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Datasheet Updates

Most [Isolator datasheets](#) and our Application Note on [Isolator High-Voltage Standards](#) have been updated for VDE 0884-17 certification, increased Working Voltages, and Intrinsically Safe certification.

Presentation

NVE Spintronic Device Scientist Mst Nazmunnahar is presenting a paper, "Discovery of a new high-Tc ferromagnet in Fe-rich Ce – Fe – Zr alloys" at the Conference on Magnetism and Magnetic Materials, November 2.

[NVE Presentations »](#)

Holidays

NVE will be **open** on Veterans' Day (Friday, November 11).

We will be **closed** Thursday and Friday, November 24 and 25 for the Thanksgiving holiday.

Product support is available 365 days a year, including holidays, at:

sensor-apps@nve.com
or
iso-apps@nve.com

NEW Isolated DC-to-DC Boost Converters

NVE has expanded its revolutionary IsoLoop® ILDCxxVE line of DC-to-DC converters with 3.3-to-5 and 3.3-to-6 volt boost versions in addition to the original 3.3-to-3.3 volt version:

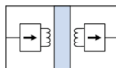
Part Number	Package	Input Voltage	Output Voltage
ILDC11VE			3.3 V
ILDC12VE [new!]	SOIC16W	3.3 V	5 V
ILDC13VE [new!]			6 V

High Isolation

ILDCxxV parts are rated at 4 kV isolation under the new VDE 0884-17 standard.

Adequate Power

250 milliwatts of fully-regulated power is enough current for an isolated RS-485 bus or high-side MOSFET drivers.



ILDC1x functional diagram.

Low Ripple

Less than one millivolt peak-to-peak ripple means low noise and reliable systems.

Soft Start

A smooth output ramp-up with a minimum two millisecond startup facilitates power sequencing such as allowing control electronics to start before an H-bridge is powered.

Rugged

A 175 °C maximum junction temperature allows full power up to 125 °C ambient with no derating. Integrated short-circuit protection prevents excessive power dissipation.

Minimal Parts Count

Three inexpensive bypass capacitors are the only external parts required. No additional regulation is needed and there is no minimum load. Frequency hopping and shielding quash EMI and make ferrite beads unnecessary.

Ultraminiature Packages

The JEDEC-standard SOIC16 package provides a remarkable 4 kV isolation in accordance with the new VDE 0884 standard. The world's smallest isolated DC-to-DC converters—3 x 5.5 mm DFN6 parts—are coming soon.

Evaluation Boards

ILDC-Series evaluation boards have everything needed to operate an ILDC1x, which is just the part and three bypass capacitors. There are also LEDs to show the converter is operating, and screw terminals for easy connections. No ferrite beads or external regulators are necessary.

Immediate Delivery

ILDC-Series parts and evaluation boards are [in stock](#) for immediate delivery.

[ILDC1x datasheet »](#)

[Demonstration video »](#)

Buy Online
\$9.95 shipping

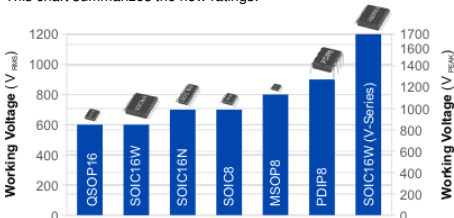
Best-in-Class Isolator Working Voltages

NVE is continuously improving our patented ceramic-polymer composite isolator barrier process. These isolators have the best Working Voltages in the industry, and now they are certified for Working Voltages of at least 600 Vrms (849 Vpk) under VDE 0884-17, the new "gold standard" for isolators.

Under VDE 0884-17, Working Voltage ratings are determined from Time Dependent Dielectric Breakdown (TDDB) testing, and are an important figure of merit for long-term reliability.

Our best-in-class V-Series isolators are rated for a remarkable 1200 Vrms (1798 Vpk) Working Voltage.

This chart summarizes the new ratings:



Other best-in-class barrier specifications are:

- **Isolation voltage:** up to 6 kV_{rms} (V-Series versions)
- **Barrier resistance:** 100 teraohms
- **Surge rating:** 8 kV
- **Barrier life:** 44000 years

[Download isolator datasheets »](#)

[Application Bulletin: Isolator High Voltage Safety Standards »](#)

Buy Online
\$9.95 shipping