standard 7/8" thru 3-1/8" line section.

The X-TRACTOR exhibits extremely low VSWR and insertion loss, plus it is virtually transparent to RF signals within its frequency range of operation. Available at its BNC connector is an unrectified RF signal, adjustable over a range below the signal within the coaxial line, by means of a screwdriver adjustment. The X-TRACTOR can be used to sample any signal between 2 and 1000 MHz at power levels of up to the rating of the line section.

Model No.'s	Line Section	Nominal Coupling ± 8 dB
87004	7/8"	43 dB
87005	7/8"	45 dB
87021	1 5/8"	49 dB
87031	3 1/8"	56 dB

SPECIFICATIONS

Frequency Range	2 MHz - 1000 MHz
Insertion VSWR*	1.1 max., 2 - 512 MHz 1.25 max., 512 - 1000 MHz
Insertion Loss*	0.1 dB max., 2 - 512 MHz 0.2 dB max., 512 - 1000 MHz
Connectors	BNC Female

*With Type N Line-Section Connectors & at Nominal Coupling
Specifications are subject to change without notice.

Directional X-TRACTORS

Coaxial Dynamics X-TRACTOR Series 87000 are directional RF signal sampling couplers. They permit easy sampling of RF power for frequency counting, spectrum analyzing, or scope display.

DIRECTIONAL X-TRACTORS are transparent to RF signals by virtue of their extremely low VSWR and insertion loss. Power levels of up to 100,000 watts can be sampled for frequencies between 50 and 500 MHz. Fixed attenuation values are available ranging from 37.5 to 70 dB.

DIRECTIONAL X-TRACTORS come with a standard BNC connector for the RF output and may be used in any standard 7/8" thru 6 1/8" coaxial line sections. It also may be used in the Coaxial Dynamics Model 81000-A and other RF Wattmeters, or with the X-TRACTOR auxiliary line section (Coaxial Dynamics) Model 88536. This line section can be left inserted in the coaxial line at all times and comes equipped with a dust cover to be used when an X-TRACTOR is not in use.

Model No.'s	Line Section	Max. Power "Watts"	Coupling dB ± 1 dB	Frequency
*† 87014S	7/8"	1,000	37.5 $\pm 3/4$ dB	54-90 MHz
* 87015	7/8"	1,000	50	50-500 MHz
* 87024	1 5/8"	1,000	40	50-500 MHz
87024H	1 5/8"	5,000	40	50-500 MHz
87025	1 5/8"	10,000	50	50-500 MHz
87026	1 5/8"	2,500	45	400-800 MHz
87027	1 5/8"	5,000	50	400-800 MHz
87035	3 1/8"	10,000	50	50-500 MHz
87035H	3 1/8"	35,000	50	50-500 MHz
87036	3 1/8"	100,000	60	50-500 MHz
87038	3 1/8"	5,000	50	400-800 MHz
87039	3 1/8"	10,000	70	400-800 MHz
87046	4 1/16"	50,000	60	50-500 MHz
87066	6 1/8"	50,000	60	50-500 MHz

† Consult Factory for Availability.

* ± 1 dB 174 - 500 MHz Coupling drops to 48 dB at 50 MHz.

SPECIFICATIONS

Frequency Range	See Chart
Insertion VSWR	1.1 max.
Insertion Loss	0.1 dB max.
Directivity	30 dB
Maximum Power	See Chart

Connectors:
Directional X-TRACTORS BNC Female
Auxiliary Line Section 7/8" With any Standard Quick-Match Connectors
Specifications are subject to change without notice



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NOW ACCEPTING



BROADBAND ATTENUATOR – 2 Watt BNC

MODEL 6902-dB-BNC

Coaxial Dynamics' Model 6902 series of broadband 2 Watt BNC attenuators are rated from DC to 4 GHz. They are suitable for impedance matching, receiver or low power transmitter padding as well as general test and measurement applications including WiFi, WiMax and WiBro. The maximum VSWR is 1.25:1 at 4 GHz and the accuracy is +/- 0.3dB to +/- 0.75dB depending upon the attenuation value. Standard attenuation values include 3, 6, 10, 20 and 30 dB. Other attenuation values are available on special order. The length is 1.4 inches (3.56cm) maximum including the BNC male and female connectors with a weight of 0.6 ounces (17g).

Model No.	Attenuation
6902-3-BNC	3 dB
6902-6-BNC	6 dB
6902-10-BNC	10 dB
6902-20-BNC	20 dB
6902-30-BNC	30 dB

Coaxial Dynamics was founded in 1969 and is located in Middleburg Heights, OH near Cleveland, Ohio, USA. The company has been a leading manufacturer of precision equipment for test and measurement, attenuation, termination and filtering of RF power from 1 Watt to 200 Kilowatts. Engineers and technicians in a wide variety of markets throughout the world use Coaxial Dynamics' products. Application examples include Analog and Digital Radio and TV Broadcast, Telecommunications, Military, Aerospace, Scientific and Land Mobile markets.



- ☒ Broad Bandwidth with Superior VSWR at Lower Frequencies
- ☒ Power Handling up to 2 Watts CW and 250 Watts Peak
- ☒ Short Length for Cleaner Panel and Cable Installations
- ☒ Two Year Limited Warranty

Specifications

Frequency Range:	DC to 4 GHz
Standard dB Values:	3, 6, 10, 20 and 30 dB
Attenuation Accuracy:	
0 to 6 dB	+/- 0.3 db
7 to 20 dB	+/- 0.5 db
21 to 30 dB	+/- 0.75 db
VSWR:	1.25:1 Max DC to 4 GHz
Input Power:	2 Watts @ +25°C Derated linearly to 0.5 Watts @ +125°C
Peak Power:	250 Watts Max
Impedance:	50 Ohms Nominal
Operating Temp Range:	-65 to +125°C
Connectors:	BNC Male / BNC Female
Finish:	Nickel Plated Brass
Conductors:	Gold Plated Beryllium Copper or Brass
Nominal Size:	0.58" Dia x 1.40" L (1.47cm x 3.56cm)
Weight:	0.6 oz (17g)

These 50 ohm RF Load Resistors are light weight, dry coaxial loads that can be used in any position. A two-year warranty is supplied with each load covering performance characteristics.

All power ratings are for continuous operation; however, data are available for special applications and pulsed power conditions. Your local distributor or the factory is prepared to answer any question you may have.

Any of our Quick Match Connectors can be used on these loads. Should you desire a connector other than the included type N female, it should be specified when ordering. A list of your choices is included in the 88000 Series of the catalog for your convenience.

MODEL NUMBER	CW POWER RATING	VSWR	FREQUENCY RANGE	INCLUDED CONNECTOR	WEIGHT OZ. (g)
4005	5W	1.05:1 1.10:1	DC-1000 MHz 1 GHz-4 GHz	N (F)	6.0 (170)
4010	10W	1.05:1 1.10:1	DC-1000 MHz 1 GHz-4 GHz	N (F)	4.0 (113)
4025	25W	1.05:1 1.10:1	DC-1000 MHz 1 GHz-4 GHz	N (F)	8.3 (235)
4050	50W	1.05:1 1.10:1	DC-1000 MHz 1 GHz-4 GHz	N (F)	12.5 (354)
4100	100W	1.05:1 1.10:1	DC-1000 MHz 1 GHz-4 GHz	N (F)	50.4 (1429)
4150	150W	1.05:1 1.10:1	DC-1000 MHz 1 GHz-4 GHz	N (F)	80.0 (2268)
4160	250W	1.15:1 1.35:1	DC-1000 MHz 1 GHz-2.4 GHz	N (F)	208.0 (2950)
4170	500W	1.15:1 1.35:1	DC-1000 MHz 1 GHz-2.4 GHz	N (F)	480.0 (6800)
*4180	1000W	1.15:1 1.35:1	DC-1000 MHz 1 GHz-2.4 GHz	N (F)	544.0 (7700)

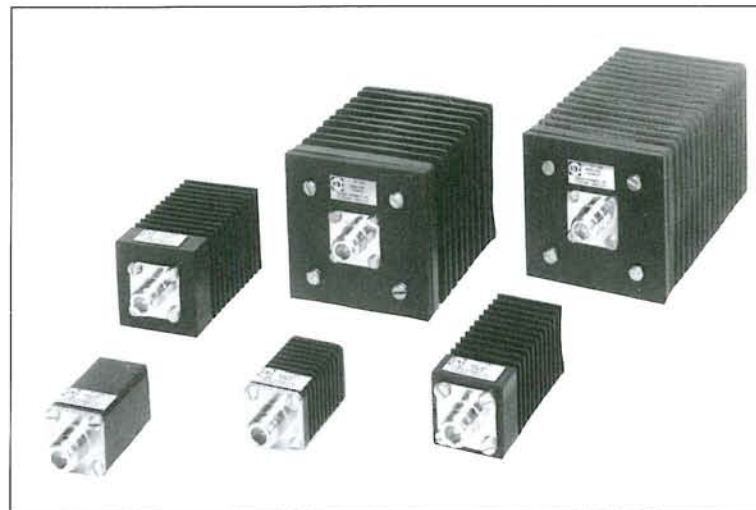
*Includes 12V AC cooling fan 115V AC/60 Hz standard. 230V AC/50 Hz available.
Model 4160 not shown. Consult factory for dimensions.

Note: Coaxial dry dielectric termination load resistors can be operated in any position. Ambient air temperature ranges for CW power rating noted above is -40° C to + 45° C.

RF TERMINATING LOAD RESISTORS

4000 SERIES

DRY LOADS



CHECK THESE COAXIAL FEATURES:

- ☒ 2 YEAR LIMITED WARRANTY
- ☒ CONTINUOUS FULL-RATED POWER
- ☒ QUICK-MATCH CONNECTORS

Model 4005 	Model 4010 	Model 4025 	Model 4050
Model 4100 	Model 4150 	Model 4170 	Model 4180



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Coaxial Dynamics

A CDI INDUSTRIES, INC. COMPANY
SPECIALISTS IN RF TEST EQUIPMENT & COMPONENTS

RF TERMINATING
LIQUID-AIR LOADS

84000
SERIES

TERMINATING RF LIQUID-AIR LOADS

500 – 1500 WATTS

84000 SERIES

Liquid-Air Loads

Several models of these loads available to cover CW power ranges of 500, 600, 1000 and 1500 Watts over a frequency range of DC to 1.0 GHz. At a characteristic impedance of 50 Ohms, the VSWR does not exceed 1.10 to 1.

These loads come equipped with connectors ranging from type "N" Quick Match to 1-5/8". They can be used to terminate AM, FM, TV, CW or Pulse transmissions in coaxial transmission line systems.



600 and 1000 Watt are pictured.

TERMINATING LOAD RESISTORS

Liquid Dielectric - Air Convection

Model	CW Power Rating	V S W R	Connector
84005-N	500 W	1.10:1 DC-1.0 GHz	N Female
84006-N	600 W	1.10:1 DC-1.0 GHz	N Female
84010-LC/N	1000 W	1.10:1 DC-1.0 GHz	LC & N Female
84010-N	1000 W	1.10:1 DC-1.0 GHz	N Female
84010-NM	1000 W	1.10:1 DC-1.0 GHz	N Male
84010-1	1000 W	1.10:1 DC-1.0 GHz	1 5/8 EIA FI
84010-2	1000 W	1.10:1 DC-1.0 GHz	1 5/8 Unfl Rec
84010-3	1000 W	1.10:1 DC-1.0 GHz	1 5/8 Unfl
84010-4	1000 W	1.10:1 DC-1.0 GHz	7/8 EIA FI
84015-LC	1500 W	1.10:1 DC-1.0 GHz	LC Female
84015-N	1500 W	1.10:1 DC-1.0 GHz	N Female
84015-1	1500 W	1.10:1 DC-1.0 GHz	1 5/8 EIA FI
84015-2	1500 W	1.10:1 DC-1.0 GHz	1 5/8 Unfl Rec
84015-3	1500 W	1.10:1 DC-1.0 GHz	1 5/8 Unfl
84015-4	1500 W	1.10:1 DC-1.0 GHz	7/8 EIA FI

NEWER ITEMS INDICATED IN RED.

Ambient air temperatures for CW power ratings are -40°C to +45°C.

84000 SERIES DIMENSIONS (excluding connectors)

Power	L	W	H	Weight
		In. (cm)		lbs. (kg)
500 W	16.13 (40.97)	6.63 (16.84)	9.00 (22.86)	22.0 (9.98)
600 W	16.13 (40.97)	6.63 (16.84)	9.00 (22.86)	23.0 (10.43)
1000 W	16.19 (41.12)	6.63 (16.84)	9.00 (22.86)	25.0 (11.34)
1500 W	15.85 (40.26)	7.38 (18.75)	13.63 (34.62)	40.0 (18.14)

Most models are available with optional thermal overload switches to interface with interlock or other warning circuits.

84000 SERIES OPTIONS

Model	Description
88200	Thermoswitch, Normally Closed
88201	Thermoswitch, Normally Open

All loads must operate with vent plug on top position only.

Coaxial Dynamics

84000 SERIES

Liquid-Air Loads

Several models of these loads are available to cover CW power ranges of 2.5 through 12.5 kW over a frequency range of DC to 2,400 MHz. A wide variety of configurations are available to meet most applications. Many connectors, thermal switches and blower options are available.

**TERMINATING
RF
LIQUID / AIR
LOADS**

**84000
SERIES**

2.5 kW - 6 kW

5 kW - 12.5 kW



84000 SERIES 2.5 kW - 6 kW DIMENSIONS (excluding connectors)

Power	H	W	L	Weight
		in. (cm)		lbs. (kg)
2500 W	18.00 (45.72)	7.50 (19.05)	19.50 (49.53)	55 (24.9)
3000 W	18.00 (45.72)	7.50 (19.05)	19.50 (49.53)	66 (29.9)
5000 W	23.00 (58.42)	7.75 (19.69)	19.50 (49.53)	70 (31.8)
6000 W	23.00 (58.42)	7.75 (19.69)	19.50 (49.53)	81 (36.7)

84000 SERIES 5 kW - 12.5 kW DIMENSIONS (excluding connectors)

Power	H	W	L	Weight
		in. (cm)		lbs. (kg)
5000 W	27.00 (68.58)	9.25 (23.50)	26.00 (66.04)	180 (81.6)
10,000 W	34.50 (87.63)	9.50 (24.13)	26.00 (66.04)	210 (95.2)
12,500 W	34.50 (87.63)	9.50 (24.13)	26.00 (66.04)	210 (95.2)

Ambient air temperatures for CW power ratings are -40°C to +45°C. **Please Note: 84000 Series loads must operate with fill-plug on top position only.**



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NOW ACCEPTING





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2.5 kW - 6 kW

TERMINATING LOAD RESISTORS

Liquid Dielectric - Air Convection - 50 Ohms

Model	CW Power Rating	V S W R	Connector
84025-LC	2500 W	1.1:1 MAX DC-1000 MHz	LC Female
84025-1	2500 W	1.1:1 MAX DC-1000 MHz	1 5/8 EIA FI
84025-2	2500 W	1.1:1 MAX DC-1000 MHz	1 5/8 Unfl Rec
84025-3	2500 W	1.1:1 MAX DC-1000 MHz	1 5/8 Unfl
84026-1	2500 W	1.1:1 MAX DC-1000 MHz	3 1/8 EIA FI
84026-2	2500 W	1.1:1 MAX DC-1000 MHz	3 1/8 Unfl Rec
84026-3	2500 W	1.1:1 MAX DC-1000 MHz	3 1/8 Unfl
84030-LC	3000 W	1.1:1 MAX DC-1000 MHz	LC Female
84030-1	3000 W	1.1:1 MAX DC-1000 MHz	1 5/8 EIA FI
84030-2	3000 W	1.1:1 MAX DC-1000 MHz	1 5/8 Unfl Rec
84030-3	3000 W	1.1:1 MAX DC-1000 MHz	1 5/8 Unfl
84031-1	3000 W	1.1:1 MAX DC-1000 MHz	3 1/8 EIA FI
84031-2	3000 W	1.1:1 MAX DC-1000 MHz	3 1/8 Unfl Rec
84031-3	3000 W	1.1:1 MAX DC-1000 MHz	3 1/8 Unfl
84050-LC*	5000 W	1.1:1 MAX DC-1000 MHz	LC Female
84050-1*	5000 W	1.1:1 MAX DC-1000 MHz	1 5/8 EIA FI
84050-2*	5000 W	1.1:1 MAX DC-1000 MHz	1 5/8 Unfl Rec
84050-3*	5000 W	1.1:1 MAX DC-1000 MHz	1 5/8 Unfl
84051-1*	5000 W	1.1:1 MAX DC-1000 MHz	3 1/8 EIA FI
84051-2*	5000 W	1.1:1 MAX DC-1000 MHz	3 1/8 Unfl Rec
84051-3*	5000 W	1.1:1 MAX DC-1000 MHz	3 1/8 Unfl
84060-LC*	6000 W	1.1:1 MAX DC-1000 MHz	LC Female
84060-1*	6000 W	1.1:1 MAX DC-1000 MHz	1 5/8 EIA FI
84060-2*	6000 W	1.1:1 MAX DC-1000 MHz	1 5/8 Unfl Rec
84060-3*	6000 W	1.1:1 MAX DC-1000 MHz	1 5/8 Unfl
84061-1*	6000 W	1.1:1 MAX DC-1000 MHz	3 1/8 EIA FI
84061-2*	6000 W	1.1:1 MAX DC-1000 MHz	3 1/8 Unfl Rec
84061-3*	6000 W	1.1:1 MAX DC-1000 MHz	3 1/8 Unfl

All models are available with optional thermal switches to interface with interlock or other warning circuits.

* These models are forced air cooled.

84000 SERIES OPTIONS

Model	Description
88200	Thermoswitch, Normally Closed
88201	Thermoswitch, Normally Open
88250(2.5-6 kW Loads)	Forced-Air Blower Assembly - specify 115 or 230 VAC
88251(5-12.5 kW Loads)	Forced-Air Blower Assembly - specify 115 or 230 VAC



5 kW - 12.5 kW

TERMINATING LOAD RESISTORS

Liquid Dielectric - Air Convection - 50 Ohms

Model	CW Power Rating	VSWR	Frequency Range	Connector
84055-LC	5000 W	1.1:1	DC-1000 MHz	LC Female
84055-1	5000 W	1.1:1	DC-1000 MHz	1 5/8 EIA FI
84055-2	5000 W	1.1:1	DC-1000 MHz	1 5/8 Unfl Rec
84055-3	5000 W	1.1:1	DC-1000 MHz	1 5/8 Unfl
84056-1	5000 W	1.1:1	DC-1000 MHz	3 1/8 EIA FI
84056-2	5000 W	1.1:1	DC-1000 MHz	3 1/8 Unfl Rec
84056-3	5000 W	1.1:1	DC-1000 MHz	3 1/8 Unfl
84100-LC**	10,000 W	1.1:1	DC-1000 MHz	LC Female
84100-1**	10,000 W	1.1:1	DC-1000 MHz	1 5/8 EIA FI
84100-2**	10,000 W	1.1:1	DC-1000 MHz	1 5/8 Unfl Rec
84100-3**	10,000 W	1.1:1	DC-1000 MHz	1 5/8 Unfl
84101-1**	10,000 W	1.1:1	DC-1000 MHz	3 1/8 EIA FI
84101-2**	10,000 W	1.1:1	DC-1000 MHz	3 1/8 Unfl Rec
84101-3**	10,000 W	1.1:1	DC-1000 MHz	3 1/8 Unfl
84125-LC**	12,500 W	1.1:1	DC-1000 MHz	LC Female
84125-1**	12,500 W	1.1:1	DC-1000 MHz	1 5/8 EIA FI
84125-2**	12,500 W	1.1:1	DC-1000 MHz	1 5/8 Unfl Rec
84125-3**	12,500 W	1.1:1	DC-1000 MHz	1 5/8 Unfl
84126-1**	12,500 W	1.1:1	DC-1000 MHz	3 1/8 EIA FI
84126-2**	12,500 W	1.1:1	DC-1000 MHz	3 1/8 Unfl Rec
84126-3**	12,500 W	1.1:1	DC-1000 MHz	3 1/8 Unfl

**These models are forced air cooled and come with two thermal switches, one to activate the blower assembly, and the other to interface with interlock or other warning circuits. Equipped with forced-air blower assembly - specify voltage requirements.

Please note: Models 84055 and 84056 come standard with one thermal switch (N/C over-temperature) to interface with interlock or other warning circuits.

Ambient air temperatures for CW power ratings are -40°C to +45°C. **Please Note: 84000 Series loads must operate with fill-plug on top position only.**

FOR MORE INFORMATION CALL TOLL FREE 1-800-COAXIAL (262-9425)

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86000 Series Water Cooled Loads



The 86000 Series Water Cooled RF Coaxial Loads are capable of dissipating up to 200 kW of RF power from 60 Hz to 800 MHz with a VSWR of 1.10:1 or less. With this low reflection coefficient the loads are very useful for tuning transmitters. They can be used to terminate AM, FM, TV, CW or Pulse transmissions in 50-Ohm coaxial transmission line systems. When used in conjunction with Coaxial Dynamics Directional RF Insertion Wattmeters, accurate power measurements to 200 kW can be made.

Available Models

Model	Power	Connector
86005-HN	5 kW	HN Female
86005-N	5 kW	N Female
86006-1	5 kW	1-5/8" EIA Flanged
86017-2	15 kW	1-5/8" Unflanged Recessed
86018-LC	15 kW	LC Female
86018-2	15 kW	3-1/8" Unflanged Recessed
86027-1	25 kW	3-1/8" EIA Flanged
86027-3	25 kW	3-1/8" Unflanged
86052-1	50 kW	3-1/8" EIA Flanged
86052-3	50 kW	3-1/8" Unflanged
86054-2	50 kW	6-1/8" Unflanged Recessed
86080-2	80 kW	3-1/8" Unflanged Recessed
86082-2	80 kW	6-1/8" Unflanged Recessed
86125-2	125 kW	3-1/8" Unflanged Recessed
86200-1	200 kW	6-1/8" EIA Flanged

Model	Power	Connector
86005-LC	5 kW	LC Female
86005-SC	5 kW	SC Female
86017-1	15 kW	1-5/8" EIA Flanged
86017-3	15 kW	1-5/8" Unflanged
86018-1	15 kW	3-1/8" EIA Flanged
86018-3	15 kW	3-1/8" Unflanged
86027-2	25 kW	3-1/8" Unflanged Recessed
86029-1	25 kW	6-1/8" EIA Flanged
86052-2	50 kW	3-1/8" Unflanged Recessed
86054-1	50 kW	6-1/8" EIA Flanged
86080-1	80 kW	3-1/8" EIA Flanged
86082-1	80 kW	6-1/8" EIA Flanged
86125-1	125 kW	3-1/8" EIA Flanged
86127-1	125 kW	6-1/8" EIA Flanged
86200-2	200 kW	6-1/8" Unflanged Recessed

Product Specifications

Model	86005 - 86007	86017 - 86018	86027 - 86029	86052 - 86054
Power Rating	5 kW CW	15 kW CW	25 kW CW	50 kW CW
Impedance	50 Ohms nominal			
Frequency Range	60 Hz to 800 MHz			
VSWR	1.10:1 maximum to 800 MHz			
Water Temp	Inlet: 4°C to 45°C; Outlet: 90°C maximum			
Inlet Pressure	70 PSI maximum	100 PSI maximum		
Water Flow	2 GPM	4 GPM	6 GPM	10 GPM
Water Connector	3/4" (garden hose) or 1/2" NPT			
Approximate Dimensions	3-1/2" x 10-3/16" (8.9cm x 25.9cm)	3-1/2" x 15" (8.9cm x 38.1cm)	3-1/2" x 16-1/2" (8.9cm x 41.9cm)	3-1/2" x 18-1/2" (8.9cm x 47.0cm)
Approximate Weight	4 lbs (1.8kg)	9-1/2 lbs (4.3kg)	16 lbs (7.26kg)	17 lbs (8kg)
Finish	Yellow Iridite (Chromate Conversion)			

Model	86080 - 86082	86125 - 86127	86200
Power Rating	80 kW CW	125 kW CW	200 kW CW
Impedance	50 Ohms nominal		
Frequency Range	60 Hz to 800 MHz	60 Hz to 450 MHz	
VSWR	1.15:1 maximum to 800 MHz	1.15:1 maximum to 450 MHz	
Water Temp	Inlet: 4°C to 45°C; Outlet: 90°C maximum		
Inlet Pressure	100 PSI maximum		
Water Flow	10 GPM	15 GPM	19 GPM
Water Connector	3/4" (garden hose) or 1/2" NPT		3/4" NPTF
Approximate Dimensions	8-1/2" x 30" (21.6cm x 76.2cm)	8-1/2" x 31" (21.6cm x 78.7cm)	8-1/2" x 42" (21.6cm x 106.7cm)
Approximate Weight	31 lbs (14kg)	36 lbs (16kg)	47 lbs (22kg)
Finish	Yellow Iridite (Chromate Conversion)		



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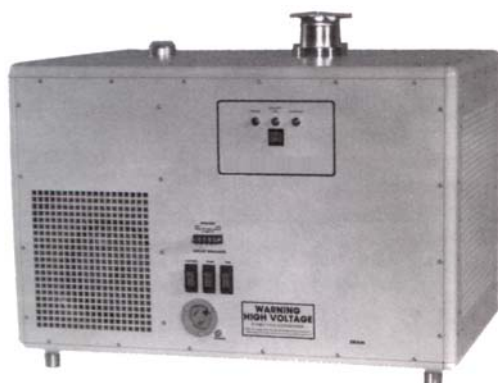
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86500 SERIES HEAT EXCHANGERS

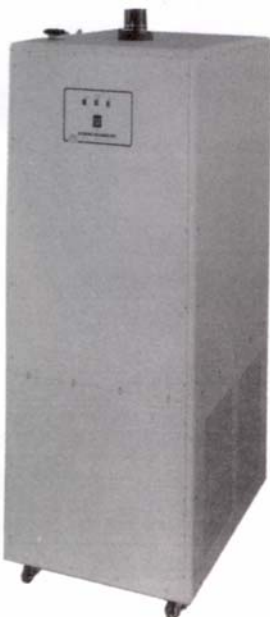
Self Contained Water Loads

Models 86505 & 86512



SPECIFICATIONS		
Model	86505	86512
Power Rating (CW)	5 kW	10 kW
Impedance	50 Ohms Nominal	
Frequency Range	DC to 800 MHz	
VSWR	1.10 : 1 to 800 MHz	
Input Connector	Quick Match, 1-5/8" or 3-1/8"	
AC Power Required	110 VAC, 60 Hz or 230 VAC, 50/60 Hz, 1 Phase	
Nominal Dimensions (Including Connector)	28" x 19-1/2" x 20" 71cm x 50cm x 51cm	33-1/2" x 21-1/2" x 21-1/2" 85cm x 55cm x 55cm
Nominal Weight	80 lbs. (36 kg)	100 lbs. (46 kg)
Finish	Textured Beige	

Model 86527



SPECIFICATIONS	
Power Rating (CW)	25 kW
Impedance	50 Ohms Nominal
Frequency Range	60 Hz to 800 MHz
VSWR	1.10 : 1 to 800 MHz
Input Connector	3-1/8"
AC Power Required	110 VAC, 60 Hz or 230 VAC, 50/60 Hz, 1 Phase
Nominal Dimensions (Including Connector)	24-1/4" x 29-3/4" x 55-3/4" 62cm x 76cm x 142cm
Nominal Weight	230 lbs. (104 kg)
Finish	Textured Beige

86500 SERIES HEAT EXCHANGERS

Self Contained Water Loads

Models 86552 & 86553



SPECIFICATIONS	
Power Rating (CW)	50 kW
Impedance	50 Ohms Nominal
Frequency Range	60 Hz to 800 MHz
VSWR	1.10 : 1 to 800 MHz
Input Connector	3-1/8" or 6-1/8"
AC Power Required	230 VAC, 60 Hz (50 Hz available)
Nominal Dimensions (Including Connector)	31-1/2" x 44" x 54-1/2" 80cm x 112cm x 138cm
Nominal Weight	Approx. 400 lbs. (182 kg)
Finish	Textured Beige

Models 86580 & 86581



SPECIFICATIONS	
Power Rating (CW)	80 kW
Impedance	50 Ohms Nominal
Frequency Range	60 Hz to 800 MHz
VSWR	1.15 : 1 to 800 MHz
Input Connector	3-1/8" or 6-1/8"
AC Power Required	230 VAC, 60 Hz (50 Hz available)
Nominal Dimensions (Including Connector)	34" x 75" x 67" 86cm x 191cm x 170cm
Nominal Weight	Approx. 700 lbs. (318 kg)
Finish	Textured Beige



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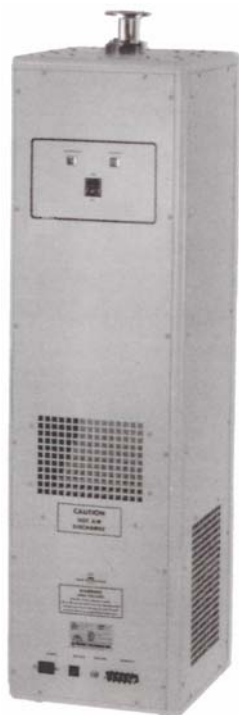
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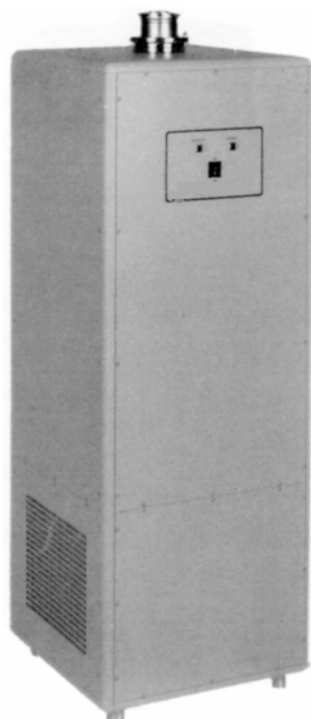
86700 SERIES AIR COOLED LOADS

Models 86705 & 86706



SPECIFICATIONS	
Power Rating (CW)	5 kW
Impedance	50 Ohms Nominal
Frequency Range	DC to 240 MHz
VSWR	1.10 : 1 to 110 MHz; 1.15 : 1 to 240 MHz
Input Connector	Quick Match, 1-5/8" or 3-1/8"
AC Power Required	115 VAC, 60 Hz, 2A or 230 VAC, 60 Hz, 2A (50 Hz available)
Nominal Dimensions (Including Connector)	13" x 13" x 51-1/4" 33cm x 33cm x 130cm
Nominal Weight	50 lbs. (23 kg)
Finish	Textured Beige

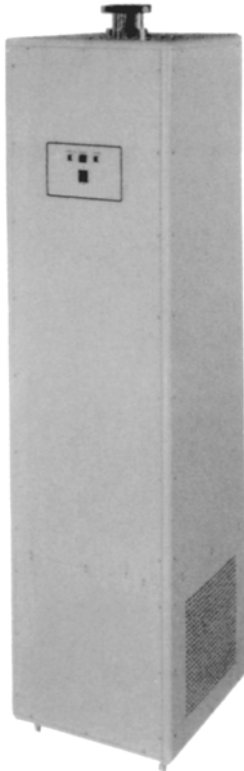
Models 86710 & 86711 Models 86715 & 86716



SPECIFICATIONS		
Model	86710 & 86711	86715 & 86716
Power Rating (CW)	10 kW	15 kW
Impedance	50 Ohms Nominal	
Frequency Range	DC to 240 MHz	
VSWR	1.10 : 1 to 110 MHz; 1.15 : 1 to 240 MHz	
Input Connector	1-5/8" or 3-1/8"	
AC Power Required	115 VAC, 60 Hz, 6A or 230 VAC, 60 Hz, 2A (50 Hz available)	
Nominal Dimensions (Including Connector)	19" x 19" x 54-1/4" 48cm x 48cm x 138cm	
Nominal Weight	90 lbs. (41 kg)	
Finish	Textured Beige	

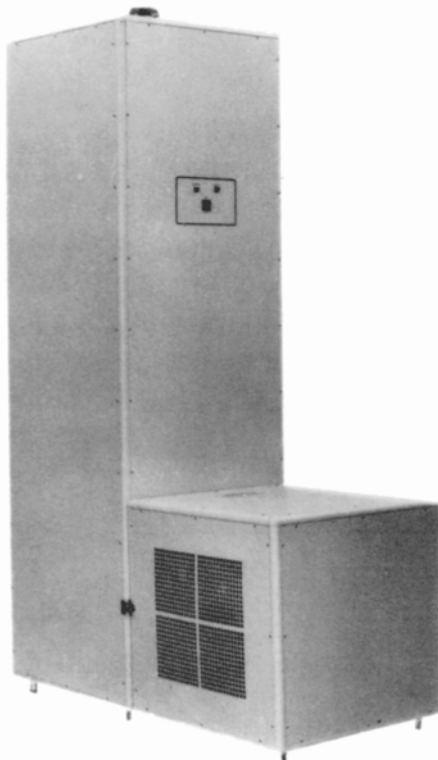
86700 SERIES AIR COOLED LOADS

Models 86725 & 86735



SPECIFICATIONS		
Model	86725	86735
Power Rating (CW)	25 kW	35 kW
Impedance	50 Ohms Nominal	
Frequency Range	DC to 240 MHz	
VSWR	1.10 : 1 to 110 MHz; 1.15 : 1 to 240 MHz	
Input Connector	3-1/8"	
AC Power Required	115 VAC, 60 Hz, 7A or 230 VAC, 60 Hz, 4A (50 Hz available)	115 VAC, 60 Hz, 12A or 230 VAC, 60 Hz, 5A (50 Hz available)
Nominal Dimensions (Including Connector)	19" x 19" x 76" 48cm x 48cm x 193cm	19" x 19" x 78" 48cm x 48cm x 198cm
Nominal Weight	136 lbs. (62 kg)	155 lbs. (70 kg)
Finish	Textured Beige	

Models 86750 & 86751 Models 86775 & 86776



SPECIFICATIONS		
Model	86750 & 86751	86775 & 86776
Power Rating (CW)	50 kW	75 kW
Impedance	50 Ohms Nominal	
Frequency Range	DC to 240 MHz	DC to 110 MHz
VSWR	1.10 : 1 to 110 MHz 1.15 : 1 to 240 MHz	1.15 : 1 to 110 MHz
Input Connector	3-1/8" or 6-1/8"	
AC Power Required	115 VAC, 60 Hz, 12A or 230 VAC, 60 Hz, 6A (50 Hz available)	230 VAC, 60 Hz, 12A (50 Hz available)
Nominal Dimensions (Including Connector)	24" x 48" x 84" 61cm x 122cm x 213cm	24" x 48" x 84" 61cm x 122cm x 213cm
Nominal Weight	290 lbs. (132 kg)	360 lbs. (163 kg)
Finish	Textured Beige	



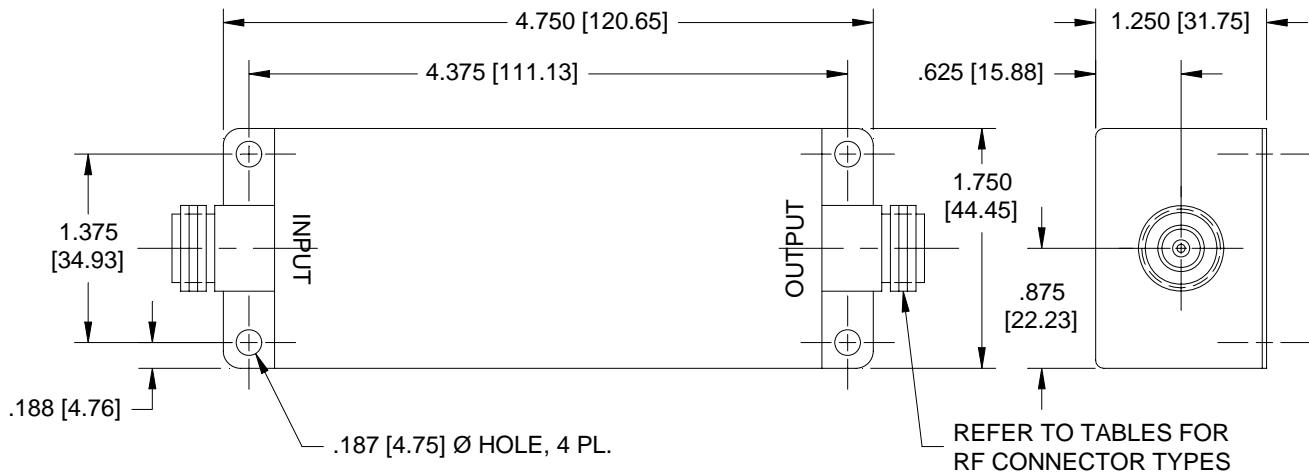
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"Standard" RF Filters

Low Pass - Low Power



Standard 100 Watt Low Pass Filters (With Type "BNC" Female Connectors)

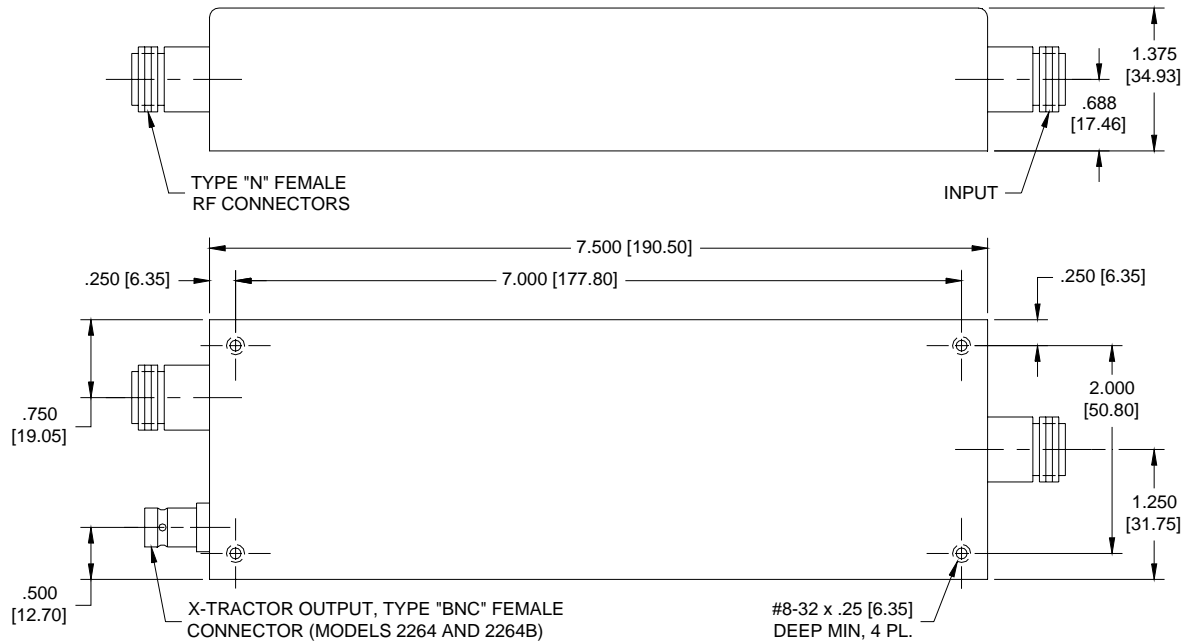
Pass Band			Stop Band		Model Number
Frequency Range	VSWR	Insertion Loss	Attenuation	Frequency Range	
88 to 108 MHz	1.35 : 1	0.5 dB	40 dB	176 to 2000 MHz	2405-40
88 to 108 MHz	1.35 : 1	0.5 dB	50 dB	176 to 2000 MHz	2405-50
88 to 108 MHz	1.35 : 1	0.5 dB	60 dB	176 to 2000 MHz	2405-60
100 to 156 MHz	1.35 : 1	0.5 dB	40 dB	200 to 2000 MHz	2420-40
100 to 156 MHz	1.35 : 1	0.5 dB	50 dB	200 to 2000 MHz	2420-50
100 to 156 MHz	1.35 : 1	0.5 dB	60 dB	200 to 2000 MHz	2420-60
225 to 400 MHz	1.35 : 1	0.5 dB	40 dB	450 to 2000 MHz	2435-40
225 to 400 MHz	1.35 : 1	0.5 dB	50 dB	450 to 2000 MHz	2435-50
225 to 400 MHz	1.35 : 1	0.5 dB	60 dB	450 to 2000 MHz	2435-60

Standard 200 Watt Low Pass Filters (With Type "N" Female Connectors)

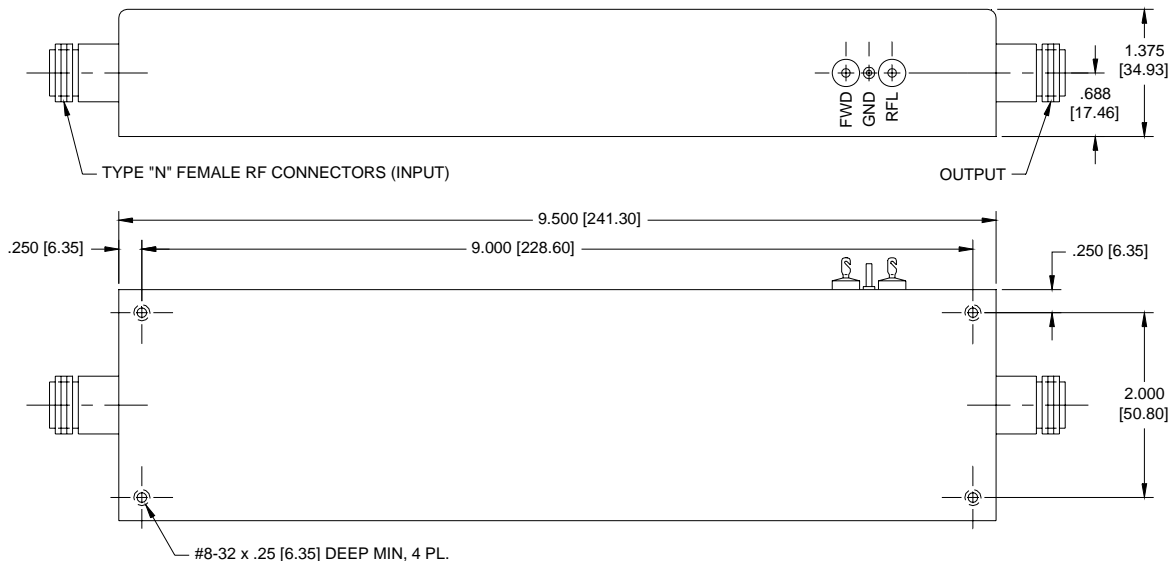
Pass Band			Stop Band		Model Number
Frequency Range	VSWR	Insertion Loss	Attenuation	Frequency Range	
88 - 108 MHz	1.35 : 1	0.5 dB	40 dB	176 - 2000 MHz	2410-40
88 - 108 MHz	1.35 : 1	0.5 dB	50 dB	176 - 2000 MHz	2410-50
88 - 108 MHz	1.35 : 1	0.5 dB	60 dB	176 - 2000 MHz	2410-60
100 - 156 MHz	1.35 : 1	0.5 dB	40 dB	200 - 2000 MHz	2425-40
100 - 156 MHz	1.35 : 1	0.5 dB	50 dB	200 - 2000 MHz	2425-50
100 - 156 MHz	1.35 : 1	0.5 dB	60 dB	200 - 2000 MHz	2425-60
225 - 400 MHz	1.35 : 1	0.5 dB	40 dB	450 - 2000 MHz	2440-40
225 - 400 MHz	1.35 : 1	0.5 dB	50 dB	450 - 2000 MHz	2440-50
225 - 400 MHz	1.35 : 1	0.5 dB	60 dB	450 - 2000 MHz	2440-60

"Standard" RF Filters & Filter/Couplers

Hi-Power FM

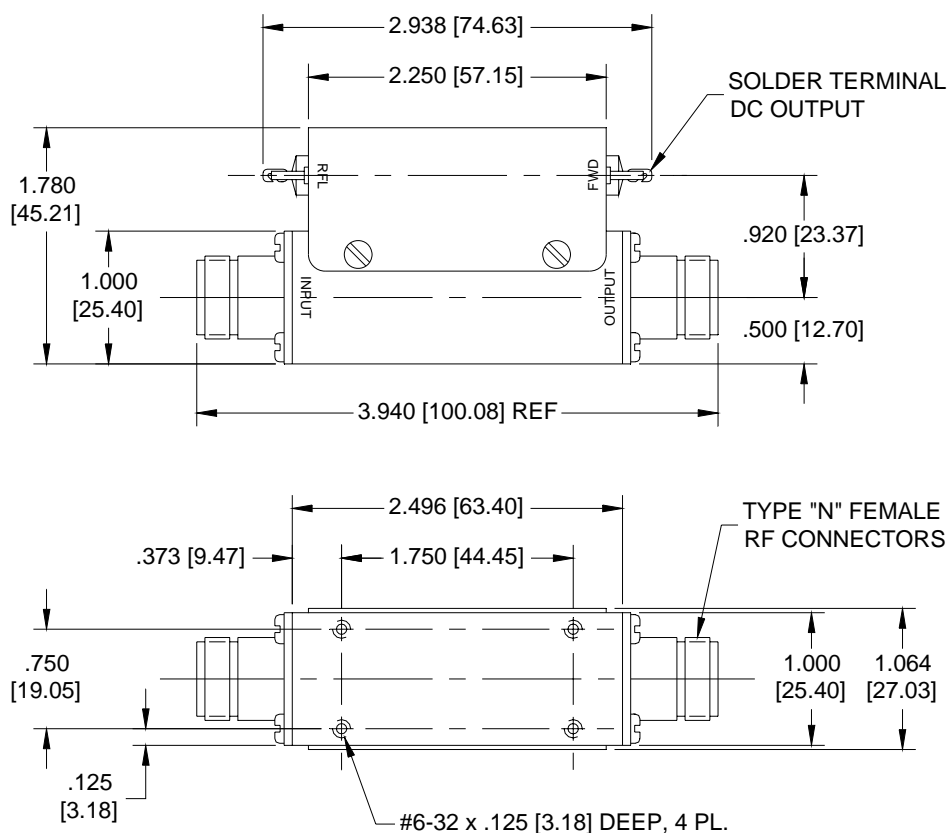


Pass Band				Stop Band		X-Tractor Output	Model Number
Freq. (MHz)	Power	VSWR	I.L. (dB)	Atten. (dB)	Freq. (MHz)		
88 to 108	1200 W	1.15:1	0.15	60 Max	176 to 1000	30 dB	2264
88 to 108	1200 W	1.15:1	0.15	60 Max	176 to 1000	36 dB	2264B
88 to 108	1200 W	1.15:1	0.15	60 Max	176 to 1000	N/A	2268



Model 5100 Filter-Coupler (Hi-Power FM)								
Pass Band				Stop Band		Coupler Specifications		
Freq. (MHz)	Power	VSWR	I.L. (dB)	Atten. (dB)	Freq. (MHz)	Dir. (dB)	Coupler Output	DC Load
88 to 108	1200 W	1.15:1	0.15	60 Max	175 to 1000	25	.50 VDC $\pm 5\%$ @ 500 W FWD .50 VDC $\pm 5\%$ @ 125 W RFL	5K Ohms

"Standard" RF Power Sensors



These Directional RF Power Sensors provide DC currents proportional to the Forward and Reflected power flowing through the line. All models are designed to drive a 30 microampere, 1400 ohm meter, or approximately 100 millivolts across a 5K load. Directivity is typically 25 dB minimum. Special calibration is also available.

Power (Watts) FWD / RFL	Frequency Range (MHz)					
	2 to 30	25 to 60	50 to 100	100 to 250	200 to 500	400 to 1000
5 / 5	N/A	3418	3426	3434	3442	3450
10 / 10	N/A	3419	3427	3435	3443	3451
25 / 10	3412	3420	3428	3436	3444	3452
50 / 10	3413	3421	3429	3437	3445	3453
100 / 25	3414	3422	3430	3438	3446	3454
250 / 50	3415	3423	3431	3439	3447	3455
500 / 100	3416	3424	3432	3440	3448	3456
1000 / 250	3417	3425	3433	3441	3449	3457



Coaxial Dynamics

A CDI INDUSTRIES, INC. COMPANY
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OEM Custom Components

Coaxial Dynamics has also been heavily involved in the design and manufacture of custom components since 1969. Components such as RF Filters, Directional Power Detectors, Filter-Detector combinations, and PIN Diode Switches are routinely designed for Customers all over the world.

Our general range of operations covers frequencies from 2 MHz to 2500 MHz. All devices are designed for use in 50 Ohm transmission line systems. Most are for use inside of transmitters and transceivers. They are designed to handle power levels from a few milliwatts up to several kilowatts.

Filters

Our filter line includes Low Pass, High Pass, and Band Pass designs. The most numerous designs are the Low Pass configurations. Insertion Loss typically ranges from 0.2 dB to 0.4 dB and VSWR from 1.3 to 1.4 maximum. Stop Band levels can reach 60 dB or higher.

Most Filters are built in a box configuration, which gives the best use of available space. At frequencies of 1000 MHz and above we use tubular structures.

Directional Power Detectors

The Directional Power Detectors come in sizes as small as ¼" x ½" x 1½" with more popular configurations in a box of 1" x 1¼" x 3". Typical output voltages are 1.0 volt across 5,000 Ohms at reasonable power levels (10 watts and greater). Most have one forward and one reflected sensing port for DC output voltages. Directivity of 30 dB is typical. VSWR runs 1.1 maximum and Insertion Loss 0.1 dB maximum in most cases.

Filter-Detectors-Switches

Combinations of Low Pass Filters and Directional Power Detectors (or Couplers) have frequently been made. This provides a single VSWR and Insertion Loss specification for the pair. Such designs typically take far less space and weight.

Designs including combinations of multiple Filters, a Directional Power Detector, and a PIN Diode Switch are also common.

Although Coaxial Dynamics does not cover all areas of Filters and Power Detectors, we do have considerable expertise in the areas we do handle.

We invite new inquires. Your needs may be satisfied with one of our hundreds of existing designs available. However, if none meet your requirements, we can design one to meet your needs.



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