

NEW

WORLD'S FIRST "OPTO" LOOP POWERED ISOLATOR & CONVERTER TO 3000VDC/RMS FOR I.S., NUCLEAR, MIL-SPEC & INDUSTRIAL V/mA/KHz INPUTS AND OUTPUTS

**MODEL
LPI
Pat. Pend.**

FEATURES:

- No Reflected Noise From Chopper Driven Transformers
- All Solid State, No Varnish to ARC
- Low Input Constant Loop Burden
- Zero (4mA) & Span (20mA) Adjustments For Custom Scaling
- Either 4-20mA or 0-10V or KHz In
- Both 4-20mA & 1-5VDC or KHz Out
- Intrinsically Safe (I.S.) by Design, Contact **OOTEK**
- Simple "Plug-N-Play" Design. Just Insert It In Your Loop
- Lifetime Warranty



Only 1.7 X 2.5 X .8"

Din Rail Mount or In Line Mount

SPECIFICATIONS @ 25°C

- Isolation Breakdown: 3KVRMS
- Accuracy: ± 0.1% of F.S.
- Linearity: ± 0.1% of Reading
- Response: 100mS 10-90%
- Minimum I Loop: 3.6mA
- Maximum I Loop: 36mA
- Burden: 5V (7V for "S" Version)
- V + For 0-10V or Hz In: 5-24VDC
- I Sink for Hz: 2mA @ 5VDC
- I + For 0-10V or Hz In: 5mA @ 24VDC
- Zin For 0-10V or Hz In: 10K
- Temp. Coefficient: ±50PPM/°C
- Input/Output Noise: None
- Zero & span Adjustments: ± 50%
- Operating Temp: -20 + 70°C
- Storage Temp: -30 + 80°C
- Humidity: 0-95% N.C.
- I.S.: By Design Only. Certificate On Request. Contact OTEK For Terms
- Output P.S. Range: 10-36VDC + Load

The World's largest manufacturer of **Loop Powered** Instruments introduces its New Model **LPI** (Pat. Pending). Unlike other products in the market, the **LPI** does not use transformers that provides up to 1KV isolation and reflect "Choppers" noise on the transmitter's line. **OOTEK's LPI** has 3KV isolation and uses optoisolators.

OOTEK's new **LPI** uses a patent pending design with ultra low quiecent current allowing the **LPI** to use a high efficiency **High Isolation** Optocoupler up to 5KVDC but down rated to 3KVDC/RMS. The rest is "cookbook" recipe.

Two models are available; the "In-Line" module is for inserting it in series with existing loops and the **DIN-Rail** for DIN rail mount. Use the **LPI** as: Isolator, Repeater, Converter (4-20 to 1-5V or 0-10V to 4-20mA & 0-10V, 0-2KHz to 4-20mA, 4-20mA to 2KHz, or 0-10V to 0-2KHz), Buffer, Scaler, etc. The **LPI** has a Green LED at the input and a Red LED at the output so you can "see" the loop. Their intensity is directly proportional to the input-output current. **See Note 1.**

ORDERING INFORMATION 6-11-09

Model: LPI -

MOUNTING

- 0 In-Line
- 1 DIN-Rail

INPUT/OUTPUT(1)

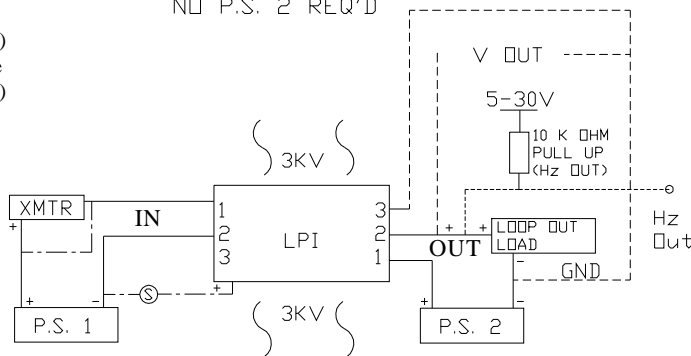
- 0 4-20 mA I/O
- 1 10-50 In, 4-20 Out
- 2 0-10V In, 4-20mA Out
- 3 0-2K Hz In, 4-20mA Out
- 4 4-20mA In, 0-2KHz Out
- 5 0-10V In, 0-2KHz Out
- 6 0-2KHz I/O
- 9 Custom (Specify)

GRADE 1 (2)

- I Industrial
- M To Mil-Spec
- N Nuclear (Contact Otek)
- S Intrinsically Safe
- 9 Custom (Specify)

- = I LOOP I/O
- = 0-10V/Hz In
- = 1-5V Out
- = FREQ Out (D.C.T.)
- NO P.S. 2 REQ'D

CONNECTIONS



Note: Many I/O configurations are available. Contact OTEK for yours.

Always Adjust Zero Before Span

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NOTE:

- 1: On "Power Up" the **LPI** might require more than 4mA input signal. After which, it will measure from as low as 3.6mA.
- 2: On **Intrinsically Safe**: The **LPI** includes the **I.S.** protection circuitry (28VDC/30mA max.) at the input and no energy storage components. (I.S. By Design) No Certificate is available until further notice! Use at your own risk. Otek will build to certain MIL-standards but testing and confirmation of compliance, if required, will need to be done by a third party and at customer's expense.

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