

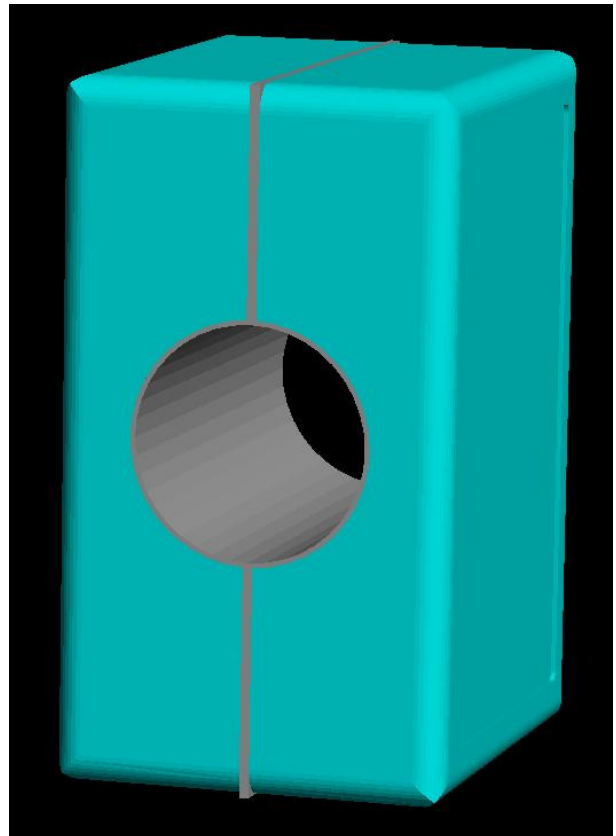
SURETECH™ **Hall Effect Current Sensor**



The **SURETECH HECS** (Hall Effect Current Sensor) measures AC or DC current on switch-gear, cables etc. The SURETECH HECS can be selected to measure a wide range of current, from less than an amp up to tens of thousands of amps. The bandwidth characteristics of the SURETECH HECS are superior to normal magnetic core CT technology, and so can be deployed on Quality Of Supply applications as well. The SURETECH HECS provides a range of outputs such as 0-5V, 0-10V, +/- 10V, 0-20mA, 4-20mA, true rms, instantaneous, relay contacts, LCD display, RS232, RS485 etc. The SURETECH HECS can optionally be fitted with signal processing options for a wide range of smart applications, including controllers.

These HECS sensors can be ordered as:
SLIP-ON (more stable, lower cost) or
SPLIT-CORE (more convenient, higher cost)

Technology: the SURETECH HECS uses Hall effect to sense a magnetic field resulting from the current. The Hall effect sensor measures the magnetic field within GOSS core (Grain Oriented Silicon Steel). Input and output current has galvanic isolation. In the event of fault conditions, the



magnetic core saturates but does not damage the sensor. Auxiliary power supplies are fitted with transient suppressers to prevent sensor damage from fault transients. HECS sensors are encapsulated in epoxy for improved stability.

Environmental Performance:

Parameter	Value
Temperature range	0 / 60 degr C
Bandwidth	DC – 10kHz
In / Out transient	5kV @ 50Hz
Accuracy (slip on)	<1%
Calibration Accuracy	0.2%

Configuration Options:

Input Types	Input Ranges	Signal Processing	Output types	Aux PSU	Enclosure formats
Uni-polar	60Amps	Precision rectified	0 / 5V dc	12Vdc	Split Box (72x50x35)
Bi-polar	125Amps	Instantaneous	-5 / 0 / +5V dc	24Vdc	Slip Over (72x50x50)
	250Amps	True RMS	0 / 10V dc	+/- 15Vdc	Split Core (enq)
	500Amps	Filtered	-10 / 0 / +10V dc	90-260Vac	
		Threshold detect	0 / 20mA dc		
			4 / 20mA dc		
			Opto Isolated transistor		
			Relay contact		
			RS232		
			LCD (16 x 2 lines)		

General Features:

- ✓ Linear measurement circuits
- ✓ Optional LCD readout available
- ✓ Wide selection of input and output options including, logic, analogue, RS232 and human
- ✓ Noise filtering available
- ✓ Dimensions and configuration: User can specify
- ✓ LV enclosure is available for panel mount flush or top-hat rail
- ✓ Transient suppression on input and outputs
- ✓ Wide selection of auxiliary power supply options available
- ✓ Galvanic isolation from HV source (optional)
- ✓ Engineering backup to provide you support for design, applications information, installation & calibration, maintenance
- ✓ All current sensing applications, both AC and DC
- ✓ HV and LV Laboratory and Test system instrumentation
- ✓ HV and LV panel current measurements
- ✓ HV and LV current alarms (upper & lower thresholds settable)

NB SPECIFICATIONS CAN CHANGE AT ANY TIME



SURE Engineering CC
 PO Box 63, Steenberg, Cape Town 7947
 South Africa
 Reg CK 87/11172/23

Website: <http://www.suretech.co.za>
 email: info@suretech.co.za
 Tel: +27-21-701-8529 Fax: +27-21-701-9183
 Cell: +27-83-555-0149