

CS18 Optional Extra

Sensor SUPPLY internal



Voltage supply for
special sensors

Applications

- Provides proper connection of several kinds of sensors to a voltage input of a measurement device (here: CS18 VCU). Sensor is plugged in at input. Signal output is connected to CS18 VCU input. Provides DC supply voltage(s) for sensor and performs signal preconditioning

Range of Use

- Certified Calibration laboratories
- Departments of **measuring instrument verification** in research, development and industry, particularly in **automotive crash test laboratories**
- **Quality assurance** in the sensor manufacturing

Features

- Supply of typical **supply voltage** for sensors
- **short-circuit-proof** power supply
- **Pre-conditioning** of the sensor output signal
- Impedance converter
- Optional DC reject high pass 0.01 Hz
- Custom made design for several types of sensor

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Components

- Plug-in module for CS18 vibration control system **SRS-35**, SPEKTRA
- Sensor In socket, Signal Out socket, Indicator LEDs

Sensor supply	
Voltage Range	Unipolar: +15 V _{DC} , +/- 2% (Type D,P,K) or custom made + 5 V _{DC} ... + 15 V _{DC} Bipolar: +15 V _{DC} , -15 V _{DC} , +/- 2% (Type E) or custom made +/- 5 V _{DC} ... +/- 15 V _{DC}
Current	max. 100 mA (polyfuse-protected)
Options and Parameters	
Balanced differential input (Type D, E, K)	Gain (0 - 5 kHz): 1 +/- 0.02% Gain (0 - 10 kHz): 1 +/- 0.05% Gain (0 - 20 kHz): 1 +/- 0.2% Gain (0 - 50 kHz): 1 +/- 1% (U _{imax} =1 V) Signal Delay: 0.4 μs (typical) (<=20 kHz; 20 ... 50 kHz, 1V) Voltage range: +/-10 V _{peak}
Grounded input (Type P)	Gain (0 - 10 kHz): 1 +/- 0.02% Gain (0 - 50 kHz): 1 +/- 0.1% Signal Delay: 0.2 μs (typical) Voltage range: +/-10 V _{peak}
Common	Input impedance 10 MOhm
Sample sensors	Type P (+15 V _{DC}): PCB 3701_ (grounded input) Type D (+15 V _{DC}): Dytran 7500A_ (differential input) Type K (+15 V _{DC}): Kistler 83_ (differential input) Type E (+15 V _{DC}): Endevco 7290A (differential input)

Optional extras for the sensor supply

- 1 to 4 channels
- Individual customer-specific connectors and connector pin assignments
- Customized sensor supply voltage(s)

Also available as VCU plug in module „Sensor SUPPLY external“
See also PR-Module for bridged piezo resistive sensors