

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

# COAXIAL DYNAMICS

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  $4\frac{1}{2}$ " tautband 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
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#### **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

88006

LC Female

#### **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, ±7% average mode of full scale

using corrections chart

±9% peak mode

100 to 512 MHz, ±6% average mode full scale,

±8% peak mode, no correction required

512 to 1000 MHz, ±7% average mode of full scale,

±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:  $.5 \,\mu sec 100-1000 \, MHz$ 

2 µsec 26-99 MHz

Minimum repetition rate: 30 pps

15 μsec 2-25 MHz

Gaussion Pulses: Minimum pulse width: .5 µsec 25-1000 MHz

usec 25-1000 MHz 15 µsec 2-24 MHz

Minimum repetition rate: 30 pps

88000 SERIES RF QUICK MATCH 50 ohm CONNECTORS 88000 N Female 88007 LC Male 88014 HN Male 88001 N Male 88008 C Female 88020 SMA Female **BNC Female** 88002 88009 C Male 88021 SMA Male 88010 7/8" Swivel Flanged Miniature UHF Female 88003 **BNC Male** 88026 88004 **UHF** Female SC Female 88011 TNC Female 88027 **UHF Male** SC Male 88005 88012 TNC Female 88028

88013 HN Female