

# Sensor NEWS

#### July 2009

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### Isolator Catalog



<Click to Download (.pdf)>

#### **NVE In the News**

NVE was featured in an Investor's Business Daily in story in June titled "Nanotechnology Firm Seeks New Uses For Tiny Sensors, Couplers."

Links to this and other articles about NVE>

## Awards & Accolades

NVE Chairman Terrence Glarner ranked number six on the Minneapolis/St. Paul Business Journal's list of 50 Hardest-working Directors.

≤More Accolades>

# Holiday



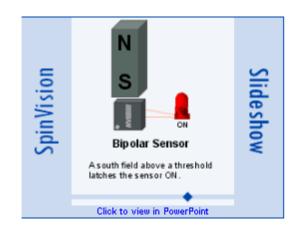
NVE will be closed for business Friday, July 3

in observance of U.S. Independence Day. Orders will be processed the following Monday.

## **Products**

# Omnipolar vs. Bipolar Magnetic Sensors

NVE offers both <u>omnipolar</u> and <u>bipolar sensors</u>. This slideshow illustrates the difference:



## Omnipolar vs. bipolar sensors

Most NVE sensors are **omnipolar**, meaning they operate with either a north or south magnetic field and release when the field strength drops below a certain threshold. Omnipolar parts are used in a wide range of applications.

**Bipolar** sensors have opposite polarity magnetic operate and release points. They are ideal for magnetic encoders that have alternating north/south poles, or other applications where one polarity of field is required to turn the parts on and the opposite polarity to turn them off.

# Company News

### ISO 9001:2008 Certification



NVE was recently certified under the new ISO 9001:2008 standard following a rigorous external audit. Customer surveys continued to give NVE very high marks for product quality and on-time shipments.

NVE has been ISO certified since 1997.

ISO 9001:2008 sets requirements to achieve customer satisfaction through consistent products and services. It also includes a requirement for the continual improvement of the Quality Management System.

The scope of NVE's Quality Management System includes design, development and manufacture of semiconductor-based magnetic/ semiconductor products, processes, systems, and services.

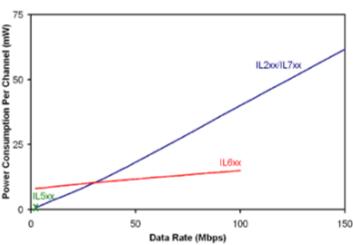
# **Application Corner**

# Isolator Power Consumption

# By Sandy Templeton

Director, Isolator Product Development and Applications

Because of their different architectures, NVE's three digital isolator families have different dynamic power consumption profiles. IL600 Series isolators are similar to optocouplers. They use a 5 mA coil current, but the dynamic power consumption component is very low. IL500 and IL200/700 Series isolators are edge-sensitive devices, drawing current on transitions but with low quiescent power consumption. The graph below shows an overview of per-channel power consumption with 3.3 V supplies.



Isolator No-Load Power Consumption Per Channel at 3.3 V

IL500 Series isolators have a maximum data rate of 2 Mbps. IL200/700 Series isolators have unsurpassed speed and have the lowest power consumption up to approximately 30 Mbps. Above 30 Mbps, the IL6xx becomes the lowest average power user.

<More Info (.pdf; Application Bulletin No. 16)>

