

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 & Slow) dynamic characteristic modes. |
| * Build External Zero& span calibration VR. |
| * Auto range |

Electrical Specification

| | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---------|---------|-------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|
| Circuit | Custom one-chip of microprocessor LSI circuit. | | | | | | | | | | | | | | | | | | |
| Measurement Type | SPL : Sound pressure level | | | | | | | | | | | | | | | | | | |
| Measurement Range | 30 - 130 dB. | | | | | | | | | | | | | | | | | | |
| Function | dB (A & C frequency weighting), Time weighting (Fast, Slow), | | | | | | | | | | | | | | | | | | |
| 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 & 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 & Slow) | Fast - t = 125 ms * "Fast" range is simulated the human ear response time weighting. Slow - t = 1 s * "Slow" range is easy to get the average values of vibration sound level. * Proposal to test FAST & SLOW Function , Please use the manual range mode | | | | | | | | | | | | | | | | | | |

| | |
|----------------------|---|
| 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. 500 Ω@24 V DC. |
| Power supply | Isolated Power 12VDC to 24VDC@20 mA. * <i>Ripple < 2.5%</i> |
| Operation Temp. | 0°C to 70°C /32°F to 158°F. |
| Operation humidity | Max. 85% RH. |
| Dimensions | 120 mm x 96 mm x 43 mm |
| Weight | 164 g. |
| Enclosure rating | meter : IP63 . Probe (Microphone) : IP40 . |
| Accessories Included | * Instruction manual..... 1 PC |