

Current Transducers Raise Voltage, Increase Creepage And Clearance

[Danisense](#) has expanded its DN1000ID current transducer product family with the introduction of the DN1000ID-CP02 model. The 'CP02 current transducer features a significantly increased creepage and clearance distance of 38 mm, compared with 11 mm for the standard DN1000ID version. In addition, the permissible voltage for uninsulated cables has been raised from 1000 V to 3200 V (see the figure).

As system voltages continue to rise across a wide range of applications, these enhancements make the new device particularly well suited for power measurement and power analysis in EV chargers, power inverters, and battery energy storage systems. Additional target applications include EV test benches, particle accelerators, MRI systems and medical scanners, battery testing and evaluation equipment, current calibration systems, and other precision current-sensing applications.

The DN1000ID-CP02 incorporates a removable isolation insert and a large 40-mm aperture to accommodate wide cable terminals. The transducer is capable of measuring currents up to 1500 A, with continuous measurement of 1000 A achieved with a linearity error of less than 1 ppm. An overrange capability of 1200 A rms for up to 30 minutes is also supported.

Based on Danisense's ultra-stable closed-loop fluxgate technology, the DN1000ID-CP02 product delivers a very low offset of 5 ppm and ultra-low drift. Noise performance is described as best-in-class, with sub-ppm RMS noise across frequencies up to 10 kHz. The device provides high resolution for precise monitoring, reliable and consistent performance, and a compact, rugged design to support straightforward installation and long-term durability.

Learn more about the DN1000ID-CP02 [here](#) or see the [datasheet](#).



Figure. Developed in response to a key customer's requirement, the DN1000ID-CP02 current transducer features a raised voltage of 3200 V and an increased clearance and creepage distance to meet the needs of today's high-voltage applications.