



DESIGNED FOR EXCELLENCE
BUILT FOR PERFORMANCE

TEST & MEASUREMENT (TMI) **PRODUCT CATALOG**



RISH MAX 10

RISH Max-10 digital multimeters are suited for universal, general applications in the electrical and electronics fields, as well as in radio and television service, training and education. They are of especially flat design, and thus fit into any bag. The protective cover, which is provided as standard equipment, can be opened at an angle for convenient reading from the workbench, and provides for easy transport.

- 3 ¾ digits 3999 counts, LCD display
- Basic Accuracy: +/- 0.5%
- CAT I - 1000V / CAT II - 600V(Safety Protection)
- AC/DC Voltage measurement upto 1000V.
- AC/DC Current measurement upto 10A.
- Resistance measurement: 40MΩ.
- Capacitance measurement: 1pF-200μF
- Frequency measurement: 500kHz
- Temperature measurement: 0-1300°C(K-type)
- Continuity test, Diode test, Duty Cycle measurement
- Battery: 2 X 1.5V (600 Hrs)
- Weight with batteries: Approx. 0.25 Kg



Rishabh iYoung

The new Rishabh iYoung Multimeter are compact, Handy & Trendy models specially targeted for applications of Electrical contractors, Service Industry, Technicians, HVAC and also the education sector i.e., students who will be the future of tomorrow.



- Pocket size compact Multi-meter
- Non-Contact Voltage Detection
- Drop proof Multi-meter
- AC-DC Voltage measurement:-100μV ... 600V
- AC-DC Current measurement:-10μA ... 10A
- Resistance measurement:- 1Ω... 40MΩ with zero correction
- Frequency measurement:-10Hz ... 500kHz
- Diode measurement, Continuity testing
- Duty cycle (%) measurement, Data Hold
- Provision of mounting clips for hand free operation
- Relative measurement
- Battery (Service Life):- 2 X 1.5 V (400hrs)
- Weight with batteries:- Approx. 0.35 Kg

RISH 410

RISHABH 410 digital multimeter is suited for universal, general applications in the electrical and electronics fields for training and education.

- Compact Pocket Fit Economical Design.
- Functionally Enhanced Dual Display
- Digital Display with 3¾ Digit, 4000 Count
- Basic accuracy:- +/- 0.5%
- Measuring Category: CAT II - 1000V / CAT III - 600V
- Automatic Blocking System (ABS) for User / Device Safety.
- Measures AC/DC V & I, OHM, Diode, Capacitance, Frequency, Duty Cycle(%), Temperature(K-type), Relative measurement, Continuity test, etc
- Overload warning (>750V AC, >1000V DC, >10 A ACDC)
- Battery (Service Life):- 2 X 1.5 V (300hrs)
- Weight with batteries:- Approx. 0.48 Kg



RISH MIT 30

RISH MIT 30 is a Analog Digital Multimeter with resistance measurement which measures VAC, VDC, VAC+VDC, Frequency, mA DC, mA (AC+DC), Resistance, Continuity, Diode, Capacitance, AC Current measurement with clip on sensor and Insulation Resistance.

Digital Multimeter Cum Insulation Tester

- Insulation Resistance measurement up to 3GΩ
- Test voltages selection: 50V, 100V, 250V, 500V and 1000V
- Automatic Terminal Blocking System (ABS) for User / Device Safety
- TRMS Measurement regardless of Signal waveforms
- AC Current measurement up to 300A (with Clip-On sensor)
- Temperatures from -200 to 800 °C (PT 100 and PT 1000)
- Indication of negative values on the Analog scale
- Protection from Dust and Water: IP20 as per IEC60529
- International Safety standards: CAT II - 1000V / CAT III - 600V
- Battery (Service Life):- 6 X 1.5 V (300hrs)
- Weight with batteries:- Approx. 0.4 Kg



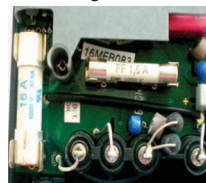
RISH Multi Series

RISH MULTI Series of Digital Multimeters are high accuracy, high safety range of Testing Instrument suitable for use in rough and harsh Industrial Environment, with unique features like Protective Rubber Holster, Automatic Terminal Blocking (ABS) System. RM series are available in 3 $\frac{3}{4}$ digit & 4 $\frac{3}{4}$ digit with RMS & TRMS measurements

- Different Models: RISH Multi 12S, 13S, 14S, 15S, 16S, 18S & New RISH Multi 20
- Basic Accuracy 0.02%
- TRMS measurement (Rish Multi 16S, 18S, Rish Multi 20)
- Automatic Terminal Blocking system for user safety
- Protective Rubber Holster for Rough Duty
- Backlit LCD Display, Analog Scale (Bar Graph)
- Min / Max value storage, Data Hold
- Power Economizing Circuit, Overload warning
- Computer Connectivity with attachable interface
- CAT III 1000V / CAT IV 600V
- Battery: 9 V Flat cell Battery
- Weight:- Approx. 0.48 Kg

Safety Features

High Precision Fuses, Over Voltage Protection



Multi Purpose Protective Holster

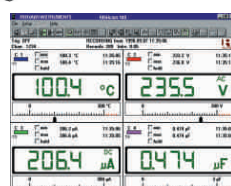


Automatic Terminal Blocking



Measurements

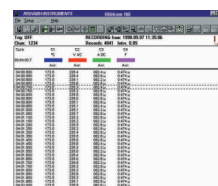
- DC Current / DC Voltage,
- AC Current / AC Voltage,
- Resistance,
- Capacitance,
- Frequency,
- Temperature,
- Continuity Testing,
- Diode Test,
- dB Measurement
- Event Counter,
- Event Duration,
- Stop Watch



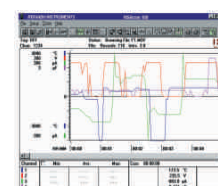
Digital Display



Analog Display



Data Logger



YT Graph

RISHABH 6k Series

RISHABH range of 6k series provide professional Multimeters which are used for measurement of Root mean Square (TRMS) Value of AC quantities regardless of wave forms.

Professional Multimeters

- Models: RISHABH 612, RISHABH 613, RISHABH 615, RISHABH 616
- Basic accuracy: 0.4%
- Available in 4 digits 6600 counts
- TRMS Measurement (RISHABH 616)
- Peak value measurement
- Dual Display Facility
- Supplied with Accredited Routine Test Certificates(Soft Copy)
- CAT III - 1000V / CAT IV 600V Protection
- 16A Current measurement in (RISHABH 613)
- 660A AC Current measurements with external clip on CT(RISHABH 612)
- % Duty Cycle measurement
- Temperature measurement(K type sensor)
- Frequency measurement upto 10MHz
- Battery: 2 X 1.5/ 600hrs
- Weight:- Approx. 0.48 Kg

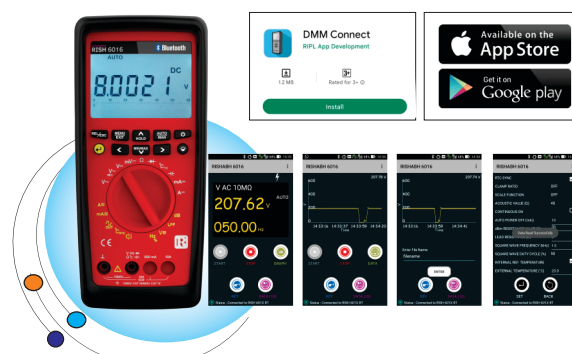


RISHABH 60k Series

RISHABH 60XX Series of Multimeter are advanced high end range of instruments, meeting the need of today's technology with a Bluetooth Communication and Android based Application for mobile phone. It is made for professional use that offer Safety, High Resolution, Large Range Count, Reliability, Ruggedness. A complete tool for Test Automation, equipped with more than 30 different measuring functions.

High-End Multimeters

- Models: RISHABH 6012, RISHABH 6013, RISHABH 6015, RISHABH 6016
- Basic accuracy: 0.05%
- Supports J, K, PT 100 & PT 1000 type sensors for Temperature measurement
- 60,000 counts True RMS measurement with high crest factors
- High bandwidth upto 100kHz for high frequency applications (6016)
- Facility of Square wave O/P with selectable Duty Hz & Duty cycle (6015 / 6016)
- Selectable clamp ratio for current measurement upto 6000A
- For measurement at VFD drives, special 1kHz LPF function is provided(6016)
- Pass/Fail with fully programmable GO-NOGO
- 32,000 readings can be logged with RTC (6015 / 6016)
- PC connectivity via a plug and play USB cable (Optional)
- Connect Mobile & PC via Bluetooth (Optional)
- Mains operation with power supply adapter (Optional)
- Battery: 2 X 1.5/ 100hrs (40 hrs for Bluetooth model with BT ON)
- Weight:- Approx. 0.5 Kg



Digital Multimeter

Economic Series

Industrial Multimeter

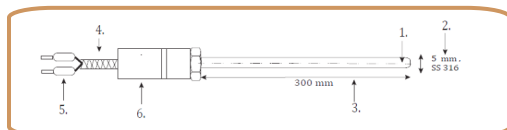


Functions		Rish Young	Rish Max 10	Rish 410	Rish Multi 125	Rish Multi 135
Basic Features	Digital Display (Counts)	3999	3999	3999	3100	3100
	TRMS	No	No	No	No	No
	Basic Accuracy	±1% rdg. +9D	±0.5% rdg. +2D	±0.5% rdg. +2D	±0.25% rdg. +1D	±0.25% rdg. +1D
	Digits	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2
	Measuring Category		CAT I-1000V, CAT II-600V	CAT II-1000V, CAT III-600V	CAT III-1000V, CAT IV-600V	CAT II-1000V, CAT III-600V
	Automatic Blocking System	No	No	Yes	Yes	Yes
Measurement	Non Contact Voltage Detection	No	No	No	No	No
	DC Voltage Measurement	100µV...600V	100µV...1000V	100µV...1000V	10µV...1000V	10µV...1000V
	Intrinsic Error, VDC (Basic Accuracy)	±1% rdg. +9D	±0.5% rdg. +2D	±0.5% rdg. +2D	±0.25% rdg. +1D	±0.25% rdg. +1D
	AC Voltage Measurement	100µV...600V	100µV...1000V	100µV...1000V	1mV...1000V	1mV...1000V
	Intrinsic Error, VAC	±1.5% rdg. +9D	±1% rdg. +5D	±1% rdg. +5D	±0.75% rdg. +1D	±0.75% rdg. +1D
	DC Current Measurement	10µA...10A	10µA...10A	10µA...10A	1µA...300mA	1µA...16A
Measurement	Intrinsic Error, ADC	±2.0% rdg. +5D	±0.8% rdg. +2D	±0.8% rdg. +2D	±1% rdg. +5D	±1% rdg. +5D
	AC Current Measurement	10µA...10A	10µA...10A	10µA...10A	10µA...300A (by clamp)	10µA...16A
	Intrinsic Error, AAC	±2.5% rdg. +5D	±1% rdg. +5D	±1% rdg. +5D	±1.5% rdg. +2D	±1.5% rdg. +2D
	Resistance Measurement	100mΩ...40MΩ	100mΩ...40MΩ	100mΩ...40MΩ	10mΩ...30MΩ	10mΩ...30MΩ
	Intrinsic Error, Resistance	±1.5% rdg. +5D	±0.8% rdg. +2D	±0.8% rdg. +2D	±0.4% rdg. +1D	±0.4% rdg. +1D
	Capacitance Measurement	1pF...200µF	1pF...200µF	1pF...200µF	No	No
	Intrinsic Error, Capacitance	±5.0% rdg. +40D	±0.5% rdg. +3D	±0.5% rdg. +3D	N/A	N/A
	Frequency/Time Period Measurement	9 Hz...500 kHz	10 Hz...500 kHz	1 Hz...500 kHz	No	No
	Intrinsic Error, Frequency	No	No	No	N/A	N/A
	Temp. Measurement Pt 100/Pt 1000	±0.5% rdg. +5D	±0.2% rdg. +2D	±0.2% rdg. +2D	Yes	Yes
	Temp Measurement K/J -Type Thermocouple	No	Yes (0....1300 °C)(K type)	Yes (0....1300 °C)(K type)	No	No
	Continuity Testing	Yes	Yes	Yes	Yes	Yes
	Diode Test	Yes	Yes	Yes	Yes	Yes
	Duty Cycle	Yes	Yes	Yes	No	No
Diagnostics & Data	Hold & Peak Hold	Only Hold	Only Hold	Only Hold	Only Hold	Only Hold
	Relative Measurement	Yes	Yes	Yes	Yes	Yes
	Computer Interface (optional)	No	No	No	Yes (via SI 232 adaptor, s/w compatible upto windows Xp)	Yes (Via external SI 232 adaptor)
	Data Logging	No	No	No	Yes (Via external SI 232 adaptor)	Yes (Via external SI 232 adaptor)
	Min-Max-Avg recording	No	No	No	No	No
	Analog bargraph	No	No	No	Yes	Yes
Display	Digital Display (Dimensions in mm)	54.7X34.9	50X30	58X31.4	65X30	65X30
	No. of Digital Display	Single	Single	Single	Single	Single
	Digit Height	12.9	10 mm	15 mm	15 mm	15 mm
	Backlit	No	No	Yes	Yes	Yes
	Bar Graph Scale	No	No	No	Yes (30 Segments)	Yes (30 Segments)
Physical Attributes & Electrical Safety	Dimensions in mm (WXHxD)	74.3x154.1x47.6	92x154x25	86x188x53	84x195x35	84x195x35
	Protective Rubber Holster	Yes	No (Plastic cover)	Yes	Yes	Yes
	Weight with batteries	0.35 kg	0.25 Kg	0.48 Kg	0.35 kg	0.35 kg
	Battery/Service Life	2X1.5 /600hrs	2X1.5 /600hrs	2X1.5 /600hrs	9V/750 Hrs	9V/750 Hrs
	Warranty			3 year		
	Protection			IP 50		

For all measurement parameters, please read measurement as "Best resolution....Max. Range"

Rishabh Temperature Sensor

RTD Sensor - 1. PT 100 (2 WIRE)
2. PT 1000 (2 WIRE)



1- Insert : RTD Type, Simplex- PT-100 (2 Wire)
PT-1000 (2 Wire)

2- Outer Sheath - SS 316

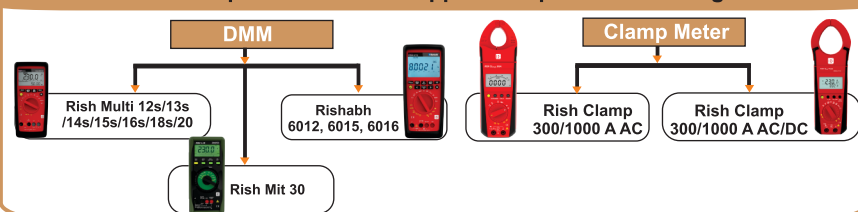
3- Insertion Length - 300 mm

4- Cable & cable length - PTFE Insulated SS Braided, 1000mm

5- Termination - Banana Pin male

6- Nylon Black handle - 140 mm

Rishabh products which support Temperature Sensing



Industrial Multimeter



Functions		Rish Multi14S	Rish Multi15S	Rish Multi16S	Rish Multi18S	Rish Multi20
Basic Features	Digital Display (Counts)	3100	3100	3100	31000	310000
	TRMS	No	No	Yes	Yes	Yes
	Basic Accuracy	±0.25% rdg. +1D	±0.25% rdg. +1D	±0.1% rdg. +1D	±0.05% rdg+ 3D	±0.02% rdg+20D
	Digits	3½	3½	3½	4½	5½
	Measuring Category	CAT III - 1000V, CAT IV - 600V	CAT III - 1000V, CAT IV - 600V	CAT III - 1000V, CAT IV - 600V	CAT III - 1000V, CAT IV - 600V	CAT III - 1000V, CAT IV - 600V
	Automatic Blocking System	Yes	Yes	Yes	Yes	Yes
	Non Contact Voltage Detection	No	No	No	No	No
Measurement	DC Voltage Measurement	10µV...1000V	10µV...1000V	10µV...1000V	10µV...1000V	10µV...1000V
	Intrinsic Error, VDC (Basic Accuracy)	±0.25% rdg. +1D	±0.25% rdg. +1D	±0.1% rdg. +1D	±0.05% +3D	±0.02% rdg+0.008rng+20D
	AC Voltage Measurement	1mV...1000V	1mV...1000V	1mV...1000V	1mV...1000V	10µV...1000V
	Intrinsic Error, VAC	±0.75% rdg. +1D	±0.75% rdg. +1D	±0.75% rdg. +3D	±0.5% rdg. +30D	±0.2% rdg. +30D
	DC Current Measurement	100 nA...10A	100nA...10A	100nA...10A	10nA...10A	10nA...10A
	Intrinsic Error, ADC	±1.0% rdg. +2D	±1.0% rdg. +2D	±1.0% rdg. +2D	±0.2% rdg. +10D	±0.5% rdg. +30D
	AC Current Measurement	1µA...10A	1µA...10A	1µA...10A	1µA...10A	10nA...10A
	Intrinsic Error, AAC	±1.5% rdg. +2D	±1.5% rdg. +2D	±1.5% rdg. +2D	±0.5% rdg. +30D	±0.2% rdg. +30D
	Resistance Measurement	10mΩ...30MΩ	10mΩ...30MΩ	10mΩ...30MΩ	10mΩ...30MΩ	10mΩ...30MΩ
	Intrinsic Error, Resistance	±0.4% rdg. +1D	±0.4% rdg. +1D	±0.2% rdg. +1D	±0.1% rdg. +6D	±0.05% rdg+0.015+20D
	Capacitance Measurement	No	10pF...30µF	10pF...30µF	1pF...10000µF	1pF...30000µF
	Intrinsic Error, Capacitance	N/A	±1% rdg. +3D	±1% rdg. +3D	±1% rdg. +3D	±1.2% rdg+0.2rng
	Frequency/Time Period Measurement	No	1 Hz...100 kHz	1 Hz...100 kHz	10 Hz...100 kHz	10 Hz...300 kHz
	Intrinsic Error, Frequency	N/A	±0.5% rdg. +1D	±0.5% rdg. +1D	±0.1% rdg. +3D	±0.05% rdg +10D
	Temp. Measurement Pt 100/Pt 1000	Yes	Yes	Yes	Yes (-200 to 850 °C)	Yes (-200 to 850 °C)
	Temp Measurement K/J -Type Thermocouple	No	No	No	No	No
	Continuity Testing	Yes	Yes	Yes	Yes	Yes
Diagnostics & Data	Diode Test	Yes	Yes	Yes	Yes	Yes
	Duty Cycle	No	Yes	2.0...98.0%	Yes	Yes
	Hold & Peak Hold	Only Hold				
	Relative Measurement	Yes	Yes	Yes	Yes	No
	Computer Interface (optional)	Yes (Via external SI 232 adaptor, S/w compatible upto Windows Xp)				
Display	Data Logging	Yes (Via external SI232 adaptor)				
	Min-Max-Avg recording	No	Yes	Yes	Yes	No
	Analog bargraph	Yes	Yes	Yes	No	No
	Digital Display (Dimensions in mm)	65X30	65X30	65X30	65X30	65X31
	No. of Digital Display	Single	Single	Single	Single	Triple Display
	Digit Height	15 mm	15 mm	15 mm	12 mm	10mm
	Backlit	Yes	Yes	Yes	Optional	Yes
Physical Attributes & Electrical Safety	Bar Graph Scale	Yes (30 Segments)	Yes (30 Segments)	Yes (30 Segments)	Yes (30 Segments)	No
	Dimensions in mm (WXHxD)	84 X 195 X 35	84 X 195 X 35	84 X 195 X 35	84X195X35	84X195X35
	Protective Rubber Holster	Yes	Yes	Yes	Yes	Yes
	Weight with batteries	0.35 kg	0.35 kg	0.35 kg	0.35 kg	0.35 kg
	Battery/Service Life	9V/750 Hrs	9V/750 Hrs	9V/750 Hrs	9V/750 Hrs	9V/300 Hrs
	Warranty	3 year				
	Protection	IP 50				

For all measurement parameters, please read measurement as "Best resolution....Max. Range"

Rish Clip ON CT 1000/1A, 1000/5A, 300/0.3A



Rish Clamp-on CT 300 A / 1000A measures current without interrupting the conducting line. They are used for electrically isolated measurement of alternating current within a broad range.

- Minimum transformation ratio error
- Safety in accordance with IEC 61010-1.
- Transformer ratio
 - 200 : 1 in Rish Clip on CT 1000/5A
 - 1000 : 1 in Rish Clip on CT 1000/1A & 300/0.3A
- Compact and Handy design
- Class 1 accuracy
- 43 & 35 mm jaw opening/conductor diameter
- Protection of CAT III 600V
- Permanently connected safety cables.
- Weight:- Approx. 650 gm

Industrial Multimeter

Multimeter Cum Insulation Tester



Functions		Rishabh 612	Rishabh 613	Rishabh 615	Rishabh 616	Rish Mit 30
Basic Features	Digital Display (Counts)	6600	6600	6600	6600	3100
	TRMS	No	No	No	Yes	Yes
	Basic Accuracy	±0.4% rdg. +5D	±0.4% rdg. +5D	±0.4% rdg. +5D	±0.4% rdg. +5D	±0.25% rdg+ 1D
	Digits	4	4	4	4	3½
	Measuring Category	CAT III - 1000V, CAT IV - 600V	CAT II-1000V, CAT III - 600V	CAT III - 1000V, CAT IV - 600V	CAT III - 1000V, CAT IV - 600V	CAT II-1000V, CAT III 600V
	UL Approval	Yes	No	Yes	Yes	No
	Automatic Blocking System	Yes	No	Yes	Yes	Yes
	Non Contact Voltage Detection	No	No	No	No	No
Measurement	DC Voltage Measurement	100µV...1000V	100µV...1000V	100µV...1000V	100µV...1000V	100µV...1000V
	Intrinsic Error, VDC (Basic Accuracy)	±0.4% rdg. +5D	±0.4% rdg. +5D	±0.4% rdg. +5D	±0.4% rdg. +5D	± 0.25% + 1D
	AC Voltage Measurement	100µV...1000V	100µV...1000V	100µV...1000V	100µV...1000V	1mV...1000V
	Intrinsic Error, VAC	± 1.0% rdg. + 3D	± 1.0% rdg. + 3D	± 1.0% rdg. + 3D	± 1.0% rdg. + 3D	±1% rdg. + 3D
	DC Current Measurement	10µA...660mA	10µA...16A	10µA...10A	10µA...10A	100nA...300mA
	Intrinsic Error, ADC	±1.5% rdg. +5D	±1.5% rdg. +5D	±1.5% rdg. +5D	±1.5% rdg. +5D	±0.5% rdg. + 10D
	AC Current Measurement	10µA...660mA (660A by clamp)	10µA...16A	10µA...10A	10µA...10A	30/300 A (with clamps)
	Intrinsic Error, AAC	±1.5% rdg. +5D	±1.5% rdg. +5D	±1.5% rdg. +5D	±1.5% rdg. +5D	±0.5% rdg. + 5D
	Resistance Measurement	100mΩ...66MΩ	100mΩ...66MΩ	100mΩ...66MΩ	100mΩ...66MΩ	10mΩ...30MΩ
	Intrinsic Error, Resistance	±0.8% rdg. + 5D	±0.8% rdg. + 5D	±0.8% rdg. + 5D	±0.8% rdg. + 5D	±0.4% rdg. +1D
	Capacitance Measurement	No	No	1pF...40mF	1pF...40mF	10pF...30µF
	Intrinsic Error, Capacitance	N/A	N/A	± 2.0 % rdg. +10D	± 2.0 % rdg. +10D	±1% rdg. +3D
	Frequency/Time Period Measurement	No	No	10 Hz...10 MHz	10 Hz...10 MHz	1Hz...100KHz
	Intrinsic Error, Frequency	N/A	N/A	± 0.2% rdg. +2D	± 0.2% rdg. +2D	± 0.5% rdg + 1D
	Temp. Measurement Pt 100/Pt 1000	No	No	No	No	Yes (-200 to 850 °C)
Diagnostics & Data	Temp Measurement K/J -Type Thermocouple	Yes	Yes (K type)	Yes (K type)	Yes(K type)	No
	Continuity Testing	Yes	Yes	Yes	Yes	Yes
	Diode Test	Yes	Yes	Yes	Yes	Yes
	Duty Cycle	No	No	1.0.....98.90%	Yes	Yes
	Hold & Peak Hold	Yes	Yes	Yes	Yes	Only Hold
	Relative Measurement	Yes	Yes	Yes	Yes	Yes
	Computer Interface (optional)	No	No	No	No	Yes (via SI 232 adaptor, s/w compatible upto windowsXp)
	Square Wave Output	No	No	No	No	No
	Data Logging	No	No	No	No	Yes (Via external SI 232 adaptor)
	Min-Max-Avg recording	No	No	Yes	Yes	No
	Analog bargraph	Yes	Yes	Yes	Yes	Yes
	Auto Hold	No	No	No	No	No
	Percentage Conversion (0-20 & 4-20 mA)	No	No	No	No	No
	Self Battery Voltage Measurement	No	No	No	No	No
	Settable Beep Level Setting	No	No	No	No	No
Display	Settable Auto off Timing	No	No	No	No	No
	Programmable GO-NOGO feature	No	No	No	No	Yes
	dB measurement	No	No	No	No	No
	Low Pass Filter (VFD Application)	No	No	No	No	No
	LoZ Mode VAC measurement	No	No	No	No	No
Physical Attributes & Electrical Safety	Application for Android & IoT Mobiles	No	No	No	No	No
	Digital Display (Dimensions in mm)	58X31.4	58X31.4	58X31.4	58X31.4	65X30
	No. of Digital Display	Dual Display	Dual Display	Dual Display	Dual Display	Single Display
	Digit Height	12 mm	12 mm	12 mm	12 mm	12 mm
	Backlit	Yes	Yes	Yes	Yes	Yes
	Bar Graph Scale	Yes (66 Segments)	Yes (66 Segments)	Yes (66 Segments)	Yes (66 Segments)	Yes
	Dimensions in mm (WXHxD)	86 X 188 X 53	86 X 188 X 53	86 X 188 X 53	86 X 188 X 53	84X195X35
	Protective Rubber Holster	Yes	Yes	Yes	Yes	Yes
	Weight with batteries	0.48 Kg	0.48 Kg	0.48 Kg	0.48 Kg	0.35 kg
	Battery/Service Life	2X1.5 /600hrs	2X1.5 /600hrs	2X1.5 /600hrs	2X1.5 /400hrs	6 x1.5 V/300 Hrs
	Warranty			3 year		
	Protection			IP 50		

For all measurement parameters, please read measurement as "Best resolution....Max. Range"

Advanced Multimeter




Functions		Rishabh 6012/6012 Bluetooth	Rishabh 6013/6013 Bluetooth	Rishabh 6015/6015 Bluetooth	Rishabh 6016/6016 Bluetooth
Basic Features	Digital Display (Counts)	60000	60000	60000	60000
	TRMS	Yes	Yes	Yes	Yes
	Basic Accuracy	$\pm 0.05\% + 5D$	$\pm 0.05\% + 5D$	$\pm 0.05\% + 5D$	$\pm 0.05\% + 5D$
	Digits	5	5	5	5
	Measuring Category	CAT III - 1000V, CAT IV - 600V	CAT I-1000V, CAT II-600V	CAT III - 1000V, CAT IV - 600V	CAT III - 1000V, CAT IV - 600V
	Automatic Blocking System	Yes	Yes	Yes	Yes
	Non Contact Voltage Detection	No	No	No	No
Measurement	DC Voltage Measurement	1 μ V....1000V	1 μ V....1000V	1 μ V....1000V	1 μ V....1000V
	Intrinsic Error, VDC (Basic Accuracy)	$\pm 0.05\% + 5D$	$\pm 0.05\% + 5D$	$\pm 0.05\% + 5D$	$\pm 0.05\% + 5D$
	AC Voltage Measurement	1 μ V....1000V	1 μ V....1000V	1 μ V....1000V	1 μ V....1000V
	Intrinsic Error, VAC	$\pm 0.5\% + 9D$	$\pm 0.5\% + 9D$	$\pm 0.5\% + 9D$	$\pm 0.5\% + 9D$
	DC Current Measurement	10nA-10A	100 μ A-16A(20A for 30s)	10nA-10A	10nA-10A
	Intrinsic Error, ADC	$\pm 0.5\% + 15D$	$\pm 0.5\% + 15D$	$\pm 0.5\% + 15D$	$\pm 0.5\% + 15D$
	AC Current Measurement	10 nA-600mA(upto 600A via clamp) AAC+DC TRMS		10nA-10A(upto 6000A via clamp)	10nA-10A(upto 6000A via clamp)
	Intrinsic Error, AAC	$\pm 1\%+10D$	$\pm 1\%+10D$	$\pm 1\%+10D$	$\pm 1\%+10D$
	Resistance Measurement	10m Ω60M Ω	10m Ω60M Ω	10m Ω60M Ω	10m Ω60M Ω
	Intrinsic Error, Resistance	$\pm 0.1\% + 10D$	$\pm 0.1\% + 10D$	$\pm 0.1\% + 10D$	$\pm 0.1\% + 10D$
	Capacitance Measurement	No	No	10pF....1000 μ F	10pF....1000 μ F
	Intrinsic Error, Capacitance	No	No	$\pm 1\% + 6D$	$\pm 1\% + 6D$
	Frequency/Time Period Measurement	No	No	6Hz-1MHz(0.166s to 1 μ s)	6Hz-1MHz(0.166s to 1 μ s)
	Intrinsic Error, Frequency	No	No	$\pm 0.1 + 5D$	$\pm 0.1 + 5D$
	Temp. Measurement Pt 100/Pt 1000	Yes (-200 to 850 °C)	No	Yes (-200 to 850 °C)	Yes (-200 to 850 °C)
	Temp Measurement K/J -Type Thermocouple	No	Yes (-200 to 1372 °C)	Yes (-200 to 1372 °C)	Yes (-200 to 1372 °C)
Diagnostics & Data	Continuity Testing	Yes	Yes	Yes	Yes
	Diode Test	Yes	Yes	Yes	Yes
	Duty Cycle	Yes	Yes	Yes	Yes
	Hold & Peak Hold	Yes	Yes	Yes	Yes
	Relative Measurement	Yes	Yes	Yes	Yes
	Computer Interface (optional)		Yes (via plug and play USB/with Bluetooth for Bluetooth model)		
	Square Wave Output	No	No	Yes	Yes
	Data Logging	Yes (via plug and play USB/with Bluetooth for Bluetooth model)		Yes (32000 Readings internally)	Yes (32000 Readings internally)
	View feature for Logged data	No	No	Yes	Yes
	Min-Max-Avg recording	Yes	Yes	Yes	Yes
	Analog bargraph	Yes	Yes	Yes	Yes
	Auto Hold	Yes	Yes	Yes	Yes
	Percentage Conversion (0-20 & 4-20 mA)	No	No	Yes	Yes
	Self Battery Voltage Measurement	Yes	Yes	Yes	Yes
	Settable Beep Level Setting	Yes	Yes	Yes	Yes
	Settable Auto off Timing	Yes	Yes	Yes	Yes
Physical Attributes & Electrical Safety	Programmable GO-NOGO feature	Yes	Yes	Yes	Yes
	dB Measurement	No	Yes	Yes	Yes
	Low Pass Filter(VFD Application)	No	Yes	Yes	Yes
	LoZ Mode VAC measurement	No	Yes	Yes	Yes
	Application for Android & iOS Mobiles	Yes (For Bluetooth Model)	Yes (For Bluetooth Model)	Yes (For Bluetooth Model)	Yes (For Bluetooth Model)
	Digital Display (Dimensions in mm)	67 X 54	67 X 54	67 X 54	67 X 54
	No. of Digital Display	Dual Display	Dual Display	Dual Display	Dual Display
	Digit Height	12.9 mm	12.9 mm	12.9 mm	12.9 mm
	Backlit	Yes	Yes	Yes	Yes
	Bar Graph Scale	Yes	Yes	Yes	Yes
Physical Attributes & Electrical Safety	Dimensions in mm (WXHxD)	91 X 200 X 54	91 X 200 X 54	91 X 200 X 54	91 X 200 X 54
	Protective Rubber Holster	Yes	Yes	Yes	Yes
	Weight with batteries	0.5Kg	0.5Kg	0.5Kg	0.5Kg
	Battery/Service Life	2X1.5 /100hrs(40 hrs for Bluetooth model with BT ON)			
	Warranty	3 year			
Protection		IP 50			

For all measurement parameters, please read measurement as "Best resolution....Max. Range"

Clamp Meter

A **clamp meter** is a device that is used for measuring current with convenience and safety. It efficiently measures current without using any test leads. To measure current with a clamp meter, user need to place a cable/Busbar in the clamp meter's jaws. A magnetic field is formed when the current flows through the conductor. This device accurately detects the magnetic field to provide the corresponding current reading. Generally, the clamp meters perform just one job, i.e., measure current.

Exclusive Features



Patented rotating-jaw design

For easier & safe operation, jaw opening lever placed at the rear side

Robust mould casing with rubber edges for strong grip

Upto 1000V AC/DC Voltage measurement

Contactless voltage detection facility(NCV)

- High Accuracy for low current measurement
- Narrow housing for firm grip & easy to carry
- Temperature from 0 to 1300°C using K type thermocouple sensors.
- Measurement during night in darkness with user selectable Backlit
- Double moulded Cover for soft touch and firm grip of the Instrument
- 1000V CAT III / 600 V CAT IV (as per IEC 61010-1- 2010)
- IP20 Protection for terminals as per IEC60529
- AUTO POWER OFF in order to save the power of the batteries
- High user safety reach inconvenient places with easy view and comfortable operations
- Measurement of AC-DC heavy Current along with multiple electrical parameters in the 1PH and 3 PH systems
- Jaw size of
41 mm for clamp meters with current measurement upto 300/400A &
51 mm for clamp meters with current measurement upto 1000A

The applications of clamp meter includes

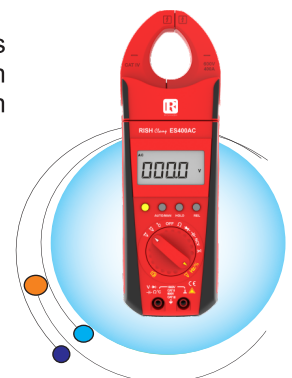
- Measurement of high value current in AC or DC Networks.
- Measurement of high value AC-DC Currents alongwith other electrical parameters measurement like Voltage, Resistance, Capacitance, Frequency, Temperature.
- Equipped with highly innovative design features which ensures high degree of safety and comfort for user.
- The applications of these meters mainly include Industrial Controls & Equipment, Commercial, Residential, Electrical systems & HVAC.

General Purpose Clamp Meters

RISH Clamp ES400AC / ES1000AC is a highly innovative design for features those increases safety and comfort of user. Clamp jaws can be opened or closed with the trigger placed at bottom side which are away from the jaws. This allows the user to place his/her hand at safer distance from live conductor. This greatly reduces exposure of human beings to electrical shocks.

Rish Clamp ES400AC / ES1000AC

- Current measurement upto 400A AC (Rish clamp ES400AC) & upto 1000A AC in (Rish Clamp ES1000AC)
- For RISH Clamp ES1000AC Jaw opening of 51mm for standard cable conductor
- Narrow housing for firm grip and easy to carry.
- Category protection upto 1000V CAT II / 600 V CAT III (as per IEC 61010-1- 2010)
- Battery:- 1.5 x 2 V AAA size, with Zinc Carbon cell appr. 200 Hrs, & Alkaline Manganese cell appr. 400Hrs
- Weight:- Approx. 0.6 Kg



Rish Clamp ES400A AC

Professional Clamp Meters

- Models: Rish Clamp 300A AC-DC / Rish Clamp 1000A AC-DC (3 3/4 digits)
- Large Jaw Opening
Rish Clamp 1000A: Jaw opening of 55mm for standard wire diameter of 50mm
Rish Clamp 300A: Jaw opening of 44mm for standard wire diameter of 40mm
- Narrow housing for firm grip and easy to carry.
- Temperatures from - 200°C to 800°C using PT 100 and PT 1000 sensors
- 1000V CAT III / 600 V CAT IV as per International Safety standard IEC 61010-1- 2001
- Protection from Dust and Water:- IP50 for Housing & IP20 for terminals (as per IEC 60529)
- Supplied with Carrying Case
- Weight:- Approx. 0.5 Kg
- Battery:- 9V DC
- Battery (life):- Minimum 220 hours (on Vdc, Adc), 80 hours (on Vac, Aac)



Rish Clamp 1000A AC/DC

High End Clamp Meters

- Models:- Rish Clamp Power 400A AC-DC / Rish Clamp Power 1000A AC-DC
- TRMS measurement
- Power Measurement in 1PH/2W, 3PH/3W & 3PH/4W balanced & unbalanced systems
- Measurement of Power parameters like Active, Reactive, Apparent Power
- Facility to measure Motor HP directly
- Harmonics measurement upto 49th Order & Individual THD measurement
- Energy measurement in Single Phase and Balanced Three Phase System
- For measurement at VFD drives, special LPF function is provided
- Bluetooth Connectivity (On request)
- Clamp meter with DUAL DISPLAY
- Non Contact Voltage Detection (NCV)
- Measurement of PF, DF, Crest factor, Phase angle
- Inrush Current / Peak Current measurement
- Weight:- Approx. 0.5 Kg
- Battery:- 9 V DC, Manganese Dioxide Cell or Alkaline manganese cell
- Battery (life):- 48 Hrs Approx



Rish Clamp Power
1000A AC/DC

Rish Clamp Solar

- Measurement range upto 1500V DC to check Solar Inverter Input Voltage
- Extended Current range upto 1500AAC (TRMS) / DC for measurement at high Current Carrying applications
- Patented rotational jaw feature so as to keep display in front in every situation
- Patented trigger at back side so as to keep a safe distance from loads and offer operational efficiency
- Double mould Casing to offer higher grip while holding the meter
- Consists of AC voltage upto 1000V (TRMS), Resistance, Continuity, Capacitance, Frequency, Diode, Duty Cycle, Temperature, etc. functions
- Complies with CE, IP 50, CAT IV 600V Protection
- Weight:- Approx. 0.6 Kg
- Battery:- 9 V DC, Manganese Dioxide Cell or Alkaline manganese cell
- Battery (life):- Minimum 220 hours on Vdc, Adc, 80 hours on Vac, Aac.



Rish Clamp Solar

Selection Table

Parameters	RISH Clamp 1000A AC	RISH Clamp 300A AC	RISH Clamp 1000A AC/DC	RISH Clamp 300A AC/DC	RISH Clamp ES 1000 AC	RISH Clamp ES 400A AC
AC Current Measurement	2...1000 A	0.2...300 A	2...1000 A	0.2...300 A	4...1000 A	4...400 A
Intrinsic Error A AC	1.5% of rdg. +5D	1.5% of rdg. +5D	1.5% of rdg. +5D	± 1.5% + 5D	± 1.5% + 5D	± 1.5% + 5D
Measurement Type AAC	Average	Average	TRMS	TRMS	Average	Average
AC Voltage Measurement	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V
Intrinsic Error V AC	0.75% of rdg +1D	0.75% of rdg +1D	0.75% of rdg +1D	± 0.75% +2D	± 1% +5D	± 1% +5D
Measurement Type VAC	Average	Average	TRMS	TRMS	Average	Average
DC Voltage Measurement	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V
Intrinsic Error V DC	0.25% of rdg+1D	0.25% of rdg+1D	0.25% of rdg+1D	± 0.25% +1D	± 0.75% +2D	± 0.75% +2D
Resistance	30MΩ	30MΩ	30MΩ	30MΩ	40MΩ	40MΩ
Intrinsic Error Resistance	2% of rdg + 1D	2% of rdg + 1D	2% of rdg + 1D	± 4% + 1D	± 0.8 + 2D	± 0.8 + 2D
Continuity	0... 300Ω	0... 300Ω	0... 300Ω	0... 300Ω	0... 400Ω	0... 400Ω
Diode Test	0...2.0 V	0...2.0 V	0...2.0 V	0...2.0 V	0...1 V	0...1 V
DC Current Measurement	-	-	1000 A	0.2...300A	-	-
Intrinsic Error A DC	-	-	1.5% of rdg. +5D	± 1.5% + 5D	-	-
Frequency	100.0KHz	100.0KHz	100.0KHz	100.0KHz	500.0KHz	500.0KHz
Capacitance	30.00μF	30.00μF	30.00μF	30.00μF	200.00μF	200.00μF
Warranty	1 Year	1 Year	1 Year	1 Year	1 Year	1 Year

Insulation Testers use a high Voltage, low Current DC charge to measure the Resistance within wires and motor windings to identify Current leakage and faulty or damaged Insulation, which can lead to arc faults, blown circuits, and risk of electrical shock or fire. Megaohm meters are ideal for monitoring machine health and improving preventative maintenance efforts.

Exclusive Features :

- Selectable test Voltages upto 5kV(as per model)
- Upto 1TΩ Wide insulation resistance range
- Facility to discharge Capacitive circuits automatically
- Facility to operate on Mains, Battery and Hand crank(on request)

Rish Insu-10

- Insulation Resistance measurement from 10kΩ to 999MΩ
- Selectable Test Voltages 50V / 100V / 250V / 500V / 1000V
- Low Resistance measurement 0.01Ω to 99.9Ω
- Voltage Measurement <25V to 600V AC/DC
- Live Circuit Detection >25V irrespective of function selected
- Automatic Discharge of Capacitive circuits after Test performed
- Storage of Min/Max values
- Storage memory for last 50 readings
- Preselectable Measurement time for Insulation Resistance
- Continuity Testing with Programmable Threshold Resistance
- Stop Watch function, Blown Fuse Indication
- Auto Power OFF
- Power supply battery 6 x 1.5V Cells, IEC LR6
- Weight:- Approx. 0.50 Kg

1kV / 1GΩ Insulation tester



Rish Insu-20

1kV / 2GΩ Insulation tester

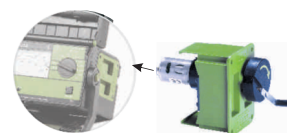


- Insulation Resistance measurement from 10kΩ to 2GΩ
- Selectable Test Voltages 50V / 100V / 250V / 500V / 1000V
- Low Resistance measurement 0.01Ω to 99.9Ω
- Voltage Measurement <25V to 600V AC/DC
- Optional: Connector jack for External Mains Adapter, 230VAC / 9VDC
- User Selectable Backlit Display
- Storage memory for last 50 readings
- Live Circuit Detection >25V irrespective of function selected
- Automatic Discharge of Capacitive circuits after Test performed
- Preselectable Limit Checks (Go / No Go option)
- Preselectable Measurement time for Insulation Resistance
- Lead Resistance Null facility for accurate measurement
- Stop Watch function, Blown Fuse Indication
- Auto power OFF, Low Battery Indication
- Power supply battery 6 x 1.5V Cells, IEC LR6
- Weight:- Approx. 0.50 Kg

Rish Insu 5000 A/AK/AKM/AKMR

- Models:- 5000A - (With Battery)
- 5000AK - (With Hand crank + Battery)
- 5000AKM - (With Hand crank + Battery + Mains)
- 5000AKMR - (With Hand crank + Mains+ Rechargeable Battery)
- Rugged 5kV Insulation Tester from state-of-the-art GERMAN TECHNOLOGY
- Insulation Resistance measurement from 10kΩ to 1TΩ
- Selectable Test Voltages 100V /250V /500V /1000V /1500V /2000V /2500V /5000V
- Test current is equal to 1mA at Test Voltage 100V, 250V, 500V & 1000V
- Voltage Measurement upto 2500V AC/DC
- Easy to read logarithmic scales with dual range
- Guard Terminal for elimination of surface Current
- Permanently connected Test leads with heavy duty insulation
- Green LED indicator for battery charge status
- Automatic Discharge of Capacitive circuits after Test performed
- Precheck of absence of voltages
- Electrical Safety: Protection Class II, IP 52
- Electromagnetic Compatibility (EMC)
- Applications: Insulation Measurement for Cables, motors, switchgear, Transformers etc.
- Power Supply 6 x 1.5V as per IEC R20
- Weight:- Approx. 3.4 Kg. (including Battery) & 4.5 Kg. (Including Battery & Mains Assembly)

HT 5kV Insulation Testers



Hand Crank Generator

Rish Insu 10Dx+

Ideal for testing insulation in live Switch yards

- Selectable short circuit Current 1.2mA, 3mA and 6mA
- Test voltage can be selected in steps of 10V from (100V to 1kV) & in steps of 25V from (1kV to 10kV)
- Insulation resistance measurement upto 20T Ω
- User selectable digital filters
- Noise Rejection upto 8 mA
- Operates on rechargeable Li-ion battery and Mains as well
- Bluetooth connectivity for data logging
- Touch screen TFT colour display
- Audio Read-out of measured insulation value
- Measurement of DC and AC voltages from 20V ~ 600V
- Three programmable timers
- Insulation leakage current measurement
- PI, DAR, DD, Step voltage & Ramp Test
- Weight:- Approx. 5Kg

10 kV / 20T Ω Insulation Tester



Rish Insu 5Dx+



5kV / 10T Ω Insulation Tester

A field insulation testing instrument

- Measurement up to 10T Ω & test voltages upto 5kV with 6mA short circuit current, to cater wide range of applications
- PI, DAR, SV/Ramp, DD, Burn/Breakdown test for diagnostic testing of various devices
- First ever Touch screen TFT color display & Audio readout of test results, making it highly user friendly
- Mobile app facility to operate instrument via Mobile enhancing safety
- Upto 8mA noise rejection for smooth, stable operation in noisy environment
- IP 67 (for close case) & IP 52 (for open case), CAT IV 600V protection
- Battery life:- 6 Hrs continuous testing at 5kV 100M Ω
- Weight:- Approx. 5Kg

Rish Insu 5Dt

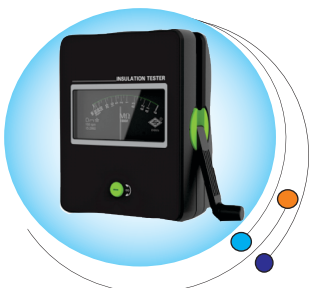
A perfect fit for all insulation testing needs

- First ever Touch screen TFT color display
- Test voltage in steps of 10V from (100V to 1kV) & in steps of 25V from (1kV to 5kV)
- User selectable digital filters & Three programmable timers
- Noise Rejection 8 mA
- Measurement of DC and AC voltages from 20V ~ 600V
- Insulation leakage Current measurement
- PI, DAR, DD, Step voltage & Ramp Test
- Connectivity with PC & Mobile to do analysis, operate instrument & enhance safety
- IP 52, CAT IV 600V protection
- Operation on Mains & Rechargeable Battery for use in any condition(Optional)
- Battery life:- 3 Hrs continuous testing (at 5kV 100M Ω)
- Weight:- Approx. 5Kg

5kV / 2T Ω Insulation Tester



Low Voltage Insulation Tester (PC body)

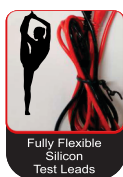


- Housed with robust Polycarbonate (PC) material case which offers high ruggedness
- Rated Voltages: 500V, 1000V; Insulation Resistance: 100M Ω , 200M Ω
- Option ITC: Continuity measurement (0 to 5K Ω)
- The compact instrument offers easy portability
- Self-powered (hand crank generator) instrument - So no battery required
- Easy to rotate generator with self-lubricating molded gears and oil impregnated bushes to eliminate mechanical maintenance
- Product design and performance in compliance to IS:2992
- World Class Aesthetics, for better user experience
- Weight:- Approx. 650 gm

Rishabh Test Leads



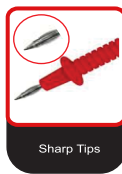
Flexible Leads



Fully Flexible Silicon Test Leads



Firm Connection



Sharp Tips



Crocodile Clips



4 mm spring engagement for Firm Connection



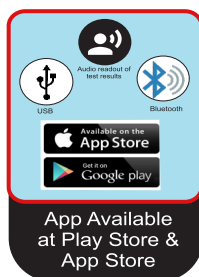
Ergonomically Designed

Silicon rubber cable offers high flexibility

High Thickness of Insulation for additional Safety

Low contact resistance for accurate measurements

Nominal voltage upto 1000V and current upto 16A



CAT II 1000V (with protective Caps CAT III 1000V/CAT IV 600V)

High Voltage Test 8kV AC, 50Hz for 1 Min @ 25 Deg.C

Applicable standards: IEC/EN61010-2-031

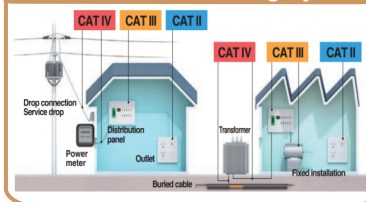
Plug and Play USB connectivity with PC



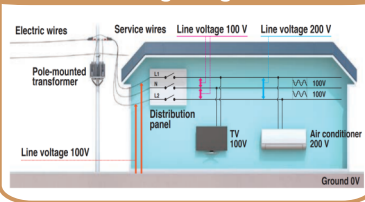
Measurement Category - Anticipated Transient

Under safety standards EN61010 Series, measurement is classified into Categories II to IV according to the measurement point's rated voltage to ground, current capacity (size of current that flows in a short-circuit fault), etc., and the transient over voltage that occurs at the measurement point

Measurement Category



Rated voltage to ground



CAT II : Measurement at a point from the power plug to the equipment's power circuits, where equipment is directly connected to an outlet

CAT III : Measurement at a point on the power distribution cabling or power supply circuits, or at a point from the distribution panel to a distribution terminal behind an outlet, where equipment (for example a fixed installation) takes electricity directly from a distribution panel.

CAT IV : Measurement at a point on a service drop to a building, or on the line from the drop connection to the power meter or distribution panel

Assuming 600 V for the measurement point's voltage to ground, a Category IV location could potentially include transient over voltage of 8000 V. Hence, CAT IV measurement instruments are designed to withstand transient over voltage of 8000 V. CAT III measurement instruments can only withstand up to 6000 V, so if 8000 V transient over voltage enters, it will cause insulation breakdown that could result in electric shock.

Anticipated Transient Overvoltage

Rated voltage to ground	Transient overvoltage		
	CAT II	CAT III	CAT IV
300 V	2500 V	4000 V	6000 V
600 V	4000 V	6000 V	8000 V
1000 V	6000 V	8000 V	1200 V
1500 V	8000 V	1000 V	1500 V
2000 V	1200 V	1500 V	1800 V

Power lines in factories and similar facilities will at times include transient overvoltage (impulse voltage) that is around 10 times the power source voltage. The transient overvoltage of the measurement points must be predicted in advance, and the instrument will need a safety design that will enable it to withstand such overvoltage.

Marks

CAT IV	600 V
Measurement category	Rated voltage to ground

Never measure a measurement point with a higher category number than the category indicated on the measuring instrument. Doing so could lead to a serious accident such as electric shock.

Product upgrades is a continuous process. Hence, data in this catalog is subject to change without prior notice.
Note: For more details, please refer Technical Datasheets or do contact us

Authorized dealer



Rishabh Instruments Ltd.

Address:- F-31, MIDC, Satpur Nashik - 422007, Maharashtra, India

global@rishabh.co.in

+91-253 2202004 / 06 / 08

www.rishabh.co.in