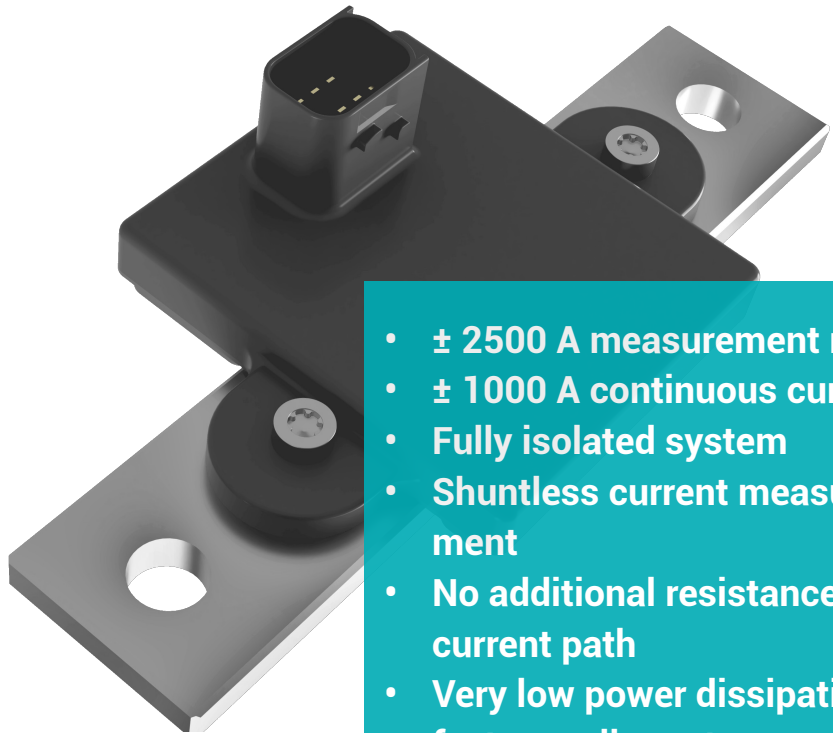


HIGH CURRENT/ HIGH VOLTAGE Sensor

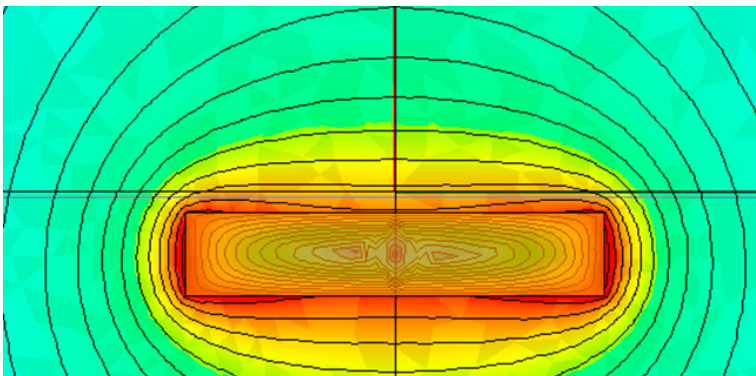
for electrical powertrain and charging stations

The AST owned 3D-Hall ASIC permits a fully insulated current measurement without introducing additional resistance to the current path. Even at currents above 1000A the power dissipation is very low and the rise of temperature is much lower than in shunt based systems. The fast sampling rate for current and voltage ensures a reliable measurement even at high-dynamic signals. The sensor is qualified according ASIL B.



- ± 2500 A measurement range
- ± 1000 A continuous current
- Fully isolated system
- Shuntless current measurement
- No additional resistance in current path
- Very low power dissipation
- fast sampling rate
- ASIL B qualified

The 3D-Hall Technology allows current measurement through the measurement of the flux density of the magnetic field caused by the current. This technology has no need for flux guiding elements made of ferromagnetic



material and therefore does not suffer from hysteresis effects. The fully isolated digital interface for the voltage measurement supports high sampling rates for the measurement of high-dynamic signals.

Technical data:

Nominal continuous current	1000A
Current Measuring range	0 to ± 2500 A
Current Measuring Accuracy	± 1 A @ 0-200A ± 2 A @ 200-1000A ± 10 A @ 1000A-2000A
Current sampling rate	100Hz
Voltage Measuring range	0-1500V
Voltage Measuring Accuracy	± 2 V @ 25°C ± 4 V @ -40°C - +125°C
Voltage sampling rate	10 kHz
Interface	CAN

AST International is a leading provider of customized sensors and controls for automotive, domestic appliance, and industrial applications. Our products stand out on account of their cutting-edge sensor technology, best quality and reliability.



AST INTERNATIONAL
ADVANCED SENSOR TECHNOLOGIES

www.ast-international.com

AST International GmbH

Baerental 26
75365 Calw/ Germany

✉ sales@ast-international.com