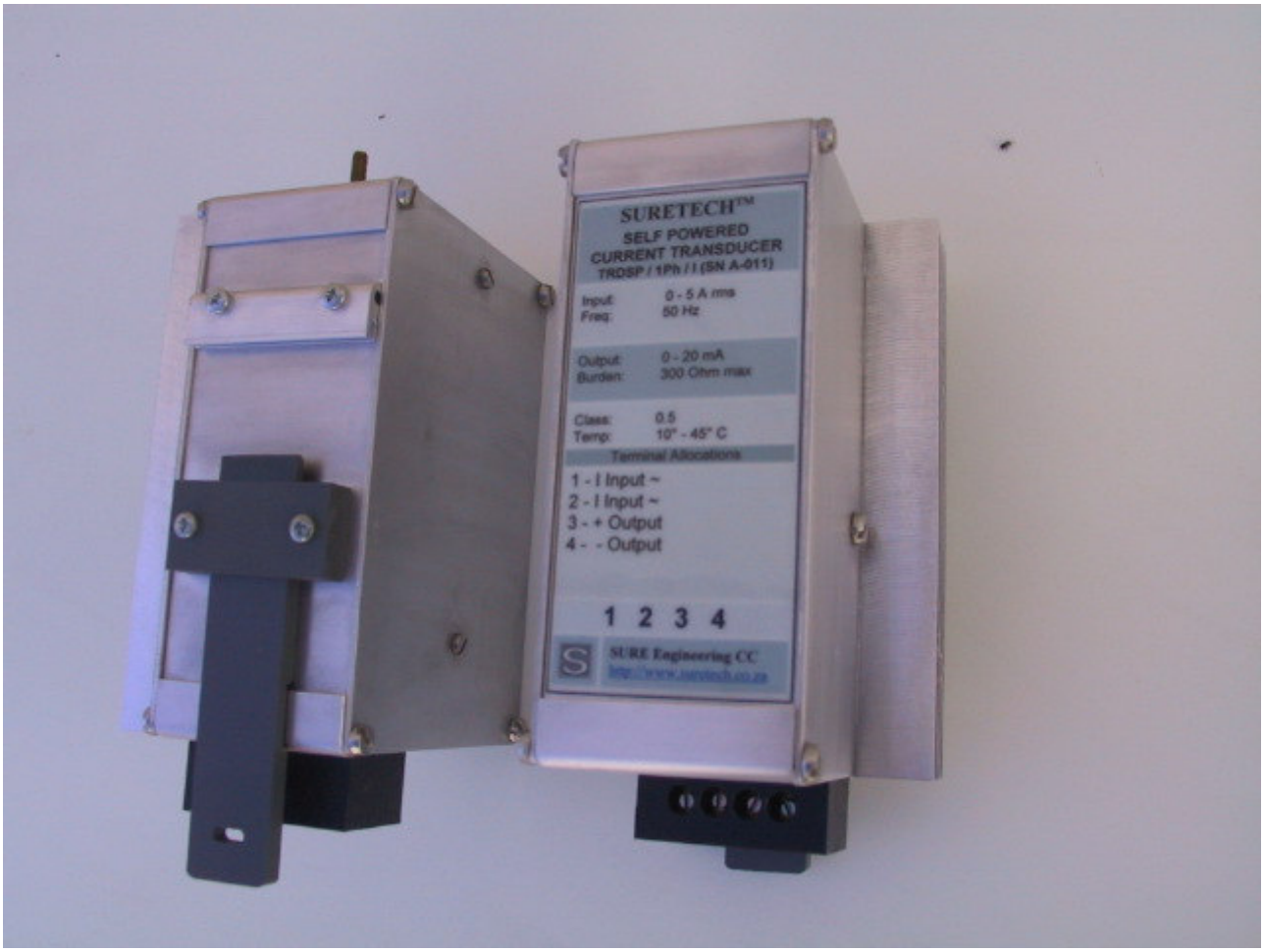
Everyone needs TRANSDUCERS for measuring electrical parameters.

SURETECH
Self Powered Current Transducer



The SURETECH Self Powered Current Transducer (SP/CTrd) measures Current without the need for an auxiliary power supply. When used in conjunction with the SURETECH CT/PSU, The SP/CTrd extracts its power directly from a 5 amp or 1amp CT (current transformer). When driving a panel meter, which responds to 0 to 20mA DC, there is no loss of linearity even at the low end of the scale, where the AC current is very low.

General Features:

- ✓ AC current input is used as the power source to the transducer
- ✓ CT power supply extracts power from the AC current to supply the current transducer
- ✓ Wide range of output choices available
- ✓ SURETECH Modular enclosure is used for DIN rail mount, and facilitates heat disipation
- ✓ Separate switch mode PSU is contained in small aluminium enclosure for power conversion
- ✓ Standard screw terminals for easy and reliable connections
- ✓ Transient suppression on inputs and outputs
- ✓ Input and output are galvanically isolated
- ✓ DC voltage or current output available
- ✓ Backup to provide you support for design, application, installation, and maintenance information

Self Powered Current Transducer Specifications:

Measurand	Description	Condition	Performance
Input AC Current	• 1 amp AC • 5 amp AC	Max current input • FSD x 100% for 200ms • FSD x 200% for 100ms • FSD x 2100% for 10ms	• 0.5%
Outputs	• 0 - 20mA dc • 0 - 5 mA dc • 0 - 5 V dc • Others are available, enquire	• Output burden <400ohm • Output burden <1600ohm • Output burden >10kohm	• 0.5%
Power Supply requirements	• +7V dc @ (10mA + output I) • -10V dc @ (10mA + output I)	• SURETECH CT-PSU provides these requirements	

CT/PSU (Current Transformer Power Supply Unit) Options:

The ultra-low voltage switching power supply extracts energy from a CT to drive a range of applications such as battery charging, instrumentation or communication electronic systems. The ultra low voltage switching power supply can accept voltages less than 1 Volt DC, designed in-house and uses inexpensive discrete components. Ultra-low voltage (less than 1 Volt) integrated circuit solutions are very rare and expensive. The CT/PSU provides an extremely cost-effective solution to provide power for a range of applications such as: transducers, pole mounted HV protection systems, and HV equipment requiring a DC supply on the hot side of the insulator etc.

Configuration	PSU Burden	Output Voltage & current
5 Amp AC Protection CT	• Voltage burden on CT = 2.1V • Max VA burden on CT = 11VA	• +7 -10V @ 30mA dc at 5amps AC • user to specify
1 Amp AC Protection CT	• Voltage burden on CT = 2.1V • Max VA burden on CT = 2.1VA	• +7 -10V @ 30mA dc at 1amps AC • user to specify
5 Amp AC Metering CT	• Voltage burden on CT = 2.1V • Max VA burden on CT = 11VA	• +7 -10V @ 30mA dc at 5amps AC • user to specify
1 Amp AC Metering CT	• Voltage burden on CT = 2.1V • Max VA burden on CT = 2.1VA	• +7 -10V @ 30mA dc at 1amps AC • user to specify

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