NVE CORPORATION

Sensor and Isolator NEWS

January 2021 *Electrifying News From NVE*

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New Year Holiday

NVE will be closed Friday, January 1.

Product of the Year

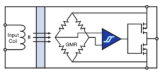
Elektronik Produkte des Jahres 2021 NOMINIERT

NVE's new **IL6xxCMTI Ultrahigh CMTI Isolators** were nominated for a "Product of the Year 2021." (See the first "Year in Review" story below).

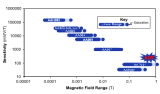
You can **vote here** in the in "Halbleiter" (semiconductor) category.

Year in Review

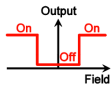
2020 new product highlights included:



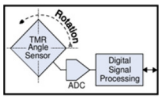
Ultrahigh CMTI Isolators
New CMTI-grade isolators are 100% tested to ensure each part has at least 200 kV/µs Common-Mode Transient Immunity. Simple external deglitch circuitry can extend the CMTI to an extraordinary 350 kV/µs. IL6xxCMTI isolators also have an extended supply range of up to six volts for compatibility to directly drive a range of power MOSFETs or gate driver ICs.
[This product was nominated for an *Elektronik* "Product of the Year 2021."]



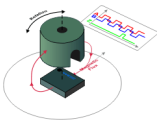
AKT001 Ultrahigh Field Sensor
The new AKT001-14E is an analog magnetometer sensor for precise sensing of magnetic fields up to a remarkable 1.5 tesla. Unique TMR technology provides unmatched field range, low power, and small size.
[this product was nominated for a Best of Sensors 2020 Award].



350 mT Magnetic Switches
The AHK991-14E is a high-field, low voltage, low power, TMR magnetic switch. The new sensors have a 350 mT typical operate point, which is high enough to detect close-proximity rare-earth magnets.

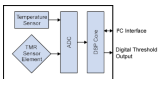


I²C TMR Smart Angle Sensor
The ASR012-10E Smart I²C TMR Smart Angle Sensor is based on the same TMR sensor element and digital processing core as the popular ASR002, but with an I²C rather than SPI interface. The new part also provides a PWM output. Both the ASR012 and ASR002 have precise, factory-calibrated TMR sensor elements and sophisticated digital signal processing.

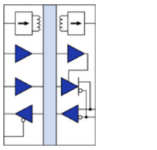


ASR022 ABZ Noncontact TMR Encoder Sensor
Replace clunky, fragile ABZ optical encoders with noncontact TMR encoder sensors for wide mechanical tolerances and contamination immunity. ASR022 sensors are factory calibrated and temperature compensated.

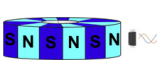
The World's Smallest DC-DC Convertor
At just 3 x 5.5 x 0.9 mm the ILDC11-15E is the world's smallest isolated DC-DC convertor. These remarkable parts provide one-quarter watt of regulated, fully-isolated power with 3.3 V input and output.



I²C Magnetometer
We expanded NVE's groundbreaking line of Smart Magnetometers with an I²C version of the popular SM225 15 mT SPI TMR magnetometer. I²C frees up a pin for a Digital Threshold output.



IL46xx Transceivers with Integrated DC-DC Convertors
These new products are RS-485 / RS-422 transceivers including NVE's revolutionary IsoLoop DC-DC convertor technology. The devices have best-in-class 40 Mbps data rates, and the integrated DC-DC convertors require no additional regulation and ferrite beads are not necessary for EMI mitigation.



AET-Series TMR Rotational / Linear Sensors
AET-Series sensors can be used with multipole ring magnets as rotary encoders, or with magnetic linear scale tape as linear motion sensors. High sensitivity allows for wide airgaps.