

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

A CDI INDUSTRIES, INC. COMPANY
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)

