



BEARING & TOOL CENTRE

Head Office :1st Floor, Vyapar Bhavan, Kadia Kui, Relief Road, Ahmedabad- 380001.
Phone : 079 - 22160386, 22134835, 30229824, 65254835 | Mobile : 9327004639



Ahmedabad Branch
GF- B -14, Jayraj Complex,Nr. Soni Ni Chawl,
Odhav, Ahmedabad-382415.
Ph.: 079 - 22890202, 30428950 (M) 9375706648

Ahmedabad Branch
B-31, Tejendra Complex, Opp CMC,
Odhav, Ahmedabad - 382415.
Phone : 079 - 22874657

Baroda Branch
108, First Floor, Brij Industries, Plot No A - 2 - 10 GIDC,
Makarapura, Susan Char Rasta , Baroda - 10.
M. 9409230832

Web Site : www.bearingtoolcentre.com | Email : info@bearingtoolcentre.com

BLUE MICRON CALIBRATION CENTRE
(TRACEABLE TO NPL / NABL)

RELIEF SERVICE CENTRE
Removal of Jaw Error, Bore Gauge, Extension & Instrument Modifications and Spares

Quotation

70 | Testing Instruments

Item Model no	Anemometer 4201	Vibration 8201 HA	Sound Level 4001	Sound Level 4010	Humidity HT 305	4 IN 1 LM – 8000
Range	0.4 – 30.0 m/s	0.5 – 199.9 mm/s	30-130 db	35-130 db	0 – 95% RH	-
Least count	0.1 m/s		0.1 db	0.1 db	0.1%	-
Lutron Make Rs.	5070	17550	6630	4680	5070	5980

Item Model no	Lux 101	TDS Meter	Ph + Probe 201 + ---	Oxygen 8810	Clamp meter 6046	Stroboscope DT 2239 A
range	0-50000 lux	10– 1900 ppm			13 mm	100 – 10000 fpm
Least count	1,10 &100				0.5”	100 / 5000 fpm
Lutron Make Rs.	2600	1885	2600 + 1560	13650	2990	9750

70 – 1 | PH/ Conductivity / TDS Testers - Combined

Item Model no	pH/conductivity/TDS Testers HI 98129	pH/conductivity/TDS Testers HI 98130
Range	0.00 to 14.00 PH	0.00 to 14.00 PH
Least count	0.01 PH	0.01 PH
Hanna Make Rs.	8300	8300

Terms & Conditions –

- ✚ Goods offered - Subject to Prior Sale
- ✚ Price Validity: "15 Days from Date of Quotation"
- ✚ C.S.T 2% extra against form C. Otherwise 5% without form C For Out of Gujarat Sales only.
- ✚ VAT 5% extra for Sales within Gujarat. Prices Ex-Godown Ahmedabad.
- ✚ Payment against Proforma Invoice, Packing, Forwarding & Freight extra.
- ✚ **Bank Detail** – Kotak Mahindra Bank Ltd.
- ✚ **Branch** – Shivranjini
- ✚ **Bank IFSC Code** - KKBK 0000 810
- ✚ **Bank Account No.** 08102 00000 2689
- ✚ Note - While making payment online do mention your Company's name.
- ✚ TIN NO 24070901229 , CST No. 24570901229
- ✚ We are looking forward to your valued orders.

DIGITAL ANEMOMETER

Model : AM-4201

ISO-9001, CE, IEC1010



FEATURES

- * The portable anemometer provides fast accurate readings with digital readability and the convenience of a remote sensor separately.
- * Multi-functions for air flow measurement:
m/s, km/h, ft/min, knots.
- * Low-friction ball-bearing design resulting in accuracy at both high and low velocities.
- * Conventional twisted vane arms, always a source of unreliability have been eliminated.
- * DATA HOLD.
- * Compact housing cabinet.
- * Wide applications: use this anemometer to check air conditioning & heating systems, measure air velocities, wind speeds, temperature...etc.



Lutron

LUTRON ELECTRONIC

The Art of Measurement

DIGITAL ANEMOMETER

Model : AM-4201

FEATURES	
* The portable anemometer provides fast, accurate readings, with digital readability and the convenience of a remote sensor separately.	* DATA HOLD function for stored the desired value on display. Large LCD display, easy to read.
* Multi-functions for air flow measurement: m/s, km/h, ft/min, knots.	* LCD display for low power consumption & clear read-out even in bright ambient light condition.
* Low-friction ball-bearing design allows free vane movement, resulting in accuracy at both high & low velocities.	* Used the durable, long-lasting components, including a strong, light weight ABS-plastic housing case.
* A sensitive balanced vane wheel rotates freely in response to air flow.	* Wide applications: use this anemometer to check air conditioning & heating systems, measure air velocities, wind speeds, temperature...etc.
* Conventional twisted vane arms, always a source of unreliability have been eliminated.	
* Compact housing cabinet, easy to carry out.	
* Built-in low battery indicator.	

GENERAL SPECIFICATIONS			
Display	18mm (0.7") LCD (Liquid Crystal Display), 3 1/2 digits.	Temp. Sensor * AM4202 only	Naked-bead type k thermocouple probe.
Measurement	m/s (meters per second), km/h (kilometers per hour), ft/min (feet/per minute), knots (nautical miles per hour), Temp.- °C, °F (AM-4202 only). Data hold.	Power Supply	DC 9V 006P, MN1604(PP3) battery (Heavy Duty Type) or equivalent.
		Power Consumption	Approx. DC 9 mA.
		Weight	325 g/0.72 LB (including battery).
Operating Temp.	0 °C to 50 °C (32 °F to 122 °F).	Dimension	<i>Instrument :</i> 168 x 80 x 35mm (6.6 x 3.2 x 1.2 inch) <i>Sensor Head :</i> Round, 72 mm Dia.
Operating Humidity	Less than 80 % RH.		
Air Velocity Sensor Structure	Conventional twisted vane arms and low-friction ball-bearing design.	Standard Accessories	Instruction Manual.....1 PC. Sensor probe.....1 PC. Carrying case.....1 PC.

ELECTRICAL SPECIFICATION (23 ± 5 °C)			
A. Air velocity			
<i>Measurement</i>	<i>Range</i>	<i>Resolution</i>	<i>Accuracy</i>
m/s	0.4-30.0 m/s	0.1 m/s	± (2 % + 1 d)
km/h	1.4-108.0 km/h	0.1 km/h	± (2 % + 3 d)
ft/min.	80-5910 ft/min.	10 ft/min.	± (2 % + 2 d)
knots	0.8-58.3 knots	0.1 knots	± (2 % + 2 d)
<i>Note: m/s - meters per second km/h - kilometers per hour ft/min - feet/per minute knots - nautical miles per hour</i>			

* Appearance and specifications listed in this brochure are subject to change without notice.

408-AM4201

VIBRATION METER

Model : VB-8201HA

ISO-9001, CE, IEC1010



FEATURES

- * Applications for industrial vibration monitoring : All industrial machinery vibrates. The level of vibration is a useful guide to machine condition. Poor balance, misalignment and looseness of the structure will cause the vibration level increase, it is a sure sign that the maintenance is needed.
- * Frequency range 10 Hz - 1 kHz, sensitivity relative meet ISO 2954.
- * Supply with vibration sensor & magnetic base, full set.
- * Velocity range : 200 mm/s.
- * Acceleration range : 200 m/s²
- * RMS & Peak measurement.
- * Data hold, Memory (Max. & Min.).
- * Separate vibration probe.
- * Optional data acquisition software.
- * Microcomputer circuit.
- * Auto shut off saves battery life.
- * Hard carrying case include.



Lutron

LUTRON ELECTRONIC

The Art of Measurement

VIBRATION METER

Model : VB-8201HA

FEATURES

* Applications for industrial vibration monitoring : All industrial machinery vibrates. The level of vibration is a useful guide to machine condition. Poor balance, misalignment & looseness of the structure will cause the vibration level increase, it is a sure sign that the maintenance is needed.	* RMS & Peak measurement. * Wide frequency range. * Data hold button to freeze the desired reading. * Memory function to record maximum and minimum reading with recall. * Separate vibration probe, easy operation.
* Frequency range 10 Hz - 1 kHz, sensitivity relative meet ISO 2954.	* Super large LCD display. * Microcomputer circuit, high performance.
* Professional vibration meter supply with vibration sensor & magnetic base, full set.	* Auto shut off saves battery life. * Built-in low battery indicator.
* Velocity measuring range 200 mm/s.	* Heavy duty & compact housing case.
* Acceleration measuring range 200 m/s ² .	* Complete set with the hard carrying case.

SPECIFICATIONS

Display	61 mm x 34 mm supper large LCD display. 15 mm (0.6") digit size.	Memory	Maximum & Minimum value.	
		Sampling time	Approx. 1 second.	
		Operating temperature	0 to 50 °C (32 to 122 °F).	
Measurement	Velocity, Acceleration RMS value, Peak value, Data hold, Max. & Min. value.	Operating humidity	Less than 80% RH.	
		Power supply	Alkaline or heavy duty type, DC 9V battery, 006P, MN1604 (PP3) or equivalent.	
Range	<i>Velocity :</i> 200 mm/s : 0.5 to 199.9 mm/s	Power consumption	Approx. DC 6 mA.	
	<i>Acceleration :</i> 200 m/s ² : 0.5 to 199.9 m/s ²		Weight	<i>Meter</i>
Frequency range	10 Hz to 1 KHz <i>* Sensitivity relative during the the frequency range meet ISO 2954</i>	Dimension		<i>Meter :</i> 185 x 78 x 38 mm (7.3 x 3.1 x 1.5 inch).
			Calibration point	<i>Vibration sensor probe:</i> Round 16 mm Dia. x 29 mm.
Circuit	Exclusive microcomputer circuit.	Accessories included		Instruction manual..... 1 PC.
Data hold	Freeze the desired reading.		Vibration sensor (VB-81A) 1 PC.	
Peak measurement	To measure the peak value.		Cable..... 1 PC.	
Power off	Auto shut off, saves battery life, or manual off by push button.		Magnetic base..... 1 PC.	
			Carrying Case..... 1 PC.	

IEC 61672 class 2

SOUND LEVEL METER

Model : SL-4001

ISO-9001, CE, IEC1010



LUTRON ELECTRONIC



The Art of Measurement

SPECIFICATIONS	
Display	18mm (0.7") LCD (Liquid Crystal Display), 3 1/2 digits.
Function	dB (A & C frequency weighting), Time weighting(Fast, Slow), Max. hold, AC & DC output.
Measurement Range	3 ranges, 30 to 130 dB, input signal only.
Resolution	0.1 dB.
Accuracy (23 ± 5 °C)	Frequency weighting meet IEC 61672 class 2, calibrating input signal on 94 dB(31.5 Hz to 8 kHz), then the accuracy of frequency weighting is specified as following: <i>31.5 Hz - ± 3.5 dB, 63 Hz - ± 2.5 dB, 125 Hz - ± 2.0 dB</i> <i>250 Hz - ± 1.9 dB, 500 Hz - ± 1.9 dB, 1 kHz - ± 1.4 dB</i> <i>2 kHz - ± 2.6 dB, 4 kHz - ± 3.6 dB, 8 kHz - ± 5.6 dB</i>
Frequency Weighting Network	Characteristics of A & C.
	A weighting - The characteristic is simulated as "Human Ear Listing" response. Typical, if making the environmental sound level measurement, always select to A weighting. C weighting - The characteristic is near the "FLAT" response. Typical, it is suitable for checking the noise of machinery (Q.C. check) & knowing the sound pressure level of the tested equipment.
Frequency	31.5 Hz to 8,000 Hz.
Calibrator	B & K (Bruel & kjaer), multi-fuction acoustic calibrator, model : 4226.
Microphone type	Electric condenser microphone.
Size of microphone	1/2 inch standard size.
Range selector	30 to 80 dB, 50 to 100 dB, 80 to 130 dB, 50 dB on each step, with over & under range indicating.
Time weighting (Fast & Slow)	Fast - t = 200 ms, Slow - t = 500 ms, * "Fast" range is simulated the human ear response time weighting. "Slow" range is easy to get the average values of vibration sound level.
Calibration	* Build in external calibration VR, easy to calibrate by external screw driver. * Internal oscillation system, 1 KHz sine wave generator.
Output Signal	AC output - AC 0.5 Vrms corresponding to each range step. DC output - DC 0.3 to 1.3 VDC, 10 mV per dB. Out put impedance - 600 ohm.
Output terminal	3.5 mm phone output terminal is provided for connection with analyzer, level recorder, tape recorder.
Operating Temp.	0 °C to 50 °C (32 °F to 122 °F).
Operating Humidity	Less than 80% RH
Power Supply	006P DC 9V battery(heavy duty type).
Power Consumption	Approx. DC 6mA.
Dimension	205 x 80 x 35 mm (8.1 x 3.2 x 1.4 inch).
Weight	280 g/0.62 LB (including battery).
Standard Accessories	Instruction Manual 1 PC. Calibration screw driver..... 1 PC.
Optional Accessories	94 dB Sound Calibrator, Model : SC-941.
	94 dB/114 dB Sound Calibrator, Model : SC-942.
	Hard carrying case, Model : CA-06.

* Appearance and specifications listed in this brochure are subject to change without notice.

0711-SL4001

IEC 61672 class 2, economical type

SOUND LEVEL METER

Model : SL-4010

ISO-9001, CE, IEC1010



Lutron

LUTRON ELECTRONIC

The Art of Measurement

FEATURES

* Large LCD display, easy to read.	* LCD display for low power consumption & clear read-out even in bright ambient light condition.
* Characteristic of " A " frequency weighting network are designed to meet IEC 61672 class 2.	
* " Fast " time weighting characteristic mode.	* Used the durable, long-lasting components, including a strong, light weight ABS-plastic housing case.
* Build in adj. VR is available for easy calibration.	
* Condenser microphone for high accuracy & long-term stability.	* Small and light weight design allow one hand operation.
* Hold function to freeze the display value.	* Low battery indicator.
* Warning indicator for over and under range.	* High quality with economical cost.

SPECIFICATIONS

Display	18 mm (0.7") LCD (Liquid Crystal Display), 3 1/2 digits.
Measurement Range	35 to 130 dB, 3 ranges : <i>range 1 - 35 to 80 dB, range 2 - 50 to 100 dB, range 3 - 80 to 130 dB, Each range with warning indicator for over & under load.</i>
Resolution	0.1 dB.
Measurement Frequency	31.5 Hz to 8,000 Hz.
Frequency Weighting Network	Characteristics of " A " frequency weighting network. <i>The " A weighting " characteristic is simulated as "Human Ear Listing" response.</i>
Time Weighting	Default to " Fast " time weighting characteristics. <i>" Fast time weighting " is simulated the human ear response character.</i>
Accuracy (23 ± 5 °C)	Characteristics of " A " frequency weighting network meet IEC 61672 class 2. Under 94 dB input signal, the accuracy are : <i>31.5 Hz - ± 3.5 dB, 63 Hz - ± 2.5 dB, 125 Hz - ± 2.0 dB 250 Hz - ± 1.9 dB, 500 Hz - ± 1.9 dB, 1 kHz - ± 1.4 dB 2 kHz - ± 2.6 dB, 4 kHz - ± 3.6 dB, 8 kHz - ± 5.6 dB</i>
Calibrator	B & K (Bruel & kjaer), multi-fuction acoustic calibrator, model : 4226.
Microphone type	Electric condenser microphone.
Size of microphone	1/2 inch standard size.
Calibration VR	Build in external calibration VR, easy to calibrate on 94 dB level by screw driver.
Data Hold	Hold function to freeze the display value.
Operating Temp.	0 °C to 50 °C (32 °F to 122 °F).
Operating Humidity	Less than 80% RH
Power Supply	006P DC 9V battery (heavy duty type).
Power Consumption	Approx. DC 6 mA.
Dimension	225 x 70 x 28 mm (8.9 x 2.8 x 1.1 inch).
Weight	250 g/0.55 LB (including battery).
Standard Accessories	Instruction Manual 1 PC.
Optional Accessories	94 dB Sound Calibrator, Model : SC-941.
	94 dB/114 dB Sound Calibrator, Model : SC-942.
	Hard carrying case, Model : CA-06.

* Appearance and specifications listed in this brochure are subject to change without notice.

0711-SL401

Humidity, Dew Point, Temperature, Fast response

HUMIDITY METER

Model : HT-305

ISO-9001, CE, IEC1010



Lutron
LUTRON ELECTRONIC

The Art of Measurement

HUMIDITY METER

Model : HT-305

FEATURES	
* Humidity + Temperature + Dew point are combined into one meter, intelligent and professional.	* LCD with two display, easy readout.
* 0.1 %RH resolution for the humidity reading, 0.1 degree resolution for the Temp. reading.	* Heavy duty & compact housing case, designed for easy carry out & operation.
* Pocket size with Separate humidity & temp. probe, easy operation. & remote measurement.	* Records Maximum and Minimum readings with Recall.
* Fast humidity measuring response time.	* Auto shut off saves battery life.
* High accuracy and high precision.	* Data hold function for freezing the desired value on display.
* Dew point measurement.	* Show the humidity & temperature values on the LCD display at same time.
* Just few panel buttons, easy operation.	* Built-in low battery indicator.
* Microprocessor circuit assures maximum possible accuracy, provides special functions and features.	* Wide humidity & temp. measuring range.
	* DC 9V power adapter input socket.

GENERAL SPECIFICATIONS			
Circuit	Custom one-chip of microprocessor LSI circuit.	Operating Humidity	Probe : 0 to 95 %RH. Main instrument : Less than 85% R.H.
Display	LCD size : 44 mm x 29 mm dual function LCD display.	Power Supply	006P DC 9V battery (Alkaline or Heavy duty type).
Measurement Unit	Humidity : %RH (Relative Humidity) Temperature : °C or °F. Dew point : °C or °F.	Power Current	Approx. DC 4.6 mA.
Response Time	5 to 30 seconds typically. @ Reach the 85% reading value	Weight	264 g/0.67 LB. @ Battery is included.
Temperature Compensation	Automatic temp. compensation for the humidity function.	Dimension	Main instrument : 135 x 60 x 33 mm, (5.3 x 2.4 x 1.3 inch). Humidity Sensor Probe : 197 mm (7.8 inch) in length.
Data Hold	Freeze the display reading.	Accessories Included	Instruction manual..... 1 PC Humidity probe..... 1 PC
Memory Recall	Maximum & Minimum value.	Optional Accessories	Hard carrying caseCA-06 Soft carrying case..... CA-05A
Sampling Time	Approx. 0.8 second.		
Power off	Auto shut off saves battery life.		
Operating Temperature	Probe : -20 to 60 °C. Main instrument : 0 to 50 °C.		

ELECTRICAL SPECIFICATIONS (23± 5 °C)					
Humidity/ Temperature			Dew Point		
Humidity	Range	10 % to 95 % R.H.	°C	Range	-25.3 °C to 48.9 °C
	Resolution	0.1 % R.H.		Resolution	0.1 °C
	Accuracy	< 70% RH : ± 3 %RH. ≥70% RH : ± (3% reading + 1 %RH).	°F	Range	-13.5 °F to 120.1 °F.
Resolution				0.1 °F.	
Temperature	Range	-20 °C to 60 °C.	Remark : * Dew Point display value is calculated from the Humidity/Temp. measurement automatically. * The Dew Point accuracy is sum accuracy value of Humidity & Temperature measurement..		
	Resolution	0.1 degree			
	Accuracy	°C - 0.8 °C. °F - 1.5 °F.			

* Appearance and specifications listed in this brochure are subject to change without notice.

0609-HT305

Anemometer, Humidity Light Meter, Thermometer

Model : LM-8000

ISO-9001, CE, IEC1010



FEATURES

- * 4 in 1 professional measuring instrument:
Anemometer, Hygrometer, Thermometer, and Light meter.
- * Tiny bone shape with lightweight and small size case design.
- * Low-friction ball vane wheels design provides high accuracy at high and low air velocity.
- * Exclusive photo diode and color correction filter light sensor, spectrum meets C.I.E. photopic.
- * High precision thin-film capacitance humidity sensor with fast response.
- * Standard type K (NiCr-NiAl) thermocouple outlet suitable for all kinds of type K probe.
- * Build in microprocessor circuit assures excellent performance and accuracy.
- * Maximum and minimum value. Zero button, Data hold.



Lutron

LUTRON ELECTRONIC

The Art of Measurement

4 in 1

Anemometer, Humidity Light Meter, Thermometer

Model : LM-8000

FEATURES	
* The LM-8000 is a 4 in 1 professional measuring instrument: Anemometer, Hygrometer, Thermometer, and Light meter.	
* Tiny bone shape with lightweight and small size case design are suitable for handling with one hand.	
* Wristlet design provides extra protection to the instrument especially for user one hand operation.	
* Low-friction ball vane wheels design provides high accuracy at high and low air velocity.	
* Exclusive photo diode and color correction filter light sensor, spectrum meets C.I.E. photopic.	
* High precision thin-film capacitance humidity sensor with fast response to the humidity variety.	
* Standard type K (NiCr-NiAl) thermocouple outlet suitable for all kinds of type K probe.	
* Build in microprocessor circuit assures excellent performance and accuracy.	
* Concise and compact buttons arrangement, easy operation.	
* Memorize the maximum and minimum value with recall.	
* °C/°F selectable by pressing button on the front panel.	
* Lux/Feet-candle selectable by pressing button on the front panel.	
* Air velocity measuring units selectable by pressing button on the front panel for five kinds of units.	
* Multi channels display for relative humidity and temperature measured values or air velocity and temperature measured values at the same time.	
* Zero button design makes light meter calibration.	
* Hold function to freeze the current reading value.	

GENERAL SPECIFICATIONS	
Display	LCD display, 8 mm digit height.
Measurement	Anemometer, Humidity, Temperature, Light
Operating Humidity	Max. 80% RH.
Operating Temperature	0 to 50° C (32 to 122° F)
Over Input Display	Indication of " - - - "
Power Supply	006P DC 9V battery (Heavy duty type)
Power Consumption	Approx. DC 6.2 mA
Weight	160g (battery included)
Dimension	HWD 156x60x33 mm (6.14x2.36x1.29 inch).
Standard Accessory	Instruction Manual
Optional Accessories	Carrying case. Type K Temperature probe.

* Appearance and specifications listed in this brochure are subject to change without notice.

ELECTRICAL SPECIFICATION (23 ± 5°C)			
Measurement		Range	Resolution
Air velocity	ft/min	80 to 5910 ft/min	1 ft/min
	m/s	0.4 to 30.0 m/s	0.1 m/s
	km/h	1.4 to 108.0 km/h	0.1 km/h
	MPH	0.9 to 67.0 mile/h	0.1 MPH
	knots	0.8 to 58.3 knots	0.1 knots
Temperature (thermister)		32 to 122 °F	0.1 °F
		0 to 50 °C	0.1 °C
Humidity	% RH	10 to 95 %RH	0.1 %RH
	Temperature (thermister)	32 to 122 °F	0.1 °F
Light		0 to 50 °C	0.1 °C
	Lux	0 to 20,000 Lux	1 Lux
Temperature (Type K)		0 to 2,000 Fc	1 Ft-cd
		-148 to 2372 °F	0.1 °F
		-100 to 1300 °C	0.1 °C

Measurement	Range	Accuracy
Air velocity	80 to 5910 ft/min	$\leq 20 \text{ m/s} : \pm 3\% \text{ F.S.}$ $> 20 \text{ m/s} : \pm 4\% \text{ F.S.}$
	0.4 to 30.0 m/s	
	1.4 to 108.0 km/h	
	0.9 to 67.0 mile/h	
	0.8 to 58.3 knots	
Humidity	32 to 122 °F	$\pm 2.5 \text{ °F}$
	0 to 50 °C	$\pm 1.2 \text{ °C}$
	10 to 95 %RH	$< 70\% \text{ RH} :$ $\pm 4\% \text{ RH}$ $\geq 70\% \text{ RH} :$ $\pm (4\% \text{rdg} + 1.2\% \text{RH})$
	0 to 50 °C	$\pm 1.2 \text{ °C}$
Light	0 to 20,000 Lux	$\pm 5\% \text{ rdg} \pm 8 \text{ dgt}$
	0 to 2,000 Fc	
Temperature (Type K)	-148 to 2372 °F	$\pm (1\% \text{ rdg} + 2 \text{ °F})$
	-100 to 1300 °C	$\pm (1\% \text{ rdg} + 1 \text{ °C})$
Remark : <i>ft/min</i> : feet per minute <i>MPH</i> : miles per hour <i>m/s</i> : meters per second <i>knots</i> : nautical miles per hour <i>km/h</i> : kilometers per hour <i>Ft-cd</i> : feet candle		

OPTIONAL TEMPERATURE PROBE AND OTHER ACCESSORIES	
Thermocouple Probe (Type K)	TP-01, TP-02A, TP-03, TP-04
Carrying case CA-52A	* High quality carrying case with sash.

0601-LM8000

LIGHT METER *pocket*

Model : LX-101

ISO-9001, CE, IEC1010



LUTRON ELECTRONIC

The Art of Measurement

DIGITAL LUX METER

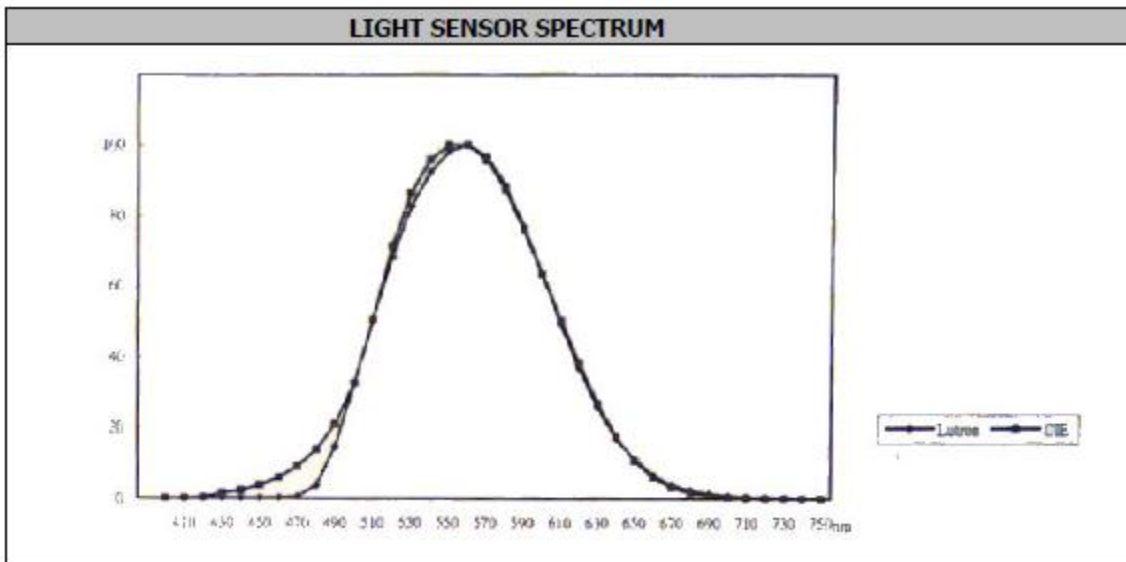
Model : LX-101

FEATURES	
* Sensor used the exclusive photo diode & multi-color correction filters, spectrum meet C. I. E. standard.	* Built-in low battery indicator.
* Sensor COS correction factor meet standard.	* LSI-circuit use provides high reliability and durability.
* Separate LIGHT SENSOR allows user take measurements of an optimum position.	* LCD display provides low power consumption.
* Precise and easy readout, wide range.	* Compact, light-weight, and excellent operation.
* High accuracy in measuring	* LCD display can clearly read out even of high ambient light.

GENERAL SPECIFICATIONS			
Display	13 mm (0.5") LCD.	Power Supply	DC 9V battery. 006P, MN1604 (PP3) or equivalent.
Ranges	0-50,000 Lux. 3 Ranges.	Power	Approx. DC 2 mA.
Zero adjustment	Internal adjustment .	Consumption	
Over-input	Indication of " 1 " .	Dimension	<i>Main Instrument :</i> 108x73x23 mm (4.3x2.9x0.9 inch) <i>Sensor probe:</i> 82x55x7 mm (3.2x2.2x0.3 inch).
Sampling time	0.4 second .	Weight	160g (0.36 LB) with batteries.
Sensor structure	The exclusive photo diode & color correction filter.	Accessories	Instruction manual.....1 PC.
Operating Temp.	0 to 50°C (32 to 122 °F).	Included	Carrying case1 PC.
Operating Humidity	Less than 80% R.H.		

ELECTRICAL SPECIFICATIONS (23± 5 °C)		
Range	Resolution	Accuracy
2,000 Lux	1 Lux	± (5 % + 2 d)
20,000 Lux	10 Lux	± (5 % + 2 d)
50,000 Lux	100 Lux	± (5 % + 2 d)

Note : Accuracy tested by a standard parallel light tungsten lamp of 2856K temperature.



* Appearance and specifications listed in this brochure are subject to change without notice.

0603-LX101

PH/ORP, DO, CD/TDS METER

Model : YK-2005WA

ISO-9001, CE, IEC1010

FEATURES



- * One meter for multi purpose operation :
PH/ORP, DO, CD/TDS METER
- * pH : 0 to 14.00 pH, ORP : ± 1999 mV.
- * Conductivity : 200 μ S/2 mS/20 mS/200 mS.
- * Dissolved oxygen : 0 to 20.0 mg/L.
- * ATC (automatic temperature compensation).
- * Real time data logger (record year, month, date, hour, minute, second), 16,000 data logger.
- * Max., Min., Data hold.
- * RS-232 computer interface
- * Optional electrode :
pH, ORP, CD/TDS, DO, ATC probe.
- * Jumbo LCD display.
- * DC 1.5V (UM-3, AA) x 4 PCs or
DC 9V adapter in.
- * Size : 203 x 76 x 38 mm.



Lutron

LUTRON ELECTRONIC

The Art of Measurement

CONDUCTIVITY METER

Model : YK-2005WA

1. FEATURES

* One meter for multi purpose operation : PH/ORP, CD/TDS, Dissolved Oxygen.
* pH : 0 to 14.00 pH, ORP : ± 1999 mV.
* Conductivity : 200 uS/2 mS/20 mS/200 mS.
* Dissolved oxygen : 0 to 20.0 mg/L.
* Real time data logger (record year, month, date, hour, minute, second), 16,000 data logger.
* Real time data logger, build in clock (hour-MIN-sec., year-month-date).
* Auto data record, 16,000 Data logger no.
* Wide sampling time adjustment range from one second to 8 hours 59 minutes 59 seconds.
* RS232 computer interface.
* MAX, MIN, Data hold.
* RS-232 computer interface
* Can default auto power off or manual power off.
* Optional PH, ORP, CD/TDS, Dissolved Oxygen and ATC probe.
* DC 1.5V (UM-3, AA) x 4 PCs or DC 9V adapter in.
* PH meter function can select PH or ORP.
* PH measurement can select ATC or manual temperature adjustment.
* PH measurement can make the auto calibration for pH 7, pH 4 and pH 10 or other value.
* Conductivity measurement can select uS/mS or TDS
* Conductivity measurement can select Temp. Coefficient of measurement solution.
* ATC for the conductivity measurement.
* Dissolved oxygen meter use the polar graphic type oxygen probe with temperature sensor, high precision measurement for Dissolved Oxygen (DO) and temperature measurement.
* Heavy duty dissolved oxygen probe, probe head can connect with BOD bottle.
* DO use the automatic Temp. compensation.
* DO meter build in " % SALT " & " Mountain Height " compensation value adjustment.
* Super large LCD display with contrast adjustment for best viewing angle.
* Separate probe, easy for operation of different measurement environment.
* Wide applications: water conditioning, aquariums, beverage, fish hatcheries, food processing, photography, laboratory, paper industry, plating industry, quality control, school & college, water conditioning.

GENERAL SPECIFICATIONS

Circuit	Custom one-chip of microprocessor LSI circuit.
Display	LCD size : 58 mm x 34 mm.
Measurement	PH/ORP Conductivity/TDS(Total Dissolved Solids) Dissolved Oxygen
Sampling Time of Data Logger	2 sec to 8 hour 59 min. 59 sec. '@ Auto datalogger
Data Hold	Freeze the display reading.
Memory Recall	Maximum & Minimum value.
Power off	Auto shut off saves battery life or manual off by push Button.

ELECTRICAL SPECIFICATIONS (23±5 °C)

A. PH/mV

PH Electrode	Optional, Any PH electrode with BNC connector.
Measurement	PH 0 to 14 PH
	mV -1999 mV to 1999 mV
Input Impedance	10 ¹² ohm
Temperature Compensation for pH measurement	Manual 0 to 100 °C, be adjusted by push button on front panel.
	Automatic (ATC) With the optional temperature probe (TP-07) 0 to 65 °C.
pH Calibration	PH7, PH4, and PH10, 3 points calibration ensure the best linearity and accuracy.
Optional probe and accessories	* PH electrode.....PE-03, PE-11, PE-01, PE06HD PE-04HD, PE-05T, PE-03K7 * ATC (automatic temperature probe)..... TP-07 * pH 7 buffer solution..... PH-07 * pH 4 buffer solution..... PH-04 * ORP electrode..... ORP-14

2-2 Electrical Specifications (23 ± 5 °C)

Measurement	Range	Resolution	Accuracy
PH	0 to 14 PH	0.01 PH	± (0.02 PH + 2 d)
mV	0 to 1999 mV	1 mV	± (0.5% + 2 d)

* PH accuracy is based on calibrated meter only.

B. Conductivity

Conductivity probe	Optional, Carbon rod electrode for long life.
Function	* Conductivity (uS, mS) * TDS (Total Dissolved Solids, PPM) * Temperature (C, F)
Temperature Compensation	Automatic from 0 to 60 °C (32 - 140 °F), with temperature compensation factor variable between 0 to 5.0% per C.
Probe Operating Temperature	0 to 60 °C.
Probe Dimension	Round, 22 mm Dia. x 120 mm length.
Optional probe and accessories	* Conductivity probe..... CDPB-03 * 1.413 mS Conductivity Standard Solution.....CD-14

1. Conductivity (uS, mS)

Range	Measurement	Resolution	Accuracy
200 uS	0 to 200.0 uS	0.1 uS	± (2% F.S.+1d) * F.S. - Full scal
2 mS	0.2 to 2.000 mS	0.001 mS	
20 mS	2 to 20.00 mS	0.01 mS	
200 mS	20 to 200.0 mS	0.1 mS	

* Temperature Compensation :
Automatic from 0 to 60 °C (32 - 140 °F), with temperature compensation factor variable between 0 to 5.0% per C.

* The accuracy is specified under measurement value ≤ 100 mS.

* mS - milli Simens * @ 23±5°C

Sampling Time of display	Approx. 1 second.
Data Output	RS 232 PC serial interface.
Operating Temperature	0 to 50 °C. - Main instrument.
Operating Humidity	Less than 80% R.H.
Power Supply * main instrument	DC 1,5 V battery (UM3) x 4 PCs, (Heavy duty type). DC 9V adapter input. @ AC/DC power adapter is optional.
Power Current	Operatiron : Approx. DC 28 mA Clock (power off) : Approx. DC 1 uA.
Weight	365 g/ 0.8 LB. @ Battery is included.
Dimension	203 x 76 x 38 mm
Accessories Included	Instruction manual..... 1 PC Hard arrying case (CA-06).....1 PC
Optional Accessories	* PH electrode..... PE-03, PE-11, PE-01, PE06HD PE-04HD, PE-05T, PE-03K7 * ATC (Automatic Temperature Probe)..... TP-07 * pH 7 buffer solution..... PH-07 * pH 4 buffer solution..... PH-04 * Conductivity probe..... CDPB-03 * 1.413 mS Conductivity Standard Solution..... CD-14 * Oxygen probe..... OXPB-11 * Spare Probe head with Diaphragm set OXHD-04 * Probe-filling Electrolyte..... OXEL-03 * AC to DC 9V adapter. * RS232 cable, UPCB-02. * USB cable, USB-01 * Data Acquisition software, SW-U801-WIN. * Data Logger software, SW-DL2005.

20,000 PPM	1,320 to 13,200 PPM
200,000 PPM	13,200 to 132,000 PPM
* Temperature Compensation : Automatic from 0 to 60 °C (32 - 140 compensation factor variable between	
* The accuracy is specified under measuremei	
* PPM - parts per million * @ 23± 5°C	

3. Temperature

Function	Measuring Range
°C	0 °C to 60 °C
°F	32 °F to 140 °F
* @ 23± 5°C	

C. Dissolved oxygen

Oxygen Probe	Optional, The polarographic typ
Measurement & Range	Dissolved Oxygen Oxygen in Air Temperature
Resolution	Dissolved Oxygen Oxygen in Air Temperature
Accuracy (23± 5 °C)	Dissolved Oxygen Oxygen in Air Temperature
Probe Compensation & Adj.	Temperature Salt Height (M. T.)
Probe Weight	335 g/0.74 LB (batt
Probe Size	190 mm x 28 mm Dia
Optional Accessories	* Oxygen probe..... * Spare Probe head v * Probe-filling Electro

* Appearance and specifications listed in this brochure are subject to change without notice.

PH PROBE



1000A DCA/ACA CLAMP METER METER

Model : DM-6046

ISO-9001, CE, IEC1010



Carrying case
CA-05A
(optional)



LUTRON ELECTRONIC

The Art of Measurement

ACA/DCA CLAMP METER

Model : DM-6046

FEATURES	
* Measure max. 1000 A DCA or ACA by the inductive conductor, contactless.	* LCD display, easy & clear readout. * High internal impedance, assures min. measuring error.
* Economical cost with professional quality.	* LSI-circuit provides high reliability and durability.
* Design meet IEC 1010 safety requirement.	* Built-in low battery indicator.
* ACA, DCA, ACV, DCV, ohms, Diode.	* Overload protection circuit is provided for all range.
* Built-in Data Hold function.	* Compact & heavy duty ABS housing plastic case.

GENERAL SPECIFICATIONS				
Display	13 mm (0.5") LCD, 3 1/2 digits. Max. indication 1999.		Power Consumption	Approx. DC 10.8 mA.
Measurement Range & Polarity	ACA, DCA, ACV, DCV, ohms, Data hold. Automatic Switching, " - " indicates negative polarity.		Operating Temp.	0 to 50 °C (32 to 122 °F)
Current Sensor	Hall effect sensor.		Operating Humidity	Less than 80% RH.
Zero adjustment	DCA	External knob, for DCA zero adjustment.	Weight	400 g/0.90 LB (including battery).
	Others	Automatic adjustment.	Dimension	230 x 70 x 36 mm(9.1 x 2.8 x 1.4 inch)
Over-input	Display shows '1' or '-1'.		Conductor Jaw Size	78.5 mm (3.1 inch) - outside
Sampling Time	Approx. 0.4 second.		Accessories	Test lead (red & black)..... 1 Pair Operation manual..... 1 PC.
Battery	Heavy duty type, DC 9V battery. 006P, MN1604 (PP3) or equivalent.		Optional Accessories	Carrying case Full range adapters

ELECTRICAL SPECIFICATIONS (23± 5 °C)					
Function	Range	Resolution	Accuracy	Overload Circuit Protection	Remark
DC Voltage	200 mV	0.1 mV	± (1 % + 1 d)	AC/DC 400 V.	Input impedance 10 Mega ohm
	200 V	0.1 V		AC/DC 600 V.	
	600 V	1 V			
AC Voltage (50/60Hz)	200 V	0.1 V	± (1 % + 2 d)	AC/DC 600 V.	Input impedance 10 Mega ohm
	600 V	1 V			
Resistance	2000 ohm	1 ohm	± (1 % + 1 d)	AC/DC 400 V	
AC/DC Current	200 A	0.1 A	± (1.5 % + 15 d)	AC/DC 1000 A	ACA Spec. test on 60 Hz/50 Hz.
	1000 A	1 A			
Diode Check	Short/non conductance, good/defect test. Approx. diode VF (forward voltage).				
Data Hold	Available for all functions to keep the data hold on the display .				
Remark	* Input impedance for ACV & DCV range is 10 Mega ohm. * ACA, ACV frequency response is from 40 to 400 Hz. * ACA, ACV specification be tested on sine wave 50/60 Hz.				

OPTIONAL ACCESSORIES		
Carrying case, CA-05A	Pressure adapter, PS-403	Current shunt, ST-50.
Sound adapter, SL-406	Light adapter, LX-02.	Humidity adapter, HA-702.
Anemometer adapter, AM-402	Tachometer adapter, TA-601	Alligator test lead, TL-02AS
EMF adapter, EMF-824	High voltage probe, HV-40	Heavy duty alligators, AL-04

* Appearance and specifications listed in this brochure are subject to change without notice.

0608-DM6046

DIGITAL STROBOSCOPE

Model : DT-2239A

ISO-9001, CE, IEC1010



LUTRON ELECTRONIC

The Art of Measurement

DIGITAL STROBOSCOPE

Model : DT-2239A

DESCRIPTION

The model DT-2239A is a microprocessor circuit design, high accuracy, digital readout, light duty STROBOSCOPE/TACHOMETER that is ideal for inspecting and measuring the speed of moving gears, fans, centrifuges, pumps, motors and other equipment used in general industrial maintenance production, quality control, laboratories and as well as for schools and colleges for demonstrating strobe action.

SPECIFICATIONS

Display	0.3" LED, 4 digits.	Power Supply	110 Vac 10%, 50/60 Hz. or 220 Vac 10%, 50/60 Hz. or 230 Vac 10%, 50/60 Hz.
Stroboscopic Flash Rate	100 to 10,000 flashes per minute (FPM).	Power Consumption	Less than 30 Watt.
Accuracy	100 to 5,000 FPM/RPM) - ± 1 digit. over 5000 FPM/RPM - ± 0.05% .	Operating Temp.	0 to 50 °C (32 to 122 °F).
Resolution	Less than 10,000 FPM/RPM- 1 FPM/RPM. Over 10,000 FPM/RPM - 10FPM/RPM	Operating Humidity	Less than 80% R.H.
Sampling Time	1 second.	Dimension	HWD - 21 x 12 x 12 cm (8.3x4.8x4.8 inch).
Range Select	Automation.	Weight	1Kg/2.2 LB.
Circuit	This stroboscope/tachometer employs an custom one-chip of microcomputer LSI circuit & crystal control time base which results in extraordinary accuracy over a wide, dynamic range.	Housing	Compact and impact plastic injection case with plastic mirror type reflector.
		Calibration	Crystal time base and microprocessor circuit, don't necessary take any external calibration process.
		Accessories Included	Operation manual..... 1 PC.

FLASH TUBE SPECIFICATIONS

Flash tube	Xenon lamp.	Flash tube replacement	It is required to change the flash tube when the instrument start to flash irregularly at speeds of 3600 RPM/FPM or more.
Flash Duration	Approximately 60 to 1,000 microseconds.		
Flash color	Xenon white 6,500 K degree.		
Flash energy	4 Watts-seconds (joules).		
Beam Angle	80		
Operating duty Cycle	For prolong life and safe operation, please adhere to the following duty cycle: Below 1,000 RPM - 30 Minutes. Above 3,600 RPM - 5 Minutes. Always allow a 10 minute cooling off period between cycles.		

OPERATIONS PROCEDURES

Preparation	(a) Plug unit into a properly grounded 110V AC, 220V AC or 230V AC outlet. (b) Turn the power switch to "on" position. (c) Determine the range switch to "Low" or "High" position.
Checking Speed	When checking speed, care must be taken to insure that the strobe is flashing in unison (one to one) with the object being monitored. A Stroboscope will also stop motion at 2:1, 3:1, 4:1 et., this is normally referred to as harmonies. To be sure of unison, turn the dial until two images appear - this will double the actual speed. Then lower the flashing rate until a single and stationary image appears - this is the actual true speed.
Checking Motion	For motion analysis, simply locate the actual speed as mentioned above and then turn the dial slowly up or down. This will give a slow motion effect allowing complete inspection.

Remark : When order the stroboscope, should inform the power supply type is AC 110 V, 220 V or 230 V.

* Appearance and specifications listed in this brochure are subject to change without notice.

0408-DT2239A



HI 98129 • HI 98130

pH/Conductivity/TDS Testers

Waterproof and Designed to Float

3

CONDUCTIVITY

The Ultimate in HANNA Combination Testers!

HI 98129 and HI 98130 are waterproof testers that offer high accuracy pH, EC/TDS and temperature measurements in a single tester! No more switching between meters for your routine measurements. These floating, waterproof testers have a large easy-to-read, dual-level LCD and automatic shut-off. pH and EC/TDS readings are automatically temperature compensated (ATC).

These technologically advanced testers have a replaceable pH electrode cartridge with an extendable cloth junction as well as, an EC/TDS graphite electrode that resists contamination by salts and other substances. This gives these meters an extended life. Your tester no longer needs to be thrown away when the pH sensor is exhausted.

The EC/TDS conversion factor is user selectable as well as the temperature compensation coefficient (β).

Fast, efficient, accurate and portable, the Combo pH, EC/TDS and temperature tester brings you all the features you've asked for and more!

Replaceable pH electrode cartridge

The Combo features an easy-to-replace pH electrode and has an extendable cloth junction. The sturdy, snap-in connector means there are no pins to bend or break.



High accuracy

The graphite conductivity electrode provides greater accuracy because it cannot be contaminated by salt deposits in the solution. The exposed temperature sensor provides fast response times, and guarantees accurate temperature compensated readings.



On-screen Battery Life

LCD indicates the percentage of battery power remaining upon startup.



Standard or N.I.S.T Buffer Calibration

Auto calibration is performed with 2 sets of memorized buffers for greater accuracy.



Adjustable TDS Ratio

For measurement accuracy, users can choose between different conductivity to TDS conversion factors.



Automatic temperature compensation
Automatic calibration
Automatic shut-off

"Direct Contact" temperature probe

EC/TDS graphite electrode

Replaceable pH electrode cartridge



SPECIFICATIONS

		HI 98129	HI 98130
Range	pH	0.00 to 14.00 pH	
	EC	0 to 3999 $\mu\text{S}/\text{cm}$	0.00 to 20.00 mS/cm
	TDS	0 to 2000 ppm	0.00 to 10.00 ppt
	Temperature	0.0 to 60.0°C / 32.0 to 140.0°F	
Resolution	pH	0.01 pH	
	EC	1 $\mu\text{S}/\text{cm}$	0.01 mS/cm
	TDS	1 ppm	0.01 ppt
	Temperature	0.1°C / 0.1°F	
Accuracy (@20°C)	pH	± 0.05 pH	
	EC / TDS	$\pm 2\%$ F.S.	
	Temperature	$\pm 0.5^\circ\text{C} / \pm 1^\circ\text{F}$	
Temperature Compensation	pH: automatic; EC/TDS: automatic with β adjustable from 0.0 to 2.4% / °C		
Calibration	pH	automatic, 1 or 2 points with 2 sets of standard buffers (pH 4.01 / 7.01 / 10.01 or 4.01 / 6.86 / 9.18)	
	EC / TDS	automatic, 1 point at 1413 $\mu\text{S}/\text{cm}$ or 1382 ppm	automatic, 1 point at 12.88 mS/cm or 6.44 ppt
TDS Conversion Factor	adjustable, from 0.45 to 1.00		
pH Electrode	HI 73127 (replaceable; included)		
Environment	0 to 50°C (32 to 122°F); RH max 100%		
Battery Type / Life	(4) 1.5V / approx. 100 hours of continuous use, auto-off after 8 minutes of non-use		
Dimensions/Weight	163 x 40 x 26 mm (6.4 x 1.6 x 1.0")/100 g (3.5 oz.)		

ORDERING INFORMATION

HI 98129 (Combo) and HI 98130 (Combo) are supplied with 1.5V batteries (4), HI 73127 pH electrode and HI 73128 electrode removal tool.

ELECTRODES

HI 73127 Spare pH electrode for (Combo)

SOLUTIONS

- HI 70004P pH 4.01 buffer solution, 20 mL sachets (25)
- HI 70006P pH 6.86 buffer solution, 20 mL sachets (25)
- HI 70007P pH 7.01 buffer solution, 20 mL sachets (25)
- HI 70009P pH 9.18 buffer solution, 20 mL sachets (25)

- HI 70010P pH 10.01 buffer solution, 20 mL sachets (25)
- HI 70030P 12.88 mS/cm buffer solution, 20 mL sachets (25)
- HI 70031P 1413 $\mu\text{S}/\text{cm}$ buffer solution, 20 mL sachets (25)
- HI 70032P 1382 ppm buffer solution, 20 mL sachets (25)
- HI 70038P 6.44 ppt buffer solution, 20 mL sachets (25)
- HI 70442P 1500 ppm buffer solution, 20 mL sachets (25)
- HI 70300M Electrode storage solution, 250 mL
- HI 7061M Electrode cleaning solution, 250 mL

ACCESSORIES

- HI 73128 Electrode removal tool