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New Products
[IL800-Series Top-of-the-Line Isolators](#)

(See story at right)

New Documents
[Revised Isolator Datasheets](#)

- VDE certification

- Power consumption spec upgrades

- MSL 1


IL815 and IL817
Top-of-the-Line 4-Channel Isolators

The newest members of the groundbreaking IL800-Series Isolator family are four-channel, wide-body isolator. Four-channel isolators are one of our most popular configurations, with applications including analog-to-digital convertors and SPI interfaces.



The new IL815TE and IL817TE are also the first IL800-Series Isolators in NVE's unique True 8™ eight-millimeter creepage wide-body package.



The IL800-Series is the industry's new top-of-the-line isolators with best-in-class specifications:

- 125°C max. operating temperature
- 110 Mbps
- 10 ns propagation delay
- DC-correct; deterministic power-up
- 50 kV/μs typ.; 30 kV/μs min. transient immunity
- IEC 60747-5-5 (VDE0884) certified—800 Vrms WV
- 44000-year barrier life
- Low EMC footprint
- True 8™ eight-millimeter creepage wide-body package

The new parts are [in stock](#) for immediate delivery, along with the previously-announced two-channel [IL821T-3E](#) and three-channel [IL814T-3E](#).

[Download IL800-Series Datasheet >](#)
[Buy Online](#)

\$9.95 shipping

2013 Year in Review

[Record product sales](#) in the most recent quarter capped a great year for NVE with new products, design resources, and distributors:

New Products

- [IL800-Series Top-of-the-Line Isolators](#)
DC-correct isolators with best-in-class specifications, including 125°C max. operating temperature, 110 Mbps, 50 kV/μs typ. transient immunity, and 44000-year barrier life.
- [IL3585-3E](#) and [IL3685-3E](#)
Narrow-body RS-485 and PROFIBUS-transceivers.
- [IL3085-3E](#) and [IL3085E](#)
Low-cost isolated RS-485 transceivers.
- [IL721 True 8™ Isolators](#)
High-speed, two-channel bidirectional isolators in NVE's unique guaranteed eight millimeter creepage package.

Product Upgrades

- Isolator common-mode [transient immunity](#) specifications upgraded to best-in-class 30 kV/μs minimum; 50 kV/μs typical.
- [VDE-Certified Isolators](#)—NVE Isolators were certified under IEC 60747 (VDE 0884), the gold standard for isolator high-voltage performance.
- Isolator [high voltage endurance](#) specifications upgraded to best-in-class 1000 Vrms and 1500 Vdc.
- Increased Isolator [magnetic immunity](#) specifications.
- Isolator [power consumption specifications](#) upgraded.
- Most parts upgraded to [MSL 1](#).

New Design Resources

- A complete library of [Isolator IBIS models](#).

New Distribution

- [Newark element 14](#) in North America
- [CFC Electronic](#) in Italy
- [IS-POWER](#) in Turkey
- [Jingshi Technologies](#) in China

Expansion

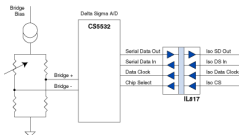
- NVE expanded production to meet increasing demand, including a new cleanroom bay.

Application Corner
Isolating SPI With IL817 Isolators

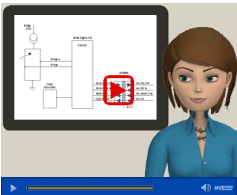
Isolating Serial Peripheral Interface Bus (SPI) eliminates ground loops between analog and digital sections and improves resolution by reducing noise.

With their high speed, high temperature, and high transient immunity, NVE's new IL800-Series isolators are ideal ([see story above](#)).

Here's an illustration of single-channel isolated delta-sigma ADC:


Isolated Delta-Sigma ADC With an IL817 Isolator

For more practical SPI circuits and tips, visit the [ADC/DAC Application Center](#) or watch this [technical video](#):


[Video: Isolating SPI Interfaces \(02-03\)](#)