

In This Issue
[Low-Power Isolators](#)
[Lab Results—
IL01x Power](#)
[Recent Exhibitions](#)
Quick Links
[Sensor Selector Guide](#)
[Isolator Selector Guide](#)
[Online Store](#)
[Contact Us](#)
[Twitter](#)
[YouTube](#)
New YouTube Videos
[Low-Power Isolator Demonstration](#)
[Low-Power Transceiver Demonstration](#)
["Blinky" angle-sensor demo kit](#)
Document Updates
[IL01x-Series Low-Power Isolator datasheet \(initial release\)](#)
Independence Day

NVE will be closed

Wednesday, July 4 for the Independence Day holiday.

Low-Power Isolator Launch

With a typical total quiescent current of just 0.3 mA per channel, new IL01x-Series low-power isolators draw one-fourth the power of our flagship products.



The new devices use NVE's patented low-power spintronic Tunneling Magnetoresistance (TMR) technology.



A unique ceramic/polymer composite barrier provides excellent isolation, best-in-class barrier resistance, and virtually unlimited barrier life.



Even with the low power, the new parts provide remarkable performance:

- 10 Mbps guaranteed maximum data rate
- No carriers or clocks for low EMI
- 100 teraohm insulation resistance
- 2.5 kV isolation
- 44000 year barrier life
- -40°C to +100°C



The four-channel versions use NVE's unique True 8™ wide-body SOIC-16 package with full 8-millimeter creepage in accordance with IEC60601.

Applications include:

- 4-20 mA loop-powered controls
- Battery-powered instruments
- SPI

Sampling began in March, and now production two-direction configurations are available:

Part #	Transmit/Receive Channels	Total Supply Current*	Package	Availability
IL011-3E	2/0	0.6 mA	SOIC-8	Q3 '18
IL012-3E	1/1			Now
IL015E	4/0	1.2 mA	0.3" SOIC-16	Q3 '18
IL016E	2/2			Now
IL017E	3/1			Now

*Typical $I_{q1} + I_{q2}$; $V_{dd1} = V_{dd2} = 3.3V$

The one-direction IL011-3E and IL015E will be available in the third quarter.

[Download the IL01x Datasheet >](#)

Buy Online
\$9.95 shipping

Lab Results
Low-Power Isolator Demonstration

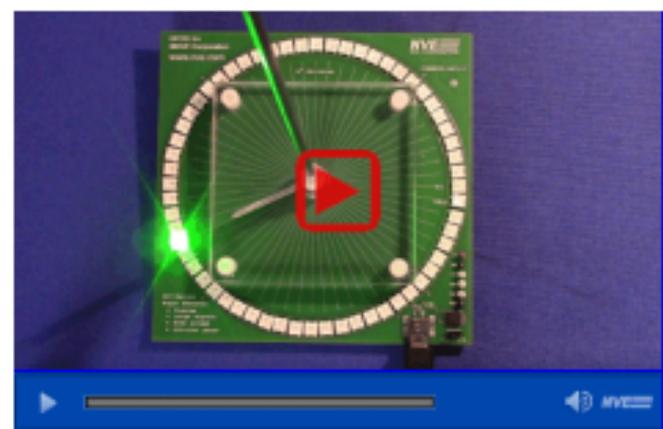
We demonstrated SPI interfaces powered by 4-20 mA current loops with the new IL017 low-power isolator. The best-in-class efficiency of IL01x isolators make them ideal for current loop applications:



Demonstrating the new IL017 isolator.

"Blinky" Angle Sensor Demo Board

Due to popular demand at the Sensor+Test show, we're offering a new angle sensor demonstration kit. The board has 60 multicolor LEDs to show the accuracy of AAT-Series angle sensors:



Demonstrating the New Angle Sensor Demo Board.

The kit features a 5-inch by 5-inch circuit board with:

- An AAT003 Angle Sensor
- 60 multicolor smart LEDs (6° spacing) indicate angle
- Onboard preprogrammed ATtiny microcontroller
- PWM angle output (8-bit resolution)
- Factory calibrated with optional field calibration

The kit also includes:

- Split-pole magnet
- Magnet locating fixture
- 5-volt wall-mount power supply module

AAT-Series angle sensors use NVE's unique Tunneling Magnetoresistance (TMR) technology featuring:

- Up to 6 megohm bridge resistance for low power
- 200 mV/V output signal
- 1.5% maximum nonsinusoidality error
- Wide sensor-magnet airgap tolerance
- Sine and cosine outputs for direction detection
- Ultraminiature 2.5 x 2.5 x 0.8 mm TDFN6

AAT-Series applications include rotary encoders, motor shaft position sensors, and Internet-of-Things sensor nodes.

[Download the documentation >](#)

Buy Online
\$9.95 shipping

Recent Exhibitions


Sensor+Test visitors learned about new [angle sensors](#) and [precision current sensors](#).

At the **Power Conversion and Intelligent Motion (PCIM)** show, we highlighted the new [IL01x Low-Power Isolators](#) and [IL2985E Low-Power Transceivers](#).

