

TES-1330A/1332A/1334A Light Meter



FEATURES

- Spectral Sensitivity close to CIE photo pic Curve
- Cosine Angular corrected
- Analog output jack for recording (TES-1332A/1334A)
- Data Hold function, Peak Hold function for 1334



SPECIFICATION

Display	3 1/2 digit LCD
Measuring Range	20/200/2000/20000 Lux (1330A also Footcandle for 1334A) 200/2000/20000/200000 Lux (1332A) 20000 lux-reading x 10; 200000 lux-reading x 100
Overrange Display	Highest digit of (1) is displayed
Resolution	0.01 Lux(1330A,1334A) & 0.1 Lux(1332A)
Accuracy	+/- 3% rdg +/- 0.5% f.s.($<10,000$ lux) +/- 4% rdg +/- 10dgt($>10,000$ lux) (calibrated to standard incandescent lamp, 2856 K)
Repeatability	$\pm 2\%$
Temperature Characteristics	$\pm 0.1\% \square$
Measuring Rate	Approx. 2 times/sec.
Recorder Output	DC 2V/f.s. (full scale) (TES-1332A)
Operating Temperature & Humidity	0 ° to 40 \square (32 \square to 104 \square) $< 70\%$ R.H.
Power Source	one 9V battery
Dimensions	100mm(L) x 60mm(W) x 27mm(H)
Dimension	135mm(L) x 72mm(W) x 33mm(H)
Weight	250g
Accessories	Carrying case, 9V battery & Instruction Manual

TWN-LUX Light Sensor.

Light Intensity (LUX)
Sensor and 3 Wire
Output Transmitter.

Description.

The TWN-LUX incorporates a silicon photodiode light sensor, in a hermetical sealed case, especially designed for high precision linear applications. The sensor has a flat glass window with a built in colour correction filter, giving an approximation to the spectral response in the human eye. As an aid in adjustment an LED is mounted next to the sensor, with a gradual turn on at approx. 30% FSO.



Ordering Information.

TWN-LUX Standard Calibration: 0~1000lux Nominal.

Specifications.

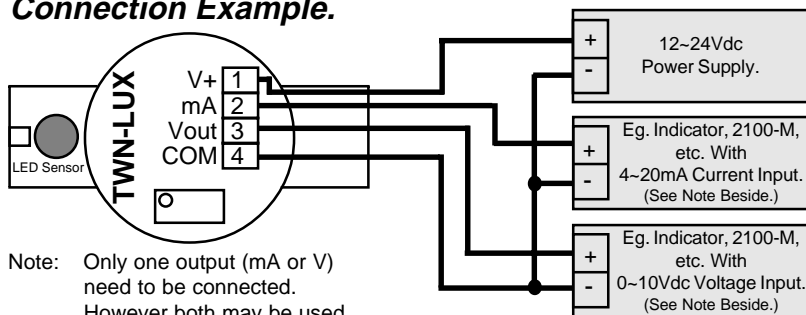
Input		Adjustable from 1~10lux to 0~1000lux Nominal. Turn Trimpot fully clockwise = 0~10lux Nominal. Turn Trimpot fully anticlockwise = 0~1000lux Nominal. (Note: Trimpot requires 25 turns to go from one end to the other.)
Output	-Voltage	0~10Vdc. Output Impedance = 1k Ω (Note: With a 12Vdc power supply output may only rise within approx. 95% FSO.)
	-Current	4~20mA, 3 wire. Maximum Load = 300 Ω @ 12Vdc. Maximum Load = 900 Ω @ 24Vdc.
Power Supply		12~24Vdc.
Current Draw	-Voltage Output	20mA @ 24Vdc P/S with 10Vdc out.
	-Current Output	40mA @ 24Vdc P/S with 20mA out.
Operating Temperature		0~70C.
Storage Temperature		-20~80C.
Operating Humidity		90%RH Max. Non-Condensing.

Note 1. Specifications based on Standard Calibration Unit, unless otherwise specified.

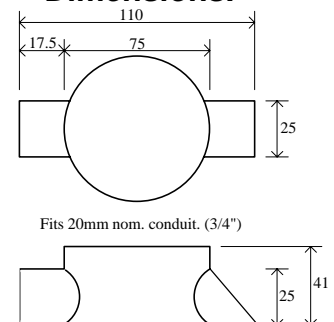
Note 2. Due to ongoing research and development, designs, specifications, and documentation are subject to change without notification.

No liability will be accepted for errors, omissions or amendments to this specification.

Connection Example.



Dimensions.



The Proper Installation & Maintenance of TWN-LUX.

MOUNTING.

- (1) Mount in a clean environment away from power control equipment. Be mindful of positioning the light sensor, (mounted at the end of the enclosure) so that the desired level of illumination reaches the sensor. Do Not mount the sensor in direct light or sunlight - measure reflected light.
- (2) Do not subject to vibration or excess temperature or humidity variations.

WIRING.

- (1) All cables should be good quality overall screened INSTRUMENTATION CABLE with the screen earthed at one end only.
- (2) Signal cables should be laid a minimum distance of 300mm from any power cables.
- (3) For 2 wire current loops Austral Standard Cables B5102ES is recommended. For three wire transmitters, RTD's and Resistance Probes, Austral Standard Cables B5103ES is recommended.
- (4) It is recommended that you do not ground current loops and use power supplies with ungrounded outputs.
- (5) Lightning arrestors should be used when there is a danger from this source.
- (6) Refer to diagrams for connection information.

COMMISSIONING.

- (1) Once all the above conditions have been carried out and the wiring checked apply power to the TWN-LUX and allow five minutes for it to stabilize.
- (2) It is advised to adjust the output of the TWN-LUX to the lux level required using a calibrated lux meter, once the "room" being measured is complete. This is necessary as every installation has a unique reflective pattern, depending on colours, windows, positioning of walls, furniture, etc. Turn the Trimpot clockwise to increase the output reading, and anticlockwise to decrease the output reading.

MAINTENANCE.

- (1) Repeat (3) of the commissioning instructions. Do it regularly - at least once every 12 months.

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