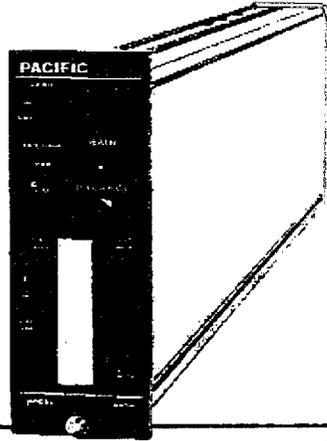


**MODELS 8650/8655**



**BASIC MODELS**

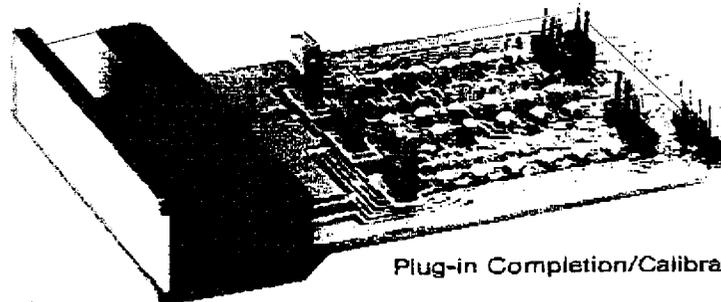
- 8650** Transducer Amplifier,  $\pm 10$  Volts Common Mode
- 8655** Transducer Amplifier,  $\pm 300$  Volts Common Mode

**OPTIONS**

- B** Excitation Interrupt
- C1** Voltage Calibration
- F2** Switch Selectable 2-Pole Bessel Filter
- F5** 6-Pole Bessel Filter (includes frequency module)
- G** Power Amplifier,  $\pm 10$  Volts at 100 mA
- J** Output offset,  $\pm$  Full Scale

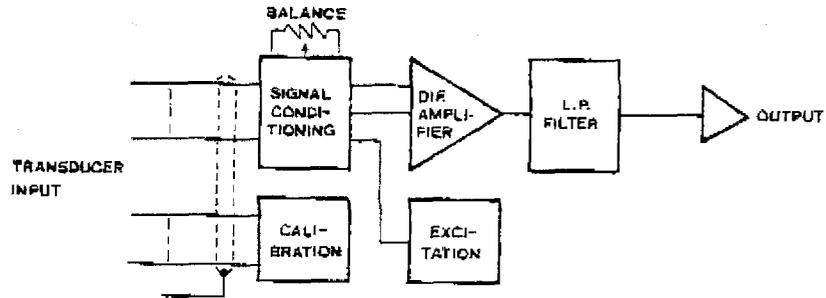
**BRIEF SPECIFICATIONS**

Input .....	2 to 10 wires plus shield
Voltage Excitation .....	0.1 to 15 Volts, 100 mA
Current Excitation .....	1 to 100 mA, 12 Volts
Bridge Completion .....	4-arms, plug-in card
Bridge Balance .....	0.02% resolution
Calibration .....	R-Shunt, 2 bipolar steps, optional voltage substitution
Input Impedance .....	50 megohm, 200 pF
Gain .....	1 to 2500, 0.1% accuracy
Linearity .....	0.01%
Output .....	$\pm 10$ Volts, 10 mA (100 mA optional)
Bandwidth .....	100 kHz
Filter (option F2) .....	Bessel, 12 dB/octave: switch selectable bandwidths; 10 Hz, 100 Hz, 1 kHz, 10 kHz, 100 kHz
Filter (option F5) .....	Bessel, 30 dB/octave: Low pass frequency selected from 1 Hz to 100 kHz by plug-in module
Noise .....	7 $\mu$ V RMS
Zero Stability .....	$\pm 5 \mu$ V, $\pm 0.4 \mu$ V/degree C
Common Mode .....	120 dB rejection
8650 .....	$\pm 10$ Volts
8655 .....	$\pm 300$ Volts
Monitor .....	Terminals for excitation and output



Plug-in Completion/Calibration Card

# TRANSDUCER CONDITIONING AMPLIFIER



## FEATURES

- Isolated Voltage/Current Excitation
- Bridge Balance and Remote Calibration
- Differential Instrumentation Amplifier
- 10 or 300 Volt Common Mode
- Switch Selectable Filter
- Self-Contained, Line Powered

**T**ransducer Conditioning Amplifiers 8650 and 8655 are similar instruments which differ only in common mode voltage. The 8650 rejects up to  $\pm 10$  Volts common mode and 8655 rejects up to  $\pm 300$  Volts. These models have similar performance to Pacific's 8250 and 8255 without the mainframe/plug-in module flexibility. Both units provide transducer excitation, conditioning, balance, calibration, amplification and filtering for strain gages and 1-, 2-, or 4-arm transducers. They are also used with potentiometric transducers, potentiometers, thermocouples and similar low level sources.

Both models contain a fully floating and shielded excitation power supply with selectable constant voltage or constant current operation. Input configuration, bridge completion, and calibration components are located on a plug-in card which mounts through the front panel and is easily changed to suit test requirements. Two steps of bipolar, single or double shunt calibration can be selected by optically isolated remote control. Voltage substitution calibration and excitation interrupt are options for both models.

Amplifier gain is adjustable from 1 to 2500 in 10 calibrated steps with variable gain multiplier. The amplifier operates from grounded or floating sources with 120 dB common mode rejection. Full bandwidth is 100 kHz. Optional filters include a switch selectable 2-pole Bessel and a 5-pole Bessel, with bandwidths selected by plug-in frequency modules. Data output is  $\pm 10$  Volts at 10 mA. Power amplifier option provides  $\pm 10$  Volts at 100 mA output capability. Option J increases range of the output zero control providing plus and minus full scale offset capability.

These instruments are self-contained, floating, line powered and input/output compatible with the Pacific 8200 Series.