

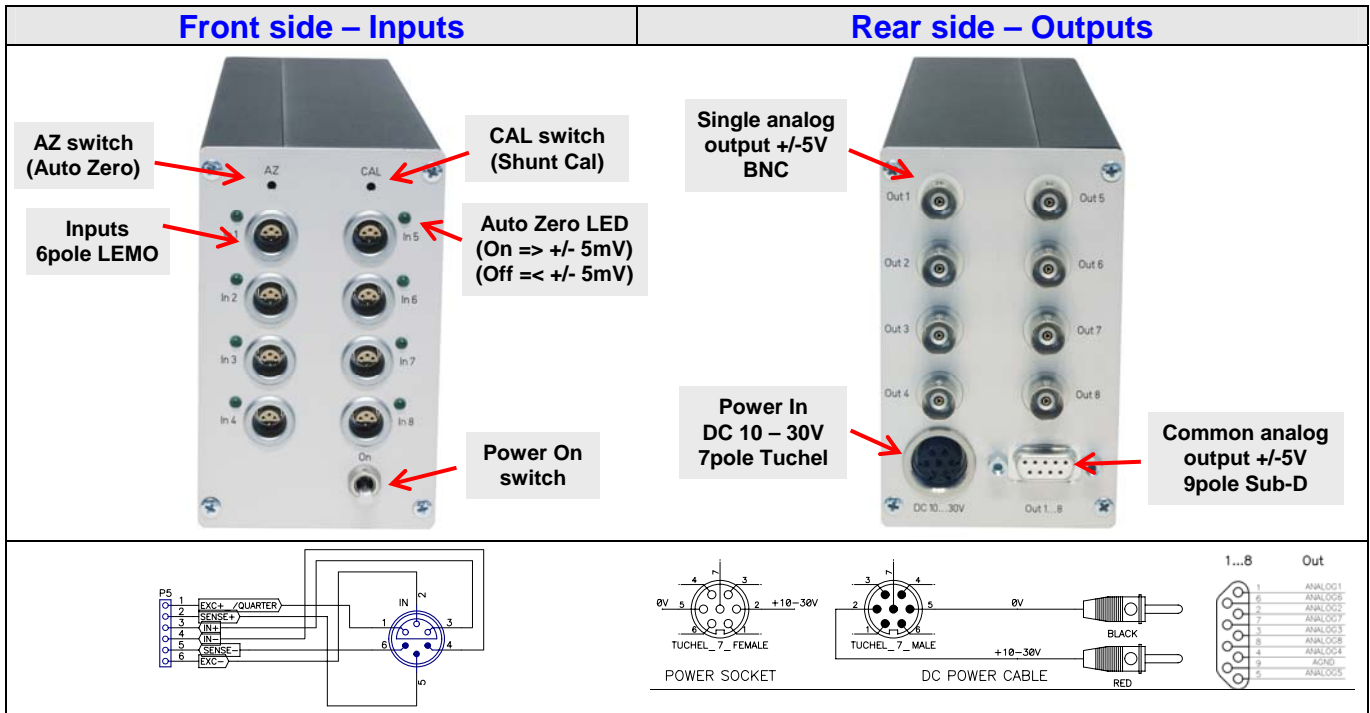
SC-8

8-channel sensor amplifier


Signal conditioning for STG, LVDT, TH-K,
F/V, ICP, CURRENT, FILTER ...



- STG offset via Auto Zero calibration
- Full-, half- or quarter-bridges
- Gain 3 ranges 10, 100 or 1000 (other gain on request)
- Bridge excitation 4V or 8V
- Jumper programmable
- Mixed installation practicable
- Output +/-5V via BNC
- STG and IPC can be combined with a low pass filter (10Hz to 7,5kHz)
- Compact and rugged design
- Powering 10 - 30V DC



Dimensions: 65 x 105 x 250 mm, Weight 1.5kg, Powering: 10-30V DC, Operating temperature range: - 20°C ... + 80°C

To measure:	Module	Description	Characteristics
Force, pressure, strain, torsion, material stress	STG	Strain gauges 	<ul style="list-style-type: none"> Full, half, quarter bridges in 2- and 3-wire technique (120Ω, 350Ω, 1kΩ) Settable gain (2, 10, 100, 1000) Settable bridge supply (4V, 8V) Auto-zeroing Additive 5kHz fixed filter (2pol. Butterworth)
Distance	LVDT	Inductive distance sensor	<ul style="list-style-type: none"> Settable gain (1, 2, 5, 10) Sensor supply 5kHz, ±5V Auto-zeroing
Frequency, speed by pulse frequency	F/V	Frequency-to-voltage converter	<ul style="list-style-type: none"> Settable maximum frequency (500Hz, 2.5kHz, 10kHz) Minimum frequency 40Hz Signal amplitude 0.3-10V Square, sine and triangle wave forms 10Hz output filter (2pol. Butterworth)
Acceleration, oscillation, vibrations, acoustic	ACC	Acceleration sensor based on STG	<ul style="list-style-type: none"> all common sensors
	CAP	Capacitance accelerometer	<ul style="list-style-type: none"> Measuring ranges ±3g, ±10g, ±50g Shock resistance 10.000g Frequency ranges 0-160Hz (±3g), 0-350Hz(±10g), 0-550Hz (±50g)
	ICP	Piezoelectric accelerometer and microphones	<ul style="list-style-type: none"> Excitation current 1mA, 2mA, 4mA, 20mA (optional others) Excitation voltage 30V Gains 0.5, 1, 2, 4, 8, 16, 32 (optional others) Signal bandwidth 5-16000Hz
Temperature	THERMO	Thermo wires Type J, K (T)	<ul style="list-style-type: none"> Measuring range from -20°C up to +500°C Gain 10mV/°C Internal cold junction compensation Optional galvanic isolation with integrated ISO module
	Pt100	Thermo resistors from Pt100 / Pt1000	<ul style="list-style-type: none"> Measuring range from -20°C up to +500°C Gain 7.7mV/°C Excitations 0.25, 0.5, 0.75, 1mA for Pt100 Optional galvanic isolation with integrated ISO module
Galvanic isolated voltage	ISO	Isolation amplifier	<ul style="list-style-type: none"> Additive isolated sensor excitation Input ±10V Optional 4Hz fixed filter (4pol. Butterworth)
Voltage	VOLT	No signal conditioning	<ul style="list-style-type: none"> Input ±2.5V, ±5V (default), ±10V, ±15V, ±20V, ±25V Auto-zeroing up to ±250mV Input resistance >100kΩ (depends on range) Optional bridge excitation ±15V
	FILTER	Optional filter for all modules	<ul style="list-style-type: none"> 8th order elliptical or linear phase frequency response, more than 2000 cut off frequencies from 10Hz to 7,5kHz available (reciprocal scaling)