auto range , +Type K/J Thermometer
***

SOUND LEVEL METER

Model : SL-4112P *ISO-9001, CE, IEC1010*

Lutron

LUTRON ELECTRONIC

The Art of Measurement

Auto range, + type K Temp.
+ Himodity, Light, Anemometer

SOUND LEVEL METER

Model : SL-4112P

FEATURES

* Large LCD display, easy to read.
* Frequency and Time weighting meet IEC 61672 class 2.
* A, C frequency weighting networks is selected.
* Time weighting (Fast & Slow) dynamic characteristic modes.
* 0.5" standard microphone head.
* AC output for system expansion.
* RS232 computer interface.
* Auto range & Manual range selection.
* Available for external calibration adjustment.
* Condenser microphone for high accuracy & long-term stability.
* Memory function to store the Max. & Min. value.
* Hold and Peak Hold functions.
* Build in type K and type J thermometer.
* Probe (EM-910P) is included for Humidity/Temp., Light and Anemometer measurement.
* Data logger with 1,600 no. memory, sampling time can select to 1, 2, 5, 10, 30, 60, 600, 1800 or 3600 seconds.
* DC 1.5 V battery (UM-4, AAA) X 6 or DC 9V adapter in.
* Operation key used push button.
* LCD display for low power consumption & clear read-out even in bright ambient light condition.
* Using the durable, long-lasting components, including a strong, light weight ABS-plastic housing case.

ELECTRICAL SPECIFICATION FOR SOUND LEVEL METER

Function	dB (A & C frequency weighting), Time weighting (Fast, Slow), Hold, Memory (Max. & Min.), Peak hold, AC output, RS232 output.
Meter default function	Range set to auto range. Frequency weighting set to A weighting. Time weighting set to fast.
Measurement Range	30 - 130 dB.
Resolution	0.1 dB.
Range selector	*Auto range :* 30 to 130 dB. *Manual range :* 3 range, 30 to 80 dB, 50 to 100 dB, 80 to 130 dB, 50 dB on each step, with over & under range indicating.
Frequency	31.5 to 8,000 Hz.
Microphone type	Electric condenser microphone.
Microphone size	Out size, 12.7 mm DIA. (0.5 inch).
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.
Time weighting (Fast & Slow)	Fast - t= 125 ms, Slow - t = 1 second, * "Fast" range is simulated the human ear response time. * "Slow" range is easy to get the avg. values of vibration sound level. * The "Fast" & "Slow" response range are designed to meet IEC 61672 class 2 requirement.
Calibrator	B & K (Bruel & kjaer), MULTIFUCTION ACOUSTIC CALIBRATOR 4226.
Output Signal	** AC output :* AC 0.5 Vrms corresponding to each range step. Out put impedance - 600 ohm. ** RS232 output.*
Output terminal	*Terminal 1 :* RS232 computer interface terminal, photo couple isolated. *Terminal 2 :* AC output terminal. *Terminal socket size :* 3.5 mm dia. phone socket.
Calibration VR	Build in external calibration VR, easy to calibrate on 94 dB level by screw driver.

ELECTRICAL SPECIFICATION FOR TYPE K/J THERMOMETER

Sensor Type	*Reso-lution*	*Range*	*Accuracy*
Type K	0.1 ℃	-50.0 to 1300.0 ℃	± (0.4 % + 0.8 ℃)
		-50.1 to -199.9 ℃	± (0.4 % + 1 ℃)
	0.1 ℉	-58.0 to 2372.0 ℉	± (0.4 % + 1.5 ℉)
		-58.1 to -327.8 ℉	± (0.4 % + 1.8 ℉)
Type J	0.1 ℃	-50.0 to 1100.0 ℃	± (0.4 % + 0.8 ℃)
		-50.1 to -199.9 ℃	± (0.4 % + 1 ℃)
	0.1 ℉	-58.0 to 2012.0 ℉	± (0.4 % + 1.5 ℉)
		-58.1 to -327.8 ℉	± (0.4 % + 1.8 ℉)

* *Accuracy value is specified for the meter only.*

* *Temp. probe (Type K, TP-01 TP-02A, TP-03. TP-04) is the optional accessories.*

GENERAL SPECIFICATION

Display	51 mm x 37 mm LCD (Liquid crystal display), 5 digits with annunciator.
Data logger	Data logger with 1,600 no. memory, sampling time can select to 1, 2, 5, 10, 30, 60, 600, 1800 or 3600 seconds.
Operating Temp.	0 to 50 ℃ (32 to 122 ℉).
Operating Humidity	Less than 80% RH.
Power Supply	DC 1.5 V battery (UM4, AAA) x 6 PCs, or equivalent.
Power Consumption	Approx. DC 15 mA max..
Dimension	*Main imstrument :* 246 x 68 x 41 mm (9.6 x 2.7 x 1.6 inch). *Probe :* 116 x 48 x 30 mm (4.6 x 1.9 x 1.2 inch).
Weight	410 g/0.9 LB (including battery).
Accessory Included	* Instruction Manual .....1 PC * Humidity/Light/Anemometer probe EM-910P.....1 PC

Optional Accessories	94 dB Sound Calibrator : Model : SC-941. SC-942. Sound wind shield ball Model : SB-01
	USB cable Model : USB-01 RS232 cable (isolated RS232 cable) : Model : UPCB-02.
	* Data Acquisition software Model : SW-U801-WIN. * Data logger transfer software Model : SW-DL2005., SW-E2005
	Type K Temperature probe : Model : TP-01 TP-02A, TP-03. TP-04

ELECTRICAL SPECIFICATIONS FOR PROBE EM-910P

Anemometer

A. Air velocity

Measure-ment	*Range*	*Resolu-tion*	*Accuracy*
m/S	0.4 - 25.0 m/s	0.1 m/s	± (2% + 0.2 m/s)
km/h	1.4 - 90.0 km/h	0.1 km/h	± (2% + 0.8 km/h)
mph	0.9 - 55.9 mile/h	0.1 mile/h	± (2% + 0.4 mile/h)
knot	0.8 - 48.6 knots	0.1 knots	± (2% + 0.4 knots)
FPM	80 - 4930 ft/min	1 ft/min	± (2%+40 ft/min.)

Note:

m/S - meters per second km/h - kilometers per hour

FPM - feet per minute knot - nautical miles per hour

mph - miles per hour (international knot)

B. Temperature

Measuring Range	0 ℃ to 50 ℃/32 ℉ to 122 ℉
Resolution	0.1 ℃/0.1 ℉
Accuracy	± 0.8 ℃/1.5 ℉

Humidity/Temp. meter

A. Humidity

Measuring Range	0 % to 95 % R.H.	
Resolution	0.1 % R.H.	
Accuracy	≧70%RH	± (3% reading + 1% RH).
	< 70%RH	± 3% RH.

B. Temperature

Measuring Range	0 ℃ to 50 ℃/32 ℉ to 122 ℉
Resolution	0.1 ℃/0.1 ℉
Accuracy	± 0.8 ℃/1.5 ℉

Light meter

Measuring Range	LUX	0 to 20,000 LUX.
	Ft-cd	0 to 1,860 Ft-cd
Resolution	LUX	1 LUX
	Ft-cd	0.1 Ft-cd
Accuracy	± (5% rdg + 8 dgt)	

Note:

Ft-cd : Feet candle

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