



INDICATING MOVING IRON, MOVING COIL VOLTMETER & AMMETER


ME BRAND Moving Iron Instruments are generally used for measuring A.C. Voltage and currents. These are Repulsion type with spring control and zero adjusters. Their Low sensitivity is compensated by their rugged construction. Low price and fair accuracy. These instruments conforms to IS 1248-1983. Square case instruments are interchangeable with German (DIN 43700) 144 X 144mm, 96 X 96mm, 72 X 72mm.


 <p>A.C. Panel Meter</p>	<p>PANEL METERS MOVING IRON A.C. (As per IS Specification: - 1248/1983)</p> <ul style="list-style-type: none"> Suppressed scale & Special Dial Marking meters are available at extra charge of Rs. 40.00 each For meters Above 600Volts upto 1000V extra charge of Rs. 100.00 		
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	ROUND	SQUARE		
MODEL	SO – 65	SR – 72	SR - 96	SR – 144
Panel Cutout	65mm dia	68 X 68 mm	92 X 92 mm	138 X 138 mm
Accuracy	2%	1.5%	1.5%	1%
Ranges :- AC 10mA to 30A.Direct, AC 1A & 5A C.T. Operated	Rs. 330.00	Rs. 370.00	Rs. 400.00	Rs. 630.00
Ranges :- AC 10 to 600 V, AC 40 to 100 A. Direct	Rs 360.00	Rs. 400.00	Rs. 430.00	Rs. 660.00


 <p>D.C. Panel Meter</p>	<p>PANEL METERS MOVING COIL D.C. (As per IS Specification: - 1248/1983)</p> <ul style="list-style-type: none"> Center zero, shifted zero, Special Dial Marking meters are available at extra charge of Rs. 40.00 each For meters Above 600Volts upto 1000V extra charged of Rs. 100.00 		
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	ROUND	SQUARE		
MODEL	MO – 65	MR – 72	MR - 96	MR – 144
Panel Cutout	65mm dia.	68 X 68 mm	92 X 92 mm	138 X 138 mm
Accuracy	2%	1.5%	1.5%	1%
Range :- DC 1mA to 30 A. Dir , 50mV to 500mV DC 10V to 150 Volts.	Rs. 480.00	Rs. 540.00	Rs. 580.00	Rs. 830.00
Range :- DC 40A to 100 A. Direct DC 200 – 600 V	Rs. 500.00	Rs. 570.00	Rs. 610.00	Rs. 880.00
Range :- Galvanometer – 30-0-30G & DC 100-1000µA.	Rs. 520.00	Rs. 580.00	Rs. 620.00	Rs. 910.00

 <p>FREQUENCY METER</p>	RANGES	MODEL	PRICE (Rs`)	
	230 / 440V 45–50–55 Hz. VIBRATING Reed / AnalogType R- Reed type I – Analog/Indicating type		FMR-72 (72 Sq.)	750.00
			FMR-96 (96 Sq.)	850.00
			FMR-144 (144Sq.)	1100.00
			FMR-D96 (96 Desk Model)	1400.00
			FMR-P (Portable)	1850.00
			FMI-96 (Analog 96Sq.)	1200.00
			FMI-D96 (96 Desk Analog)	1700.00
			FMI-P (Analog Portable)	2300.00

 <p>OHMS METER</p>	RANGES	PORTABLE (ABS MOULDED CASE)	Desk Model – 96Sq.
	Shunt type Any Range 0-25 to 2000 Ohms	Rs. 1900.00	Rs. 1300.00
	Series type Any Range 0-2K to 100 Kohms	Rs. 1900.00	Rs. 1300.00

	PHASE SEQUENCE INDICATOR : - Model :- PSI-96 96 X 96 mm Sq. 110 to 500 Volts with 3 terminals	Rs. 850.00
	Portable fitted in Sun-mica covered wooden box with insulated terminals	Rs .1850.00
	Desk Model PSI (96Sq. MM.)	Rs. 1400.00

	CELL TESTER. Model :- CT-65-3. Range :- 3 – 0 – 3 Volts	Rs. 575.00
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D. C. Shunt

D.C. SHUNTS. ACCURACY CLASS 1, 75mV DROP (As per IS Specification 1248/83)

- ✦ For any other mV drop, Price on request.
- ✦ Prices & dimensions of light weight shunts on request.

Range (Amp)	Rate /Unit (Rs.)	Range (Amp)	Rate /Unit (Rs.)	Range (Amp)	Rate /Unit (Rs.)	Range (Amp)	Rate /Unit (Rs.)
'I' TYPE SHUNT		'I' TYPE SHUNT		'L' TYPE SHUNT		'T' TYPE SHUNT	
5 A	140.00	75 A	230.00	600 A	1200.00	4000 A	9250.00
10 A	140.00	100 A	260.00	750 A	1250.00	5000 A	10500.00
15 A	140.00	125 A	275.00	800 A	1300.00	6000 A	14850.00
20 A	150.00	150 A	290.00	1000 A	1775.00	7500 A	15950.00
25 A	150.00	200 A	590.00	1200 A	2300.00	8000 A	17100.00
30 A	185.00	250 A	650.00	1500 A	2475.00	10000 A	26400.00
40 A	220.00	300 A	700.00	2000 A	3500.00		
50 A	220.00	400 A	875.00	2500 A	3950.00		
60 A	230.00	500 A	925.00	3000 A	4900.00		



Current Transformer

BPL (BAR PRIMARY LOW TENSION) TAPE WOUND CURRENT TRANSFORMER

- ✦ For CT Ratio 50/5A TO 150/5A Class 1. 15VA Price Rs. 900.00
- ✦ For CT Ratio 200/5A TO 300/5A Class 1. 15VA Price Rs. 700.00
- ✦ For CT with Secondary 1 Amps Price on Request.

Ratio	Approximate Overall Dimensions in mm			Rated Burden In VA	Accuracy CLASS	Price Rs.	Ratio	Approximate Overall Dimensions in mm			Rated Burden In VA	Accuracy CLASS	Price Rs.
	ID	OD	HT					ID	OD	HT			
30/5A	33	80	35	5	5.0	330.00	800/5A	105	135	30	15	1.0	430.00
50/5A	33	66	35	5	5.0	270.00	1000/5A	105	135	30	15	1.0	450.00
60/5A	33	66	35	5	5.0	270.00	1200/5A	105	135	30	15	1.0	490.00
75/5A	33	66	35	5	5.0	270.00	1500/5A	125	160	30	15	1.0	560.00
100/5A	33	66	35	5	1.0	270.00	1600/5A	125	160	30	15	1.0	580.00
150/5A	33	66	35	5	1.0	270.00	2000/5A	125	160	30	15	1.0	650.00
200/5A	33	66	35	10	1.0	280.00	2500/5A	125	160	30	15	1.0	880.00
250/5A	60	100	35	10	1.0	300.00	3000/5A	125	160	30	15	1.0	930.00
300/5A	60	100	35	10	1.0	310.00	3200/5A	125	160	30	15	1.0	1150.00
400/5A	60	100	35	15	1.0	320.00	4000/5A	175	215	30	15	1.0	1500.00
500/5A	60	100	35	15	1.0	330.00	5000/5A	175	215	30	15	1.0	1850.00
600/5A	60	100	35	15	1.0	340.00	6000/5A	175	215	30	15	1.0	2400.00



Portable Meter



PORTABLE/LAB TYPE METERS. M. I. (AC) / M. C. (DC) AMMETERS AND VOLTMETERS. INDUSTRIAL GRADE. IS 1248/83, ACCURACY :- ± 1%

- Meters mounted on Engineering Plastic (ABS) Moulded panel, fitted in **Engineering Plastic (ABS) Moulded case** with rubber footing & rexine strap, provided with antiparallax mirror & knife-edge pointer, Scale Length 150mm Approx.

ITEM DESCRIPTION	<u>MOVING IRON A.C.</u>		ITEM DESCRIPTION	<u>MOVING COIL D.C.</u>	
AMPS-Any range upto 30A VOLT – 5 to 600 V	MODEL	Ammeters / Voltmeters Price (Rs.)	AMPS-Any range upto 30A VOLT – 5 to 600 V	MODEL	Ammeters / Voltmeters Price (Rs.)
Single Range	MIP-1	1250.00	Single Range	MCP-1	1300.00
Two Range in ratio 1:2	MIP-2	1300.00	Two Range in ratio 1:2	MCP-2	1350.00
Three Range in ratio 1:2:4	MIP-3	1350.00	Three Range in ratio 1:2:4	MCP-3	1400.00
Four Range in ratio 1:2:4:8	MIP-4	1400.00	Four Range in ratio 1:2:4:8	MCP-4	1450.00

◀ For AC & DC meters Above 600Volts upto 1000Volts & above 30A upto 100A direct extra charge of Rs. 100.00
 ◀ For DC Meters in micro Amp (100-1000uA) meter extra cost Rs. 100.00
 ◀ For DC Meters Centre or Shifted zero meters are available at Extra cost of Rs. 50

WATTMETER & POWER FACTOR METER in Portable and Panel Mounting type

	:	PORTABLE WATTMETER : - Dynamometer type, mounted on Engineering Plastic (ABS) Moulded panel, fitted in Engineering Plastic (ABS) Moulded case with rubber / plastic footing & rexine strap, provided with antiparallax mirror & knife-edge pointer, Scale Length 150mm Approx.
	:	PANEL MOUNTING WATTMETER :- Enclosed in deep drawn metal sheet black finished rust proof case available in flush mounting type and 96mm & 144mm Square size side cover fabricated from CRC sheet black finished rust proof case. Base Bakelite moulded.

SINGLE PHASE SINGLE ELEMENT 'L.P.F. WATTMETER' (P.F. – 0.2)

MODEL	CURRENT RANGE	VOLTAGE RANGE	Price (Rs.)	Accuracy
LPFW1E1P-P Size-Portable	Any one combination of 0.5/1, 1/2, 2.5/5, 5/10, 10/20A	Any one combination of 75/150/300V, 125/250/500V, 150/300/600V	3600.00	1.5%

Single Phase Single Element U.P.F. Wattmeter.

MODEL	CURRENT RANGE	VOLTAGE RANGE	Price (Rs.)	Accuracy
W1E1P-96 Size-96mm.Sq.	Any single range upto 20A	Any single Range upto 600V	1400.00	1.5%
W1E1P-144 Size-144mm.Sq.	Any single range upto 20A	Any single Range upto 600V	1700.00	1.5%
W1E1P-P Size-Portable	Any single range upto 20A	Any single Range upto 600V	2100.00	1 %
W1E1P-P Size-Portable	Any one combination of 0.5/1, 1/2, 2.5/5, 5/10, 10/20A	Any one combination of 75/150/300V, 125/250/500V, 150/300/600V	2300.00	1 %

◀ For shifted Zero, Centre Zero in all types of Wattmeters, Extra Charge Rs. 100.00
 ◀ For Reversing switch arrangement in all types of Wattmeters, Extra Charge Rs. 200.00

Wattmeters 2/3 Element, 3 / 4 Wire, 3 Phase :-

RANGES		Wattmeter. 2 – Element Dynamometer Type for 3-phase 3 wires Balance & Unbalance Load. Class 1.5%		Wattmeter. 3 – Element Dynamometer Type for 3-phase 4 wires Balance & Unbalance Load. Class 1.5%	
Current	Voltage	MODEL	PRICE (Rs.)	MODEL	PRICE (Rs.)
5 or 1 Amp	110V or 440V	W2E3P-96 Size-96mm.Sq.	2300.00	W3E3P-96 Size-96mm.Sq.	2800.00
5 or 1 Amp	110V or 440V	W2E3P-144 Size-144mm Sq.	2800.00	W3E3P-144 Size-144mm Sq.	3300.00
5 or 1 Amp	110V or 440V	W2E3PP Size-Portable	4100.00	W3E3PP Size-Portable	4500.00



POWER FACTOR METERS Measuring Range :- 0.5 (lead) – 1.0 (unity) – 0.5 (lag)

Ranges Available of P. F. Meter :

Current range :- 5 or 1 Amp

Voltage Range :- 110V or 440 Volts

Power Factor Meter-Single Element Dynamometer type For Single Phase Load. Class $\pm 2^0$		Power Factor Meter 2 Elements. Dynamometer type for 3 Phase 3 Wires Balance & Unbalance Load. Class $\pm 2^0$		Power Factor Meter 3 Elements Dynamometer type For 3 Phase 4 Wires Balance & Unbalance Load. Class $\pm 2^0$	
MODEL	PRICE (Rs.)	MODEL	PRICE (Rs.)	MODEL	PRICE (Rs.)
PF1E1P-96 Size-96mm.Sq.	1650.00	PF2E3P-96 Size-96mm.Sq.	2850.00	PF3E3P-96 Size-96mm.Sq.	3400.00
PF1E1P-144 Size-144mm Sq.	2030.00	PF2E3P-144 Size-144mm Sq.	3500.00	PF3E3P-144 Size-144mm Sq.	3950.00
PF1E1PP Size-Portable	3100.00	PF2E3PP Size-Portable	4300.00	PF3E3PP Size-Portable	4700.00



DESK MODEL METERS (MINI PORTABLE) :- MOVING IRON AND MOVING COIL TYPE

Panel meters AC and DC mounted on a black colored moulded Plastic desk with insulated terminal.
For the use in Institutes and Laboratories.

Moving Iron type AC		Moving Coil type DC	
MODEL	Price (Rs.)	MODEL	Price (Rs.)
DSO-65	750.00	DMO-65	850.00
DSR-72	850.00	DMR-72	950.00
DSR-96	900.00	DMR-96	1000.00

◀ Double Range Meters with ratio 1:2 are available in desk type with extra charge of Rs. 50.00
 ◀ For meters Above 600Volts upto 1000V & DC 100-1000uA extra charge of Rs. 100.00



D. C. ENERGY METERS

PORTABLE MODEL AMP.HOUR METER. RANGE – 5A.220V. DC :-
ELECTRONIIC DIGITAL 0.5 inch, 4 Digit seven segment **LED display.**





Rs. 6500.00

D. C. ENERGY METERS

PORTABLE MODEL AMP.HOUR METER. RANGE – 5A.220V. DC :-
ELECTRONIIC DIGITAL 0.3 inch, 4 Digit seven segment **LCD display.**

Rs. 7500.00

Meter with higher Current and any other Voltage range can be supplied,
Price will be given at request




 FLUSH / OPEN 1PH	 PORTABLE. 1PH	 FLUSH / OPEN 3PH	 PORTABLE 3PH	VARIACS (AUTO TRANSFORMERS)
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	Single phase Input Voltage 0-240 V AC, 50 Hz. Output 0- 270 V AC				Three Phase Input Voltage 415V AC, 50 Hz. Output 470V AC			
	Air Cooled		Oil Cooled		Air Cooled		Oil Cooled	
Output Current Rating	Flush (Open) type	Portable (Closed) type	Without oil	Qty of oil required.	Flush (Open) type	Portable (Closed) type	Without oil	Qty of oil required.
	Price (Rs.)	Price (Rs.)	Price (Rs.)	(Liters)	Price (Rs.)	Price (Rs.)	Price (Rs.)	(Liters)
MODELS	VA*F1	V A*P1	V A*P1-OC		V A*F3	V A*P3	VA*P3-OC	
1 Amps	1150.00	1750.00	-	-	4125.00	5650.00	-	-
2 Amps	1250.00	1850.00	-	-	4350.00	5900.00	-	-
3 Amps	1600.00	2200.00	-	-	5225.00	6750.00	-	-
4 Amps	2550.00	3300.00	6450.00	6.5	8550.00	11300.00	14400.00	35
5 Amps	2650.00	3400.00	6600.00	6.5	8900.00	11650.00	14700.00	35
8 Amps	3300.00	4050.00	7250.00	5.5	10650.00	13500.00	16500.00	32
10 Amps	3500.00	4300.00	7450.00	5.0	11300.00	14100.00	17150.00	32
15 Amps	5775.00	6775.00	10500.00	20	18400.00	22800.00	27300.00	40
20 Amps	6325.00	7325.00	11100.00	20	19800.00	24200.00	28600.00	40
28 Amps	9750.00	10850.00	15950.00	36	30900.00	36400.00	41250.00	95
30 Amps	10750.00	11850.00	16900.00	36	32850.00	38500.00	43200.00	95
40 Amps	12650.00	14300.00	20000.00	80	39350.00	45950.00	53100.00	110
50 Amps	15950.00	17600.00	23300.00	80	48400.00	55000.00	62150.00	110
60 Amps	17350.00	19000.00	24750.00	80	55600.00	62250.00	69400.00	110

◀ A* in MODELS stands for Current Rating.

◀ Motorisation charges for 1/3 Phase Variacs are extra at Rs. 3500.00 for variacs of 2 – 20 Amps and Rs. 4500.00 for Variacs of 28 Amps and above.

◀ For micro switch arrangement Extra charge Rs. 200.00 per piece.

	BATTERY CHARGER Dry and Lead Acid Batteries Model 10 A. 6/12/18/24 Volts . :- Rs. 6100.00
	CONSTANT VOLTAGE TRANSFORMERS (CVT) Input 170 to 270 Volts AC. Output 230 Volt ± 10%. 500VA :- Rs. 2550.00
	RECTIFIERS Metal Rectifier : Table Model with Voltmeter. Ammeter & Selector Switch. Range 10 Amp. 24 Volts. :- Rs. 6150.00 Silicon Rectifier : Table Model with Voltmeter, Ammeter & Selector Switch. Range 10 Amp. 24 Volts. :- Rs. 6050.00



LOAD BANKS PORTABLE / LABORATORY TYPE

Type of Loads :- Resistance Load / Lamp Load / Capacitor Load / Induction Load. (Choke Coil)
Single / Three Phase with measuring Ammeter, Voltmeter and Selector Switch

RANGE	Capacitor Load		Lamp Load		Resistance Load		Induction Load	
	1 Phase	3 Phase	1 Phase	3 Phase	1 Phase	3 Phase	1 Phase	3 Phase
1 kw (4 A)	8250.00	16000.00	8250.00	16000.00	10500.00	19250.00	11500.00	24750.00
1.25 kw (5 A)	8800.00	17600.00	8800.00	17600.00	11000.00	20900.00	12000.00	25300.00
2 kw (8 A)	9350.00	19250.00	9350.00	19250.00	12000.00	24750.00	12650.00	26400.00
2.5 kw (10 A)	9900.00	20600.00	9900.00	20900.00	13200.00	28000.00	13500.00	28600.00
3 kw (12 A)	10500.00	22000.00	10500.00	22000.00	13750.00	29150.00	14600.00	29700.00
4 kw (16 A)	12000.00	25300.00	13200.00	25850.00	16500.00	32500.00	17300.00	34650.00
5 kw (20 A)	15500.00	29700.00	17000.00	30250.00	17600.00	35200.00	18450.00	38000.00
7.5 kw (30 A)	18700.00	34100.00	19800.00	34650.00	20350.00	40150.00	23100.00	49000.00
10 kw (40 A)	21000.00	39000.00	21450.00	40150.00	23650.00	49000.00	-	-
15 kw (60 A)	25300.00	44000.00	26400.00	51150.00	29150.00	58300.00	-	-

◀ **For Three Phase Load Banks, Current ranges are provided in each phase.**



TRANSFORMERS

Copper wound, Accuracy to IS available in Air Cooled and Oil Cooled type (But without Oil) Oil Cost shall be extra

Capacity KW/ KVA	Single Phase Pri. : 230 V, Sec. : 115 V		Single Phase Pri.: 440V, Sec.: 230V OR Pri.:230V, Sec.:230 V		Three Phase Pri. : 440 V, Sec : 230 V	
	Air Cool Price (Rs.)	Oil Cool Price (Rs.)	Air Cool Price (Rs.)	Oil Cool Price (Rs.)	Air Cool Price (Rs.)	Oil Cool Price (Rs.)
250 VA	1700.00	-	1750.00	-	-	-
500VA	2550.00	-	2700.00	-	8800.00	-
1KVA	5100.00	-	5700.00	-	12100.00	13850.00
2KVA	8550.00	-	9650.00	-	15600.00	17800.00
3KVA	10250.00	12100.00	11550.00	12650.00	16700.00	18900.00
5KVA	15950.00	17300.00	16500.00	17600.00	20000.00	22200.00
10KVA	27000.00	30500.00	29000.00	30250.00	44400.00	49000.00



PORTABLE TYPE CURRENT TRANSFORMERS PORT.(C.T.)

Supplied in Pine Wood case with carrying strap.

CLASS
(1.0)/7.5VA

1. Primary taps 5, 10, 25, 50, & 100 Amps. Secondary 5 Amps

Rs. 2850.00 each



PORTABLE POTENTIAL TRANSFORMERS (P.T.)

Supplied in Pine Wood case with carrying strap.

1. Primary 110V, 250V, 440V (Any One) Secondary 75/150/300/600 Volts.

Rs. 2300.00 each

2. Potential Transformer Open type Single Phase 250/115 Volts OR 440/230 Volts

Rs. 1450.00 each



WOUND PRIMARY TYPE CURRENT TRANSFORMERS Accuracy Class 1. Burden – 15 VA

Ratio :- 5/5A, 10/5A, 15/5A, 20/5A, 30/5A, 40/5A, 50/5A.

Rs. 725.00 each



PORTABLE PRECISION GRADE INSTRUMENTS

PRECISION GRADE, ACCURACY :- $\pm 0.5\%$

Meters mounted on Engineering Plastic (ABS) Moulded panel, fitted in **Engineering Plastic (ABS) Moulded case** with rubber / plastic footing & rexine strap, provided with anti-parallax mirror & knife-edge pointer, Scale Length 150mm Approx.

1. Portable Precision Grade Single Phase Single Element Dynamometer type Wattmeters Accuracy : $\pm 0.5\%$ of full Scale Deflection.		4. Portable Precision Grade Moving Coil milliammeters and Ammeters D.C. Accuracy : $\pm 0.5\%$ of full Scale Deflection.	
Any Voltage Range in ratio 1:2:4 75/150/300V, 150/300/600V Any Current Range in ratio 1:2 0.5/1A, 10/20A	Price Rs.3600.00	Miliammeter D.C.	
		Any One Range	0- 1/2 mA 0- 500/1000 mA
			Price Rs. 2850.00
2. Portable Precision Grade Dynamometer type Voltmeters and Ammeters Accuracy : $\pm 0.6\%$ of full Scale Deflection.		Ammeters : D.C. (With Internal Shunt)	
Voltmeters : A.C. D.C. Range :- (Any one Range) 0 – 75/150/300 V 0 - 150/300/600 V	Price Rs. 3500.00	Any one Range	0-1/2 Amps 0-10/20 Amps
			Price Rs. 3100.00
Ammeters : A.C. D.C. Range :- (Any one Range) 0 - 1/2 Amps 0 – 5/10 Amps.		Portable Moving Coil millivoltmeters and Voltmeters D.C. Accuracy : $\pm 0.5\%$ of full Scale Deflection	
	Price Rs. 3500.00 Each	Millivoltmeters D.C.	
		Any one Range	0-75/150/300 mV 0-150/300/600 mV
			Price Rs. 2850.00
3. Portable Moving Iron Precision Grade Voltmeters and Ammeters Accuracy : $\pm 0.5\%$ of full Scale Deflection.		Voltmeters D.C. (Sensitivity 1000 Ohms / Volts)	
Voltmeters : A.C. Range :- (Any one Range) 0 – 75/150/300 V 0 - 150/300/600 V	Price Rs. 2850.00	Any One Range	0-1.5/3/7.5 V 0-3/7.5/15 V 0-15/30/60 V 0-75/150/300 V 0-150/300/600 V 0-125/250/500 V
Ammeters : A.C. Range :- (Any one Range) 0 – 0.5/1 Amps 0 – 5/10 Amps.	Price Rs. 2850.00 Each		