

## Automotive GMR Current Sensor – CS-70v

Willow Technologies Limited ([www.willow.co.uk](http://www.willow.co.uk)) introduces the new Yamaha **CS-70v Coreless Magnetic Balanced Sensor**. The device gives high accuracy electric current measurement by using high sensitivity GMR elements. Packaged complete with Integral Busbar, the CS-70 can be used with AC or DC and provides a ratio-metric or non-ratio-metric analogue voltage output.



With no Ferrite core required, the design provides for a light weight (1.82g) and compact package (23x12mm approx.) which is driven by a 5VDC power supply. The standard unit is capable of measuring up to 50Amps with a sensitivity of 28.3mV/A typical. Custom designs can be considered which would increase the measuring range dramatically and Willow welcomes any enquires of this nature.

Martin Pearce, Marketing Director at Willow Technologies Limited commented “Present demand for these highly innovative current sensing assemblies stems from the automotive, industrial, electric utility and home electronics (electric tools) markets, with applications ranging from monitoring of auxiliary and electric vehicle batteries, inverters for motor driving, power conditioners, smart meters and energy management systems.”

CS-70v exhibits excellent performance over a wide temperature range with offset temperature drift less than +/-6mV and sensitivity temperature drift of less than +/-1%. Linearity is 0.05%FS (max.) with response time at just 1.0µs and frequency response of 400kHz. Current consumption is very low at 6mA for 0A and 16mA for 50A on the busbar. Dielectric voltage to 2.5kV, the device has Creepage & Clearance of 7.53mm and 6.75mm.

Yamaha continues to develop ever improved current sensors and current sensing assemblies, their technology is highly regarded globally. “Based on the excellent quality and performance of Yamaha’s current sensing range, we are confident at Willow Technologies that this product will fast become a leading player in the market”, concluded Pearce.

### Editor Information

Founded in 1989, Willow Technologies is located in Copthorne, Surrey, UK. We provide electronic solutions to customers by designing, manufacturing and supplying components and systems globally to the electrical and electronic marketplace. Specialists in switching, sensing, resistive and hermetic seal solutions we have a wide portfolio of sensing technologies and over 60 years of application experience. Our in-house engineering capability and rapid prototyping facility for custom parts enable us to develop products to match specific application requirements. Willow is ISO9001:2000 registered.

Please contact Matthias Draxler, Technical Sales, [mdraxler@willow.co.uk](mailto:mdraxler@willow.co.uk), +44 (0) 1342 717102