

Analogue Portable Instrument

Portable Frequency Meter



The Hz meters use a frequency-to-DC current transducer which drives a high sensitivity moving coil type indicator. It features accurate frequency measurements without noticeable influence of line voltage fluctuation (50 to 300V) or waveform distortion.

- **Principle :** Frequency sensing transducer
- **Accuracy :** $\pm 0.5\%$ of full scale value on 45 to 65 Hz range
 $\pm 0.5\%$ of full scale value on 0 to 100Hz range
 $\pm 0.5\%$ of full scale value on 0 to 500Hz range
- **Scale Length :** Approx. 135mm (5-3/8")
- **Case Material :** Bakelite with glass window

Name	Frequency	Voltage	No.
Hz meter	45-65Hz	120/240V	1701
	0-100Hz	120/240V	1702
	0-500Hz	120/240V	1703

Portable Power Factor Meter



The PF meter is used for measurement in single-phase and balanced three-phase circuits. From a phase discriminating circuits, the output of the built-in transducer produces a DC proportional to the phase between voltage and current to operate the DC indicator.

- **Principle :** Phase angle sensing transducer
- **Rated Accuracy :** $\pm 3\%$ phase angle
- **Scale :** Power Factor : Lead 0 – 0.3 – 1.0 – 0.3 – 0 Lag
Power Angle : Lead 90° – 0° – 90° Lag
- **Effective Power Factor Measuring Range :** Lead 0.5 – 1.0 – 0.5 Lag
- **Scale Length :** Approx. 135mm (5-3/8")
- **Frequency Influence :** Within $\pm 1.5^\circ$ phase angle at 45 to 65Hz

Name	Current	Voltage	No.
PF (1Ø, 3Ø) meter	0.2/1A	120V	3801
	1/5A	(Usable in the range of 60-300V)	3802
	5/25A		3803

Portable Wattmeter



The wattmeter is electrodynamicometer type, this instrument is highly reliable, and designed for use in laboratories or factories for precision measurement of power at AC and commercial frequencies 45-65Hz.

- **Principle :** Electrodynamicometer type
- **Accuracy :** $\pm 0.5\%$ of full scale
- **Scale Length :** Approx. 135mm (5-3/8")
- **Scale Divisions :** 120
- **Frequency Ranges :** AC 25 to 1000Hz (COSØ=1.0) (suitable for DC)
AC 25 to 500Hz (COSØ=0.2)

Name	Range		Power Factor	No.
	Current	Voltage		
Single-Phase Wattmeter	0.2/1A	120/240V	1.0	2101
	1/5A	120/240V	1.0	2102
	2/10A	120/240V	1.0	2103
	5/25A	120/240V	1.0	2104
	1/5A	240/480V	1.0	2119

Special ranges are available upon request.