

January 2018

Electrifying News From NVE

**In This Issue**[2017 New Products](#)[2017 Website Upgrades](#)**Quick Links**[Sensor Selector Guide](#)[Isolator Selector Guide](#)[Online Store](#)[Contact Us](#)**Case Studies**

NVE sensors are used in a non-destructive test system for pipes in an [new article](#) by authors from Victoria University.

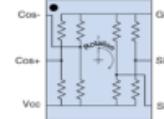
Links to this and other amazing uses of NVE products are on our new ["Case Studies"](#) Webpage.

**Happy New Year**

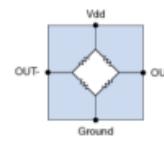
NVE was closed January 1 for the New Year holiday, but is operating normally the rest of the week.

**Special Year-End Review Issue****2017**

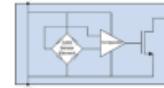
new product highlights included:

**Full-Bridge TMR Angle Sensor**

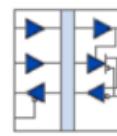
The new AAT101-10E Full-Bridge TMR Angle Sensor is a high-output magnetic sensor for angle measurements based on rotating magnetic fields.

**High-Field Analog Magnetometer Sensor**

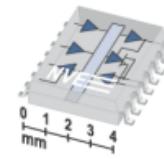
The new AAK001-14E is an analog magnetometer sensor for precise sensing of magnetic fields up to a remarkable 4 kiloersteds (400 mT).

**World's Most Sensitive Magnetic Switch**

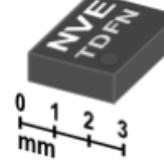
The newest member of NVE's industry-leading family of magnetic switches, the AFL006, is also the most sensitive, with a remarkable 4 oersted typical operate point.

**Low-Power Isolated RS-485 Transceiver**

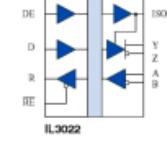
With a typical total quiescent current of just 2.4 mA at 5 volts, the new IL2985 draws less than one-third the supply current of our standard products, which are already fairly low power.

**40 Mbps QSOP RS-485 Transceiver**

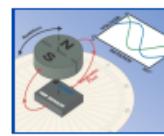
The world's fastest isolated RS-485 transceivers are now also the world's smallest. The new IL3685-1E is an ultrahigh-speed isolated transceiver in NVE's ultraminiature, low thermal resistance QSOP-16 package.

**World's Smallest Analog Sensor**

NVE's industry-standard analog magnetometer sensors got smaller with a new TDFN6 version, the AAL004-10E. The new part is the world's smallest high-performance analog sensor IC.

**Low-Cost RS-422 Transceiver**

The IL3022E is a cost-effective galvanically isolated, high-speed, full-duplex bus transceiver.

**Low-Field Angle Sensor**

AAT006-10E Angle Sensors use Tunneling Magnetoresistance (TMR) technology for operation at magnetic fields as low as 15 oersteds, allowing an extremely wide airgap tolerance.

**ADL021 Nanopower Sensor Mini Eval Board**

The AG040B is a 0.25 x 1.57 inch demo board with the ultraminiature, ultralow-power ADL021 magnetic switch. Powered by a coin cell (included), the quiescent power is so low the battery will last indefinitely. An LED indicates when the sensor is activated; a miniature bar magnet is included.

**Sensor Bare Boards**

NVE offers PCBs for use with sensors, including SOIC, MSOP, TDFN, and ULLGA for easy prototyping.

**2017 Website Upgrades**

In 2017, a new Website layout makes NVE's award-winning [technical videos](#) more accessible and easier to search, and an upgraded video server means no buffering.

A new set of [Web apps](#) lets you simulate the outputs of NVE sensors with different magnets or current-carrying traces at various distances. The handy simulations accommodate cylindrical, disk, or rectangular magnets, or a variety of current-carrying traces. Analog, digital, and Nanopower sensors are supported. The simple, intuitive apps do the complex math for you.