

2041 & 2042 Portable Standard Wattmeters



2041

260 x 180 x 136 mm 2.8 kg
(10-1/4 x 7-1/8 x 5-3/8" 6.2 lbs)



2042

260 x 180 x 136 mm 3.2 kg
(10-1/4 x 7-1/8 x 5-3/8" 7.1 lbs)

Models 2041 and 2042 are electro-dynamometer type and use the taut-band suspension system. These instruments are highly reliable, and designed for use in laboratories or factories for precision measurement of power at DC and commercial frequencies up to 1,000Hz. These instruments are housed in phenol resin cases and shielded with double permalloy sheets to block external magnetic fields.

- **Excellent power factor characteristics**
Effectively used in measurement of low power factor load power and small power
- **Shock-proof, rugged taut band suspension movement**
- **Wide current ranges of 1 : 5 ratio selectable by terminal connection method**
- **Negligible self-heating effects**

SPECIFICATIONS

Principle: Electro-dynamometer type.

Rated Accuracy: $\pm 0.5\%$ of full scale value.

Scale Length: Approx. 135 mm (5-3/8").

Scale Division: 120.

Frequency Ranges:

Model 2041 ; DC, 25 to 1,000 Hz ($\cos\phi = 1.0$)

DC, 25 to 500 Hz ($\cos\phi = 0.2$)

Model 2042 ; DC, 25 to 1,000 Hz ($\cos\phi = 1.0$).

Optional Accessory: 229201 Carrying case.

Ranges:

Model	Name	Model	Range		Power Factor	Approx. Volt-Ampere Loss	
			Current	Voltage		Voltage Circuit	Current Circuit
2041	Portable, single-phase wattmeter	204101	0.2/1 A	120/240 V	1.0	10 mA (100Ω/V)	0.66/0.56 VA
		204102	1/5 A				0.93/0.84 VA
		204103	5/25 A				1.72/1.69 VA
	Portable, single-phase, low-power-factor wattmeter	204111	0.2/1 A	120/240 V	0.2	20 mA (50Ω/V)	1.25/1.09 VA
		204112	1/5 A				1.7/1.5 VA
		204113	5/25 A	30/60 V			2.62/2.5 VA
204121		0.2/1 A	1.25/1.09 VA				
204122	1/5 A	1.7/1.5 VA					
2042	Portable, three-phase wattmeter	204201	0.2/1 A	120/240 V	1.0	10 mA (100Ω/V)	0.66/0.56 VA
		204202	1/5 A				0.93/0.84 VA
		204203	5/25 A				1.72/1.69 VA

- Notes:
1. For ranges higher than 25 A, use External Current Transformer with Model 2041 or 2042 5A wattmeter.
 2. For ranges higher than 240V, use External Potential Transformer.
 3. Model 2041 Single-Phase, Low-Power-Factor Wattmeters

are recommended for use with Epstein Iron-Loss Test Sets, as well as for measurement of small or low-power-factor power. The rated power factor of 0.2 sets no restriction on the power factor of the measuring circuit. Power measurement can be made at an arbitrary power factor.