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In the News

NVE was featured recently on the *Positively Wall Street* show on KCEO Radio, San Diego.

“The best tech company in Eden Prairie.”

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Record Year

In May, NVE reported its 11th consecutive fiscal year of record product sales since becoming publicly traded in 2000.

Thanks to our loyal customers and new customers for making it possible.

Fun Fact

A Battery of Tests



IsolLoop Isolators (even MSOPs)

have demonstrated the ability to withstand a remarkable 800 Vac or 1,130 Vdc between the input and output pins indefinitely without damage (“the endurance voltage”).

That’s the equivalent of 753 D-cells, which would make a flashlight 150 feet long.

For more information, see the [Application Corner](#) at right.

Featured Product

Wide-Body SOIC-16 Isolators

A full eight millimeter external creepage distance for the most demanding high-voltage performance. IsolLoop Isolators offer a full product line in wide-body SOIC packages, providing 2,500 Vrms isolation voltage, 300 Vrms working voltage, and 800 Vrms endurance voltage (see the [Applications Corner](#) below).



Wide-body isolators are available in a variety of input, output, and channel configurations, as well as a full line of isolated RS-485/RS-422/PROFIBUS transceivers.

Key features include:

- 0.3”-Wide SOIC-16
- 8 mm Minimum External Creepage Distance
- 3, 4, or 5 Channels, or RS-485/RS-422
- Passive or Digital Inputs
- CMOS or Open-drain Outputs
- Up to 125°C (T-Series)
- UL1577 / IEC 61010-2001

More than 25 wide-body SOIC isolators part types are currently [in stock](#) and available for immediate delivery with no minimum order.

Part Number	Mbps Data Rate	Tx/Rx Chan	Input	Key Features	Max. Temp.
IL514	2	2/1	Digital	DC correct; Output Enable	85°C
IL515	2	4/0	Digital	DC correct; Optional Ext. Clock	85°C
IL516	2	2/2	Digital	DC correct	85°C
IL613	100	3/0	Passive		85°C
IL614	100	2/1	Passive	Output Enable	85°C
IL715	110	4/0	Digital	Output Enable	100°C
IL716	110	2/2	Digital		100°C
IL717	110	3/1	Digital		100°C
IL715T	110	4/0	Digital	High Temperature	125°C
IL716T	110	2/2	Digital	High Temperature	125°C
IL717T	110	3/1	Digital	High Temperature	125°C
IL260	110	5/0	Digital	Five Channel	85°C
IL261	110	4/1	Digital	Five Channel	85°C
IL262	110	3/2	Digital	Five Channel	85°C
IL3122	5	RS-422	Passive	32 nodes; 15 kV Bus ESD	85°C
IL3185	5	RS-485	Passive	32 nodes; 15 kV Bus ESD	85°C
IL3222	5	RS-422	Passive	Fractional Load (256 nodes)	85°C
IL3285	5	RS-485	Passive	Fractional Load (256 nodes)	85°C
IL3422	20	RS-422	Passive	32 nodes; 15 kV Bus ESD	85°C
IL3485	20	RS-485	Passive	32 nodes; 15 kV Bus ESD	85°C
IL422	25	RS-422	Digital	Industry Standard	85°C
IL485	35	RS-485	Digital	Industry Standard	85°C
IL485W	35	RS-485	Digital	RS-485 + handshake	85°C
IL3522	40	RS-422	Digital	Very High Speed	85°C
IL3585	40	RS-485	Digital	Very High Speed	85°C
IL3685	40	RS-485	Digital	PROFIBUS	85°C

[Buy Online](#)
\$8.95 shipping

Exhibitions



NVE sensors will be on display at one of the largest sensor shows in the world, **Sensor+Test 2011**, June 7 - 9 in Nürnberg, Germany. NVE will exhibit in cooperation with distributor HY-LINE Sensor-Tech in Hall 12, Stand 610. [Free Registration Courtesy: HY-LINE Sensor-Tech](#)

The Power Conversion and Intelligent Motion (“PCIM”) show in May was a chance to show off powerful isolators to intelligent engineers in cooperation with distributor HY-LINE Power. [RS-485 transceivers](#) and [CAN transceivers](#) were especially popular.



Dr. Joe Davies of NVE chaired the “MRAM and Magnetic Logic Devices” and “Magnetization Dynamics and Ferromagnetic Resonance” sessions at InterMag 2011 in Taiwan recently.

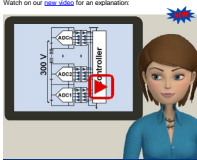
Application Corner

Endurance Voltage

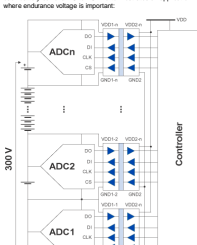
The maximum voltage that can be applied between the input and output pins of an isolator indefinitely without damage is called “endurance voltage.” Endurance voltage is typically not specified in data sheets and may be the least well-known high-voltage specification. Nevertheless, it is useful in applications where the isolators are not subject to line voltage transients.

IsolLoop Isolators’ endurance voltage has been determined to be 800 Vrms based on qualification testing. External creepage distance is up to eight millimeters (see [“Wide-Body Isolators”](#) above).

Watch on our [new video](#) for an explanation:



This battery management system for measuring the voltage of each battery cell of a DC to AC inverter illustrates an application where endurance voltage is important:



Isolated Battery Management System

The last isolation stage is a full 300 V above the controller ground, so the isolator is subject to 300 V between inputs and outputs.

Because the isolators have an endurance voltage of 800 Vrms, or 1,130 Vpeak, the isolators can be expected to withstand up to 1,130 Vdc indefinitely, and will easily withstand the voltages in the circuit above.

[<More Info \(.pdf; Application Bulletin No. 18\)>](#)