

Product Line Discontinued, but may be available to special order

- ◆ Passive Frequency Measurement
- ◆ Expanded High Resolution Scale
- ◆ Spurious Free Design
- ◆ N-female Connectors Standard

Microlab 3301A and 3303A coaxial frequency meters are broad-band devices covering all frequencies from 0.96 to 12.4 GHz. They combine the highest "Q" attainable with an expanded frequency scale that eliminates reading errors. The cast base provides stable bench mounting. Connectors are Type N female.

Coaxial frequency meters are used whenever a fast, accurate and self-contained measurement of frequency is required without any external source of power.

The meters contain a coaxial transmission line coupled to a quarter-wavelength coaxial cavity. When tuned to resonance, the cavity absorbs a portion of the signal passing through the transmission line, causing a dip to appear. The dial indicates the frequency at which this dip occurs.

Spurious-free tuning over the full frequency ranges is accomplished by capacitive loading of the tuning element at the lower frequencies for each band. The high resolution scale of the dial permits accurate reading of small frequency differences. Individually calibrated and marked readouts that provide a typical 0.01% accuracy are available upon special request. (12/09)



Minimum Dip	1.0 dB
Insertion Loss:	1.0 dB max.
Accuracy at Room Temperature:	0.17% frequencies > 1 GHz 0.22% frequencies < 1 GHz
Impedance:	50Ω nominal
Power Rating:	100 W avg., 5 kW peak
Connectors:	N type (f-f) standard
Finish: Connectors:	Nickel plate per QQ-N-290
Body:	Grey Paint per MIL-C-22750

Model No. N Conn.	Frequency Range, GHz	Off-Resonance VSWR	Increments, MHz Mark	Number	Height in (mm)	Width* in (mm)	Diameter in (mm)	Weight lb. (kg)
3301A	0.96 - 4.00	1.2:1 max	2	50	9.5 (241)	5.8 (147)	5.5 (140)	8.5 (2.5)
3303A	3.7 - 12.4	2.0:1 max	10	100	6.1 (155)	4.8 (122)	3.5 (89)	2.4 (1.1)

*Width across connectors