

Power Meters and Monitors

8400 Series Portable Power Meter



Features

- Compact, Portable
- Interchangeable Mounts
- Accurate to 26.5 GHz
- Field Replaceable Elements
- Rugged Design for Field Service

Models

- 8420, 8421, 8422

Model	8420	8421	8422
Frequency Range (GHz)	.01 to 12.4	.01 to 12.4	.01 to 12.4
Measurement Range	1 μ to 1 mW	10 μ to 10 mW	10 μ to 10 mW
Overload (CW) in mW	3	30	300
Overload (Peak) in W	0.1	3	30
VSWR (max)	1.5:1	1.5:1	1.5:1
Connector	Type N Male	Type N Male	Type N Male
Replacement Element	818A	819A	820A
Special Notes:	A	A	A

Special Notes:

A: Frequency sensitivity all models +/- 0.5 dB
 Model 8427 VSWR, 50 MHz to 22 GHz - 1.5:1, 75 MHz to 20 GHz - 1.3:1
 Mates with SMA

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Description

The 8400 Series Mini-Power Meter is an inexpensive, portable and battery operated power measurement system. Consisting of the model 8441 power meter, the model 8440-01 extension cable and one or more of the 842X series of power mounts, this system allows accurate measurements at frequencies up to 26.5 GHz¹. Each 842X series power mount measures power over a 30 dB dynamic range and utilizes thermocouple based detection for trueRMS averaged results, even with pulse modulated signals. Field service technicians have long used the 8400 series because of its rugged cast

aluminum housing, high accuracy and simple operation. Supplied in its own cushioned carrying case, the 8400 series is small enough to be carried to remote transmitter measurement areas, yet accurate enough to be used to set output levels for communication systems. Each power mount is color coded to denote its measurement range and the meter is supplied with corresponding color coded scales to simplify actual readings. Additionally, the model 8441 has a dBm to mW conversion chart mounted on its rear panel, to allow conversions of measured levels.

Specifications

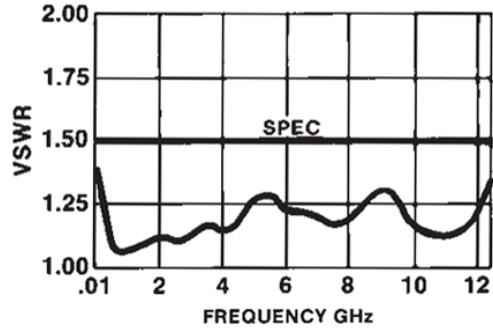
The Model 8441 Meter is a universal meter that can be used with 842X Series Power Mounts. The meter movement and front panel switches are protected by the shape of the cast aluminum housing that contains an easily accessible separate battery compartment. Readings are displayed on its 1.5 inch (3.8cm) analog meter movement. Power mounts may be mounted directly on top of the model 8441 or through the Model 8440-01 extension cable. A complete operation and maintenance manual is supplied, along with a padded carrying case that houses the meter, ext. cable and one power mount.

¹ Previously available as a Model 8401 system. Units should now be ordered stating separate meter, extension cable and power mount part numbers.

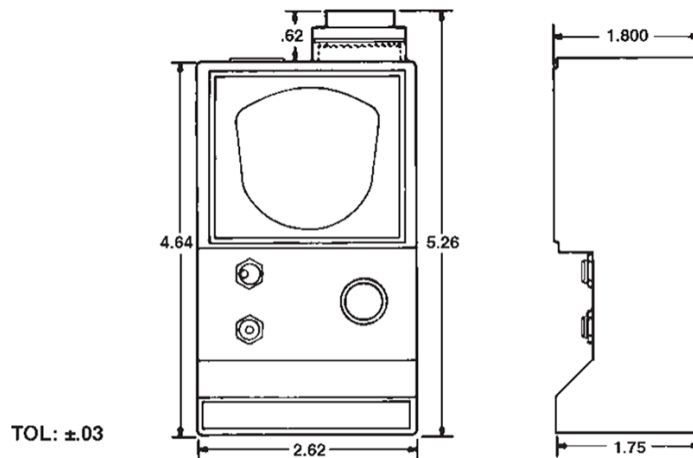
Meter Type	D'Arsonval
Size	1.5 in (3.8 cm)
Scales	3, Color Coded
Dynamic Range	30 dB
Scale Ranges	0.1, 1.0, 10 mW
Scale Multipliers	x0.1, x1.0, x10
Battery Type	6.0V (2 ea.) NEDA 1410M
Life	500 Hrs.
Size	4.7" x 2.7" x 1.75" 11.75 x 6.67 x 4.45 cm
Weight	1.3 lb., 0.6 kg
Accessories Supplied	Manual, Batteries and Carrying Case

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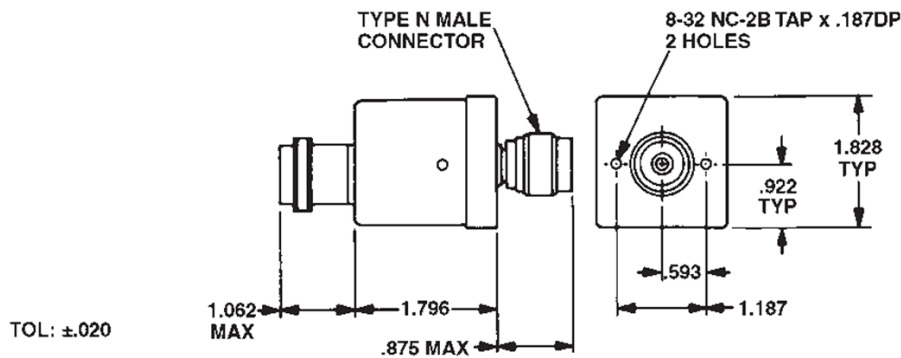
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Typical VSWR Performance



Outline Drawing for Model 8441



Mount Outline Drawing for Models 8420, 8421, 8422