

FCS-2500 / 13

(EL0188)

SOLID-CORE FLUX GATE CURRENT SENSOR
2,500A DC PRIMARY

DATASHEET



The UHACS 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	±2,500A DC
Linear measuring range (1 min)	1.1 x I _n
Primary overload current	±2,750A DC @ 1 min
Nominal output signals	±40mA
Supply voltage	±24V DC (±5%)
Current consumption (Max.)	±1.2A
Galvanic isolation	5kV RMS / min @ 50Hz
Conversion ratio (A/mA)	2,500 : 40
Weight	7.2 kg (±0.5 kg)
Protection of Case	IP65

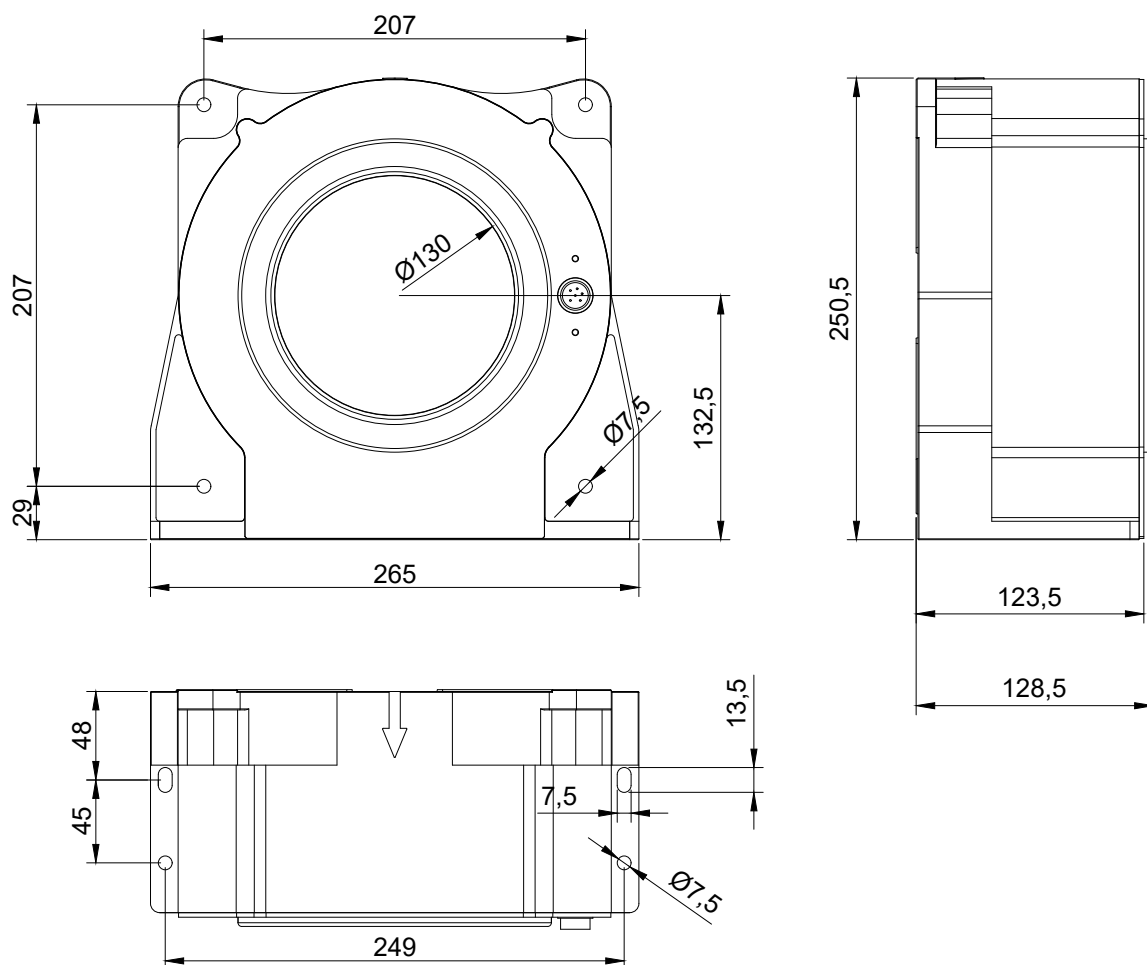
ACCURACY

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

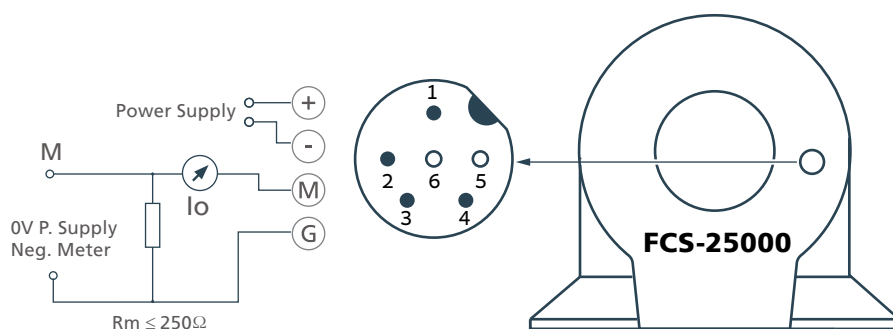
ENVIRONMENTAL

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

DIMENSIONS (MM)



WIRING SENSORS



Pins

1:	+24V (+)
2:	-24V (-)
3:	0V / Neg. Output (G)
4:	Pos. Output (M)
5:	N/A
6:	N/A

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.