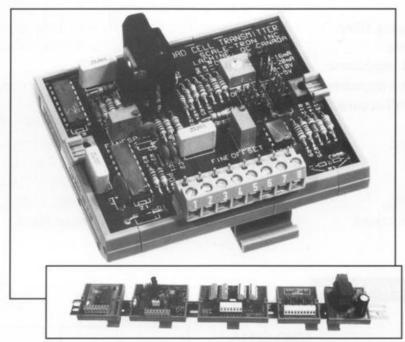
LOAD CELL TRANSMITTER

MODEL 1410

The model 1410 transmitter is a state-of-the art signal conditioning unit for load cells and all straingauge based transducers, providing voltage or current outputs suitable for PLCs, computers and remote display devices. Its high performance is guaranteed, not only at room temperature, but over a wide temperature range. The small size and choice of mounting methods make it suitable for both field and control cabinet installation. Operating from a wide range DC supply, power can be taken from the auxiliary output of most PLCs and computers; there is no need to run AC power to field positions.



The 1410 includes a high-stability excitation supply with a capacity of four 350 ohm load cells, a unique zero-drift amplifier and an integrated 4-20mA current generator. The programmable gain and dead load offset adjustments combine jumpers and fine trim pots to ensure long term stability under worst case temperature and vibration conditions. Mounting options include DIN rail, Curtis relay track and direct mount.

COMPANION SERIES

LOAD CELL SWITCHING RELAY— Model 1080

Model 1080 load cell switching relay is a special relay intended for switching between two or more load cells or load cell based scales. It is fast, reliable and accurate. It eliminates all problems which arise when regular relays are used for switching load cell signals. Designed for use in every type of automatic weighing system. Operates from most standard voltages and has the same mounting options as the 1410.

SPAN-ZERO ADJUSTMENT UNIT — Model 2420

Model 2420 SPAN-ZERO unit individually adjusts two or more load cells or load cell scales when connected in a multiple scale system. Companion to models 1080 load cell switch and the 1410, allows fine adjustment of both Span and Zero, allowing switching without the need for readjustment of the indicator. Each 2420 serves two load cells or complete load cell scales having common excitation and separate signal circuits, as is normal when switching into a common indicator or signal conditioner.

POWER SUPPLY — Model 1040

Model 1040 Power Supply is an unregulated 24V DC power source suitable for the 1410 transmitter and companion series. Its 1.5A capacity will power ten model 1410 load cell transmitters, each with its full load of 4 load cells.

SPECIFICATIONS

Excitation: 10V DC, 115mA max (4-350 ohm or 8-700 ohm load cells). Overload protected.

Signal range: 0.15 mV/V min to 4.0 mV/V max in 5 steps, plus fine trim.

Dead load offset: -0.03 to +3.3 mV/V in 5 steps, plus fine trim.

Signal stability: Max drift $\pm 0.05 \text{ uV/}^{\circ}\text{C}$. (equals $\pm 0.02\%$ total worst-case error over $\pm 20^{\circ}\text{C}$ temperature

range at 0.5 mV/V sensitivity).

Damping filter: Adjustable risetime 0.05 to 2 sec, single pole.

Output: 4-20 mA, 0-16 mA, 0-5 volt or 0-10 volt full scale.

Load impedance: 600 ohm max in 4-20mA mode.

Source impedance: 315 ohm (0-5V mode), 630 ohm (0-10V mode).

Overall accuracy: ±0.01% of full scale at 25°C.

±0.1% of full scale worst case error over ± 20°C. temperature range. 15-30V DC, at a current of (excitation current + 30) mA, 145 mA max.

Size: Board only - 87.5mm x 72mm (3.45" x 2.83")

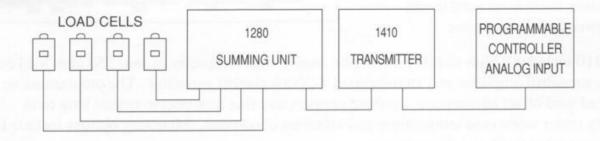
Curtis track mount version - 87.5mm x 70mm (3.45" x 2.75")

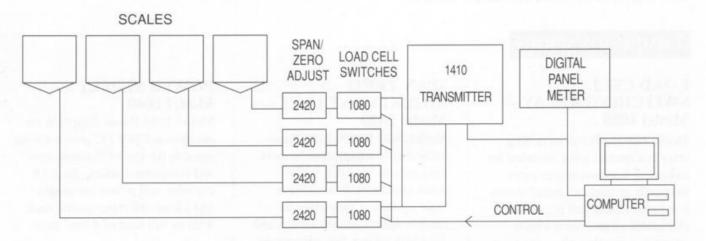
DIN mount version - 90mm x 77mm (3.54" x 3.03"), suits all standard DIN EL rails.

Connections: 8-position pluggable screw terminal block.

APPLICATIONS

Power:





Specifications are subject to change without notice.



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