# DC Line Monitor ENVIROMUX®

# The DC Line Monitor measures DC voltage and reports DC current measured with attached Hall-Effect transducers (sold separately) to the E-2D/5D/16D unit.

- Reports DC voltage and DC current.
  - Current measurements require Hall-Effect transducers (sold separately).
  - Polling rate: 1Sa/s.
- Six 2-pin terminal blocks for measuring DC voltage
- Non-isolated -60 to +60V DC
  - 0.12VDC resolution
  - 1.2VDC accuracy
- Six non-rectifying Hall Effect 4-pin transducer interfaces for measuring DC current
  - 0.2% resolution
- Accuracy and range are transducer-dependent (sold separately).
- Supports CAT5/5e/6 cable up to 1,000 ft (305 m).
- Powered by E-2D/5D/16D.
- Dimensions WxDxH (in): 6.82x3x1.71" (173x76x43 mm).
- Regulatory approvals: CE, RoHS.
- Compatible with E-FSC Fiber Converter/Extender.
  - Use to extend sensor up to 1.2 miles (2km) from the ENVIROMUX unit.

# Hall-Effect Current Sensors, Solid-Core, 6.5mm Loop Diameter



# E-DCLM-6

| DC Line Monitor |                 |  |  |  |
|-----------------|-----------------|--|--|--|
| NTI Part #      | Description     |  |  |  |
| E-DCLM-6        | DC Line Monitor |  |  |  |



### E-AMPxx-6-5

- Measures DC currents using a solid-core system.
  - Available rated currents: 10A, 20A, and 50A.
    - Contact an NTI product consultant for other available ratings between 10A and 50A.
- Common applications include: monitoring static converters for DC motor drives, battery supplied applications, uninterruptible power supplies (UPS), switched mode power supplies (SMPS), electrochemical systems, and power supplies for welding applications.
- Includes a 7ft 4-wire cable for connecting to the E-DCLM-6
  - To extend the distance between the hall-effect sensor and the E-DCLM-6, simply connect longer wires (22AWG) using the included splices.
    - It is recommended to place the E-DCLM-6 as close to the halleffect sensor as possible. The E-DCLM-6 can be placed up to 1000 ft away from the E-2D/5D/16D unit using CAT5/5e/6 cable.
- Loop diameter: 0.26" (6.5mm).
- Response time:  $\leq 1\mu S @ 50A/\mu S, 10\%-90\%$ .
- Galvanic isolation: 2.5KV @ 50Hz, AC, 1min.
- Supply voltage:  $\pm 12V$ ,  $\pm 15V$ .
- Output voltage: ±4V.
- Power consumption:  $\leq 40$  mW.
- Comes with two 0.08" (2mm) diameter mounting holes.
- Dimensions WxDxH (in): 0.98x1.26x0.98 (25x32x25mm).
- Operating temperature: -40 to 185°F (-40 to 85°C).
- Storage temperature: -40 to 257°F (-40 to 125°C).

# Hall-Effect Current Sensors, Solid-Core, 6.5mm Loop Diameter

| NTI Part #  | Rated Current | Loop Diameter |
|-------------|---------------|---------------|
| E-AMP10-6-5 | 10A           | 0.26" (6.5mm) |
| E-AMP20-6-5 | 20A           | 0.26" (6.5mm) |
| E-AMP50-6-5 | 50A           | 0.26" (6.5mm) |

Note: Contact an NTI product consultant for hall-effect sensors in other sizes and ratings.



# The DC Line Monitor measures DC voltage and reports DC current measured with attached Hall-Effect transducers (sold separately) to the E-2D/5D/16D unit.

Hall-Effect Current Sensors, Split-Core, **12mm Loop Diameter** 



# E-AMPxx-SC12

- Measures DC currents using a split-core system.
  - Available rated currents: 50A, 100A, 200A, 300A, 400A.
  - Contact an NTI product consultant for other available ratings between 50A and 400A.
- Common applications include: monitoring static converters for DC motor drives, battery supplied applications, uninterruptible power supplies (UPS), switched mode power supplies (SMPS), electrochemical systems, and power supplies for welding applications.
- Includes a 7ft 4-wire cable for connecting to the E-DCLM-6.
  - To extend the distance between the hall-effect sensor and the E-DCLM-6, simply connect longer wires (22AWG) using the included splices.
    - It is recommended to place the E-DCLM-6 as close to the hall-effect sensor as possible. The E-DCLM-6 can be placed up to 1000 ft away from the E-2D/5D/16D unit using CAT5/5e/6 cable.
- Loop diameter: 0.47" (12mm).
- Response time: ≤7µS.
- Galvanic isolation: 2.5KV @ 50Hz, AC, 1min.
- Supply voltage:  $\pm 12V$ ,  $\pm 15V$ .
- Output voltage: ±4V.
- Current consumption: ≤25mA.
- Dimensions WxDxH (in): 1.81x0.63x1.46 (46x16x37mm).
- Operating temperature: -13 to 185°F (-25 to 85°C).
- Storage temperature: -40 to 212°F (-40 to 100°C).

Hall-Effect Current Sensors, Split-Core, 21mm Loop Diameter

## E-AMPxx-SC21

- Measures DC currents using a split-core system.
- Available rated currents: 30Å, 50Å, 100Å, 200Å, and 500Å.
  - Contact an NTI product consultant for other available ratings ٠ between 30A and 500A.
- Common applications include: monitoring static converters for DC motor drives, battery supplied applications, uninterruptible power supplies (UPS), switched mode power supplies (SMPS), electrochemical systems, and power supplies for welding applications.
- Includes a 7ft 4-wire cable for connecting to the E-DCLM-6.
  - To extend the distance between the hall-effect sensor and the E-DCLM-6, simply connect longer wires (22AWG) using the included splices.
    - It is recommended to place the E-DCLM-6 as close to the hall-effect sensor as possible. The E-DCLM-6 can be placed up to 1000 ft away from the E-2D/5D/16D unit using CAT5/5e/6 cable.

-Core.

Loop Diameter 0.83" (21mm) 0.83" (21mm) 0.83" (21mm) 0.83" (21mm) 0.83" (21mm)

- Loop diameter: 0.83" (21mm). Response time: ≤5µS @ 50A/µ S, 10%-90%.
- Galvanic isolation: 2.5KV @ 50Hz, AC, 1min.
- Supply voltage: ±12V, ±15V.
  - Output voltage: ±4V.
- Power consumption: ≤25mA.
- Comes with two 0.2" (5mm) diameter open-slotted mounting holes.
- Dimensions WxDxH (in): 2.36x0.63x2.40 (60x16x61mm).
- Operating temperature: -40 to 185°F (-40 to 85°C).
- Storage temperature: -40 to 257°F (-40 to 125°C).

| Hall-Effect Current Sensors, Split-Core,<br>12mm Loop Diameter |               |               |  | Hall-Effect Current Sensors, Split<br>21mm Loop Diameter |               |  |
|--|---------------|---------------|--|--|---------------|--|
| NTI Part #   | Rated Current | Loop Diameter |  | NTI Part #   | Rated Current |  |
| E-AMP50-SC12   | 50A           | 0.47" (12mm)  |  | E-AMP30-SC21   | 30A           |  |
| E-AMP100-SC12  | 100A          | 0.47" (12mm)  |  | E-AMP50-SC21   | 50A           |  |
| E-AMP200-SC12  | 200A          | 0.47" (12mm)  |  | E-AMP100-SC21  | 100A          |  |
| E-AMP300-SC12  | 300A          | 0.47" (12mm)  |  | E-AMP200-SC21  | 200A          |  |
| E-AMP400-SC12  | 400A          | 0.47" (12mm)  |  | E-AMP500-SC21  | 500A          |  |

Note: Contact an NTI product consultant for hall-effect sensors in other sizes and ratings.

