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New YouTube Videos

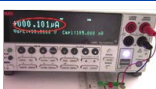
- [The world's first smart TMR magnetometer](#)
- [The World's Smallest Isolated Transceiver: Really Simple Demo](#)
- ["Blinky-Flashy" Angle Sensor Demo](#)
- [Low-Power Isolated Transceiver Demonstration](#)

Document Updates

- [ADL-Series Nanopower digital sensor datasheet](#)
New power consumption specs.

Ridiculously Low Power Digital Sensors

A new manufacturing process has allowed us to tighten the already ridiculously low power consumption specifications of ADL-Series Nanopower Magnetic Switches.



[ADL-Series Sensors run almost forever on a watch battery](#)

Duty Cycled

Internally duty cycled versions (the ADL0xx and ADL1xx Series) will run nearly forever on lithium button cells, making them ideal for battery applications such as gas and water meters, or portable instruments.

Configured as Switches

Outputs are configured as magnetic "switches," turning on when a magnetic field is applied and off when the field is removed. The field can be either polarity, and the magnetic operate point is extremely stable over supply voltage and temperature.

Integrated Latches

Integrated latches ensure the outputs are continuously available. Two duty-cycle frequencies are available, offering a tradeoff between update frequency and power consumption. Continuously-operating versions (the ADL9xx Series) are also available.

ADL sensors are also NVE's smallest parts at just 1.1 mm x 1.1 mm x 0.35 mm.

Key Specifications

- 2.4 to 3.6 V supply voltage
- As low as 84 nW power consumption at 2.4 V
- 20 or 28 oersted operate points
- Open-drain output
- -40°C to +125°C temperature range



ADL-Series Sensors fit on the head of a pin.

In Stock

Six part types are in stock for immediate delivery:

Part Type (click for more info)	Magnetic Operate Point (typ.)	Update Frequency (typ.)	Power Consumption (typ. at 2.4 V)
ADL021-14E	20 Oe	55 Hz	120 nW
ADL024-14E	28 Oe	55 Hz	120 nW
ADL121-14E	20 Oe	30 Hz	84 nW
ADL124-14E	28 Oe	30 Hz	84 nW
ADL921-14E	20 Oe	Continuous	84 µW
ADL924-14E	28 Oe	Continuous	84 µW

[Download the updated ADL-Series Datasheet >](#)

Buy Online
\$9.95 shipping

ADL Evaluation Kits



[AG941-07E: ADL-Series Nanopower Magnetic Sensor Evaluation Kit](#)



[AG040B: Battery-Powered Mini Eval Board](#)



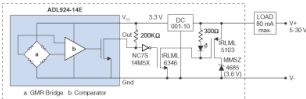
[AG040C: Externally-Powered Mini Eval Board](#)

2-Wire Interfaces

With their new, even lower quiescent current, ADL-Series sensors provide plenty of design margin for two-wire interfaces.

Two-wire interfaces need to operate over a wide power supply range. With the sensor off, the circuit must draw a minimal residual current, typically in the range of 1.5 mA. With the sensor on, the circuit must provide enough current to drive a significant load such as a motor or solenoid.

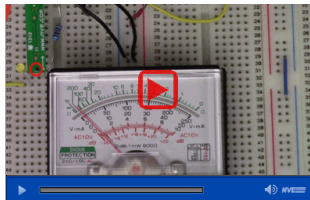
This [reference circuit](#) uses an NVE [DC001-10](#) regulator to wide operating latitude over the input voltage range:



Two-Wire Reference Circuit

The residual current is dominated by the regulator's quiescent current, which is less than 1 mA and relatively constant over input voltage. A Zener diode can be used instead of a voltage regulator in many applications.

Here's a live demonstration:



Upcoming Conferences and Exhibitions



Sensors Midwest
October 16 and 17
Rosemont, Illinois
Booth 201

[Contact us](#) for a free exhibition pass!



NVE distributor **HY-LINE** will be exhibiting at **Wireless Congress: Systems & Applications**, November 15 and 16 in Munich, Germany.