

4 to 20 mA IOT transmitter

# SOUND LEVEL TRANSMITTER

Model : TRSL-401

*ISO-9001, CE, IEC1010*



**Lutron**

**LUTRON ELECTRONIC**

*The Art of Measurement*

4 to 20 mA IOT transmitter

# SOUND LEVEL TRANSMITTER

Model : TRSL-401

FEATURES

* 4-wire installation.
* Linear current output .
* Easy installation and connection.
* Sound level range 30 to 130 dB .
* Frequency and Time weighting are designed to meet IEC 61672 class 2.
* A & C weighting networks comply with standards.
* 0.5" standard microphone head.
* Time weighting (Fast ) dynamic characteristic modes.
* Build External Zero& span calibration VR.
* Auto range

Electrical Specification

Circuit	Custom one-chip of microprocessor LSI circuit.																		
Measurement Type	<b>SPL</b> : Sound pressure level																		
Measurement Range	30 - 130 dB.																		
Function	dB ( A & C frequency weighting ), Time weighting ( Fast ),																		
Accuracy (23 ±5 °C)	Characteristics of " A ", " C " frequency weighting network meet ANSI S1.4-2014 / IEC 61672 -1 : 2013 class 2 Under 94 dB input signal, the accuracy are : <table border="1" style="margin-left: 20px;"> <tr><td>31.5 Hz</td><td>±3.0 dB</td></tr> <tr><td>63 Hz</td><td>±2.0 dB</td></tr> <tr><td>125 Hz</td><td>±1.5 dB</td></tr> <tr><td>250 Hz</td><td>±1.5 dB</td></tr> <tr><td>500 Hz</td><td>±1.5 dB</td></tr> <tr><td>1 K Hz</td><td>±1.0 dB</td></tr> <tr><td>2 K Hz</td><td>±2.0 dB</td></tr> <tr><td>4 K Hz</td><td>±3.0 dB</td></tr> <tr><td>8 K Hz</td><td>±5.0 dB</td></tr> </table> <p><i>Remark :</i> The above spec. are tested under the environment RF Field Strength less than 3 V/M &amp; frequency less than 30 MHz only.</p>	31.5 Hz	±3.0 dB	63 Hz	±2.0 dB	125 Hz	±1.5 dB	250 Hz	±1.5 dB	500 Hz	±1.5 dB	1 K Hz	±1.0 dB	2 K Hz	±2.0 dB	4 K Hz	±3.0 dB	8 K Hz	±5.0 dB
31.5 Hz	±3.0 dB																		
63 Hz	±2.0 dB																		
125 Hz	±1.5 dB																		
250 Hz	±1.5 dB																		
500 Hz	±1.5 dB																		
1 K Hz	±1.0 dB																		
2 K Hz	±2.0 dB																		
4 K Hz	±3.0 dB																		
8 K Hz	±5.0 dB																		
Frequency Weighting Network	Characteristics of A & C. A weighting : The characteristic is simulated as "Human Ear Listening" 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 )	Fast - t = 125 ms * "Fast" range is simulated the human ear response time weighting.																		

Frequency	31.5 to 8,000 Hz.
Microphone type	Electric condenser microphone.
Microphone size	Out size, 12.7 mm DIA. ( 1/2 inch).
Analog output	Analog output: 4 to 20 mA. * <i>linear to temperature.</i>
Loop impedance	Max. 90 Ω@24 V DC.
Power supply	Isolated Power 9VDC to 30VDC. * <i>Ripple &lt; 2.5%</i>
Operation Temp.	0°C to 50°C /32°F to 122°F.
Operation humidity	Max. 85% RH.
Dimensions	120 mm x 96 mm x 43 mm
Weight	340 g/0.75 Lbs without batteries.
Enclosure rating	meter : IP63 . Probe (Microphone ) : IP40 .
Accessories Included	* Instruction manual..... 1 PC * Sound probe..... 1 PC * probe holder..... 1 PC