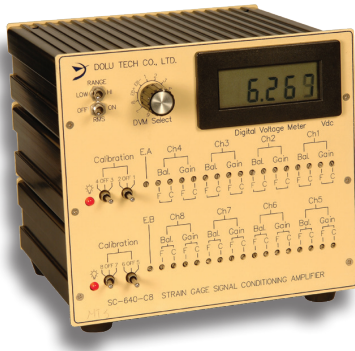




SC-640 Strain Gage Conditioning Amplifier

Signal Conditioning Amplifiers-Dynamic Strain Amplifiers



Features:

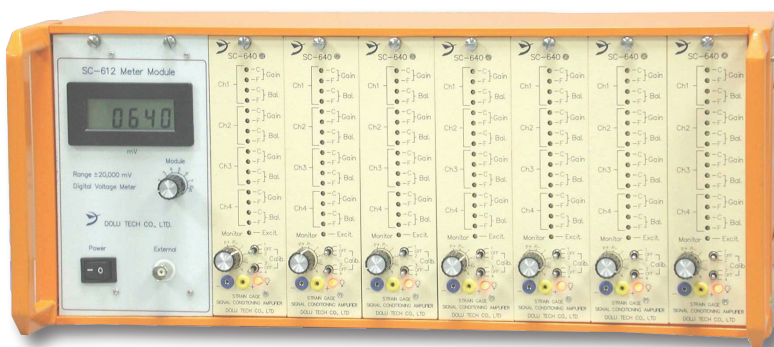
- Constant-voltage excitation 2.5 ~ 10.0 Vdc 400mA Max
- Max Frequency Response: 5KHz
- Grand balance
- Low-pass active 4 pole Butterworth standard
- Balance $\pm 13,000\mu\epsilon$
- Option bridge completion and shunt-calibration resistor modules
- Option 28 channels fits standard 19-in electronic equipment
- Option 12 channels portable rack

Description:

SC-640 Strain gage conditioning amplifier is designed by multi-channel and high accuracy measurement. 4 channels in a module designed to reduce working time .

Has max frequency response at 5KHz.

Measures strain gage type transducer for example temperature, acceleration, load cell, micro-displacement, torque and pressure transducers.





SC-640 Strain Gage Conditioning Amplifier

1-3

Specification:

- INPUT
 - Input Impedance: 10GW, 2PF
 - Input Current: 2nA
- Excitation
 - Range: 2.5 to 10.0 Vdc, 400 mA Max.
 - Noise: $100\mu\text{V} \pm 0.002\%$ Vp-p
 - Load Regulation : $\pm 200\mu\text{V}$, $\pm 0.01\%$
 - Type: Grand balance
- Amplifier
 - Gain: 50 to 4000 standard
 - Frequency Response
 - Dc to 10KHz; -3 ($\pm 0.2\text{dB}$) at all gain settings
 - Slow Rate
 - 0.5V/ μsec min at all gain settings
 - Noise: 350 Ω source impedance, dc coupled
 - Referred-to-Input (RTI):
 - 10Hz 5 μV -p.p.
 - 100Hz 22nV
 - 1KHz 18nV
 - 5KHz 16nV
 - CMR (Common-Mode Rejection):
 - Ration DC to 60Hz
- Balance Range
 - Coarse Balance: $\pm 10,000\mu\epsilon$
 - Fine Balance: $\pm 300\mu\epsilon$
- Output
 - Linear Output: $\pm 5.0\text{V}$ Max
 - Output Load : 2K Ω min. resistance
 - Bandwidth : dc to 4KHz, - 3dB nominal
 - Output Noise : Less than 400 μV rms at 400 $\mu\text{V}/\mu\epsilon$ output level
- Calibration
 - Shunt calibration resistors are provided across switch
- Filter
 - Low-pass active 4 pole Butterworth standard
 - BW: 10, 100, 1KHz (-3 $\pm 2\text{dB}$) by Jumper
- Size
 - 46 \times 166 \times 170 mm
- Weigh
 - 0.9 Kg
- Bridge Completion And Shunt-Calibration Resistor Modules
 - SC-640-CA: 0.01%, 1PPM
 - SC-640-B: 0.1%, 20PPM
 - Two 500 Ω 1/2 or full bridge. Internal dummy gages Are provided for 120 Ω , 350 Ω and 1000 Ω 1/4 bridges
 - Shunt calibration resistors are provided across intern simulator 1,000 $\mu\epsilon$
- Power Supply
 - SC-612: Power supply for 7 modular
 - Output: set, dual 13Vac, 1,000mA
 - Input: 110 or 220 Vac by switch, 1.5A
 - Switch 7 modular: EXC. & each channel output to front panel BNC connector
 - Size: 46 \times 166 \times 170 mm
 - Weight: 2.4 Kg
- SC-647 Rortable Enclosure
 - Accepts 1 SC-612 power modular and 7 SC-640 strain gage amplifier fits standard
 - 19-in electronic equipment
 - Size: 420 \times 177 \times 220 mm
 - Weight: 2.8 Kg
- SC-640-C08 Protoble Enclosure
 - Accepts power modular and 2 SC-640 strain gage amplifier
 - Size: 150 (W) \times 135 (H) \times 140 (D) mm
 - Weight: 2.2 Kg