SATEC

FCS-600

(EL0192)

SOLID-CORE FLUX GATE CURRENT SENSOR 600A DC PRIMARY

DATASHEET

The UHACS (Flux Gate Sensor) series delivers revenue-grade measurement accuracy for most applications when paired with our PRO Series meters.

Based on advanced active sensing technology, UHACS sensors provide the exceptional linearity and stability required for utility-grade metering across today's diverse energy landscape.

TECHNICAL SPECIFICATIONS

GENERAL CHARACTERISTICS

Primary Nominal current DC	± 600A DC
Linear measuring range (1min)	1.1 x I_n
Primary overload current	±720A DC @ 1 min
Nominal output signal	±40mA
Supply voltage	±15V DC (±5%)
Current consumption (Max.)	±430mA
Galvanic isolation	5KV RMS/50Hz/min
Conversion ratio (A/mA)	600 : 40
Weight	420 g (± 50 g)
Protection of Case	IP61

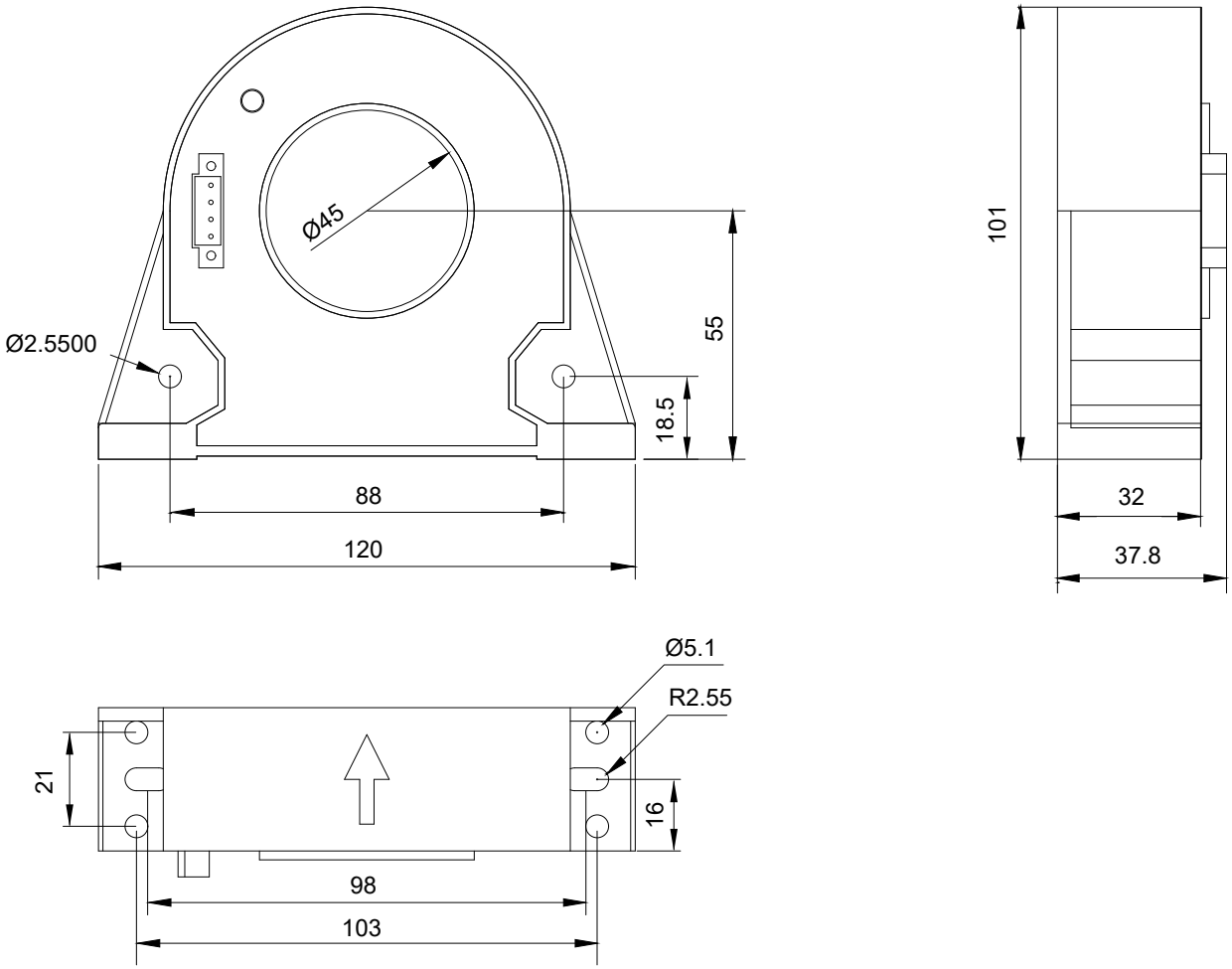
ACCURACY

Zero offset current	±1 μA (@25 °C)
Offset temperature coefficient	40 ppm / K
Measuring resistance	250 Ω
Response time	±20 μs (di/dt of 100A/μs rise to 90% I_n)
Accuracy	< 0.1% (I_n - 0.05 I_n)
Linearity	0.02% FS
Bandwidth (-3dB) / BW	DC-20kHZ

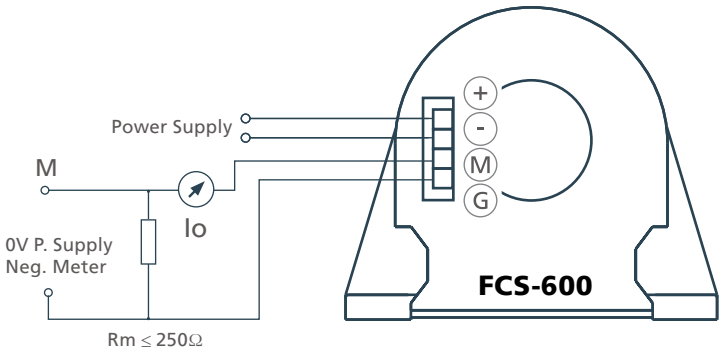
ENVIRONMENTAL

Operating temperature	-40°C ~ +85°C
Storage temperature	-55°C ~ +95°C

DIMENSIONS (MM)



WIRING SENSORS



Pins

1:	+15V (+)
2:	-15V (-)
3:	Pos. Output (M)
4:	0V / Neg. Output (G)

IMPORTANT NOTES

- **Incorrect connection may lead to the damage of the sensor.** Connect the terminals of power source and output respectively and correctly. **Please pay special attention to the 0V / Negative Current Output connection.**
- The best accuracy can be achieved when the window is fully filled with bus-bar (current carrying conductor).
- The current sensor is not allowed to be used when the secondary output is open-circuited, that is, when the primary has current or the sensor is powered on, the secondary output terminal is not allowed to be disconnected; only when the bus has no current and the sensor is not powered on, the current output terminal of the sensor can be disconnected . Otherwise, high voltage may be induced and there is a danger of electric shock or equipment damage.
- When you need to move the product, please be sure to cut off the power first and unplug all the connecting cables connected to it.