



# NK Technologies

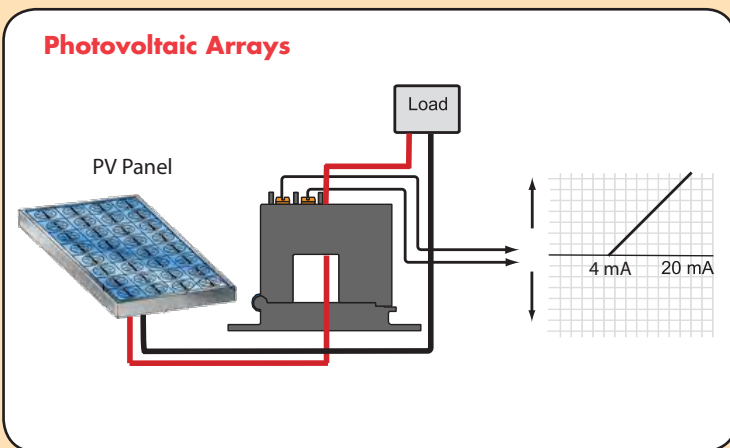


## DLT SERIES DC Current Transducers

### Applications

#### DC Current Monitoring

- PV Array combiner boxes
- Wind generators
- DC heating applications
- UPS system monitoring



**DLT Series** DC Current Transducers combine a hall effect sensor and a signal conditioner into a single package. The DLT Series is designed to produce an analog 4–20 mA signal proportional to the DC current in the primary conductor. Available in a solid-core or split-core case design. Lower current ranges make this sensor ideal for use in photovoltaic panel combiner boxes.

### Features

#### 4–20 mA Loop-powered Output

- Industry standard connections, positive indication of correct field wiring.

#### Single Range

- No chance of field range selection errors.
- Eliminates zero and span pots.

#### Isolation

- Output is magnetically isolated from the primary circuit for safety.
- Eliminates insertion loss (voltage drop).

#### Agency Approval

- UL 508 Industrial Control Equipment (USA & Canada).

### Monitoring PV Arrays:

The current produced by a photovoltaic module or array can be easily monitored by using the DLT series current sensors over the conductor exiting the collectors. A simple two-wire connection, powered by 24 VDC nominal in series with the sensor output, and the sensor will produce a signal in real time that is directly proportional to the current being produced.

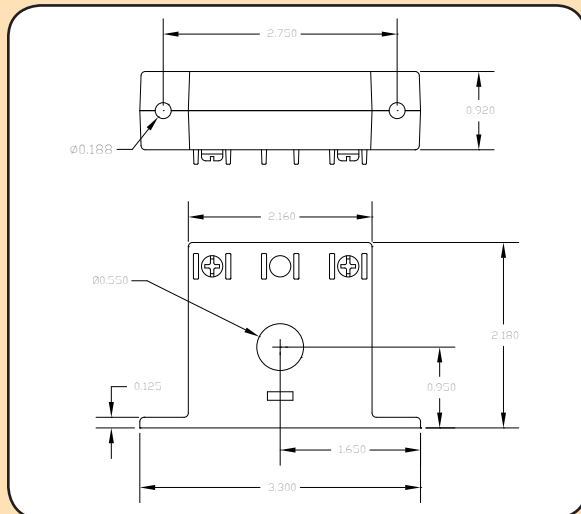
If a single cell fails, or a module quits operating properly, the current output will drop, and the current sensor will reflect the change.

Safer and more stable than shunts, non-contact current sensors are a simple answer to measuring DC current at any point in the PV system.

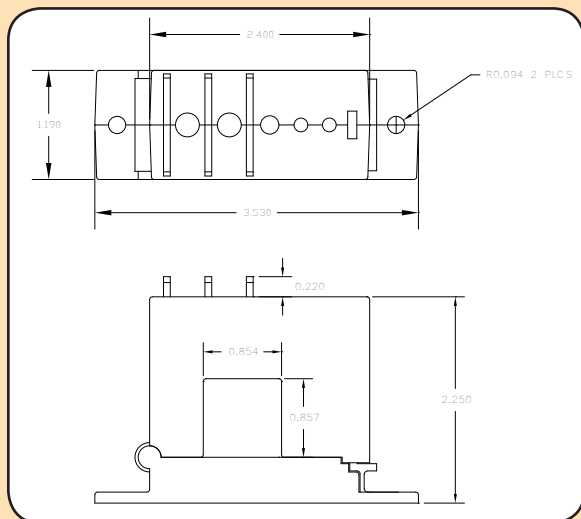


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## Dimensions

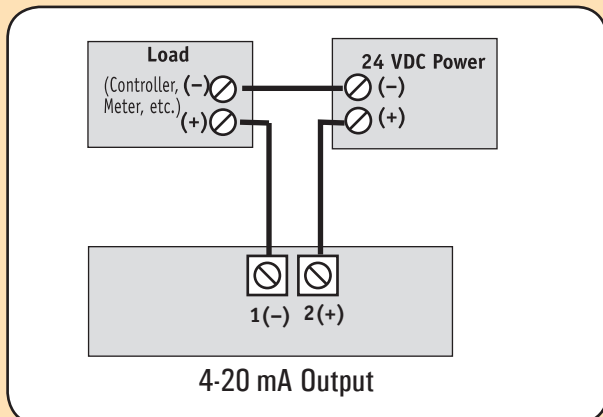


**FL Case**



**SP Case**

## Connections



**4-20 mA Output**

**Notes:** Fingersafe captive screw terminals.  
12-22 AWG solid or stranded.  
Observe polarity.

## Specifications

<b>Output Signal</b>	4-20mA, Loop-powered
<b>Output Limit</b>	23mA
<b>Accuracy</b>	1.0% FS
<b>Response Time</b>	100 ms (to 90% step change)
<b>Frequency Range</b>	DC
<b>Power Supply</b>	24VDC Nominal, 40VDC Maximum
<b>Isolation Voltage</b>	UL listed to 1,270VAC (tested to 5KV)
<b>Input Ranges</b>	0-20 to 0-400 DC, see Ordering Information
<b>Sensing Aperture</b>	<ul style="list-style-type: none"> <li>● FF Case: 0.55" (14mm) dia.</li> <li>● SP Case 0.84" (21.7mm) dia.</li> </ul>
<b>Case</b>	UL94 V0 Flammability Rated
<b>Environmental</b>	-22 to 158°F (-30 to 70°C) 0-95% RH, non-condensing
<b>Listings</b>	UL 508 Industrial Control Equipment (USA & Canada)



## Ordering Information\*

Sample Model Number: DLTB-420-24L-FF DC current transducer, 50A range, 4-20mA output, 24VDC loop-powered in a solid-core case.

DLT (1) - (2) (3) (4)

(1) Full Scale Range

A	0-20 A
B	0-50 A
C	0-100 A
D	0-200 A
E	0-300 A
F	0-400 A

(2) Output Signal

420	4-20mA
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(3) Power Supply

24L	24VDC Loop-powered
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(4) Case Style (black only)

FF	Solid-core, Front Terminals (maximum range 0-100 A)
SP	Split-core (minimum range 0-50 A)

**\*Bulk packaging only.**