

# Type 131 Load Cell Amplifier

Park Road, Ryde, Isle of Wight, PO33 2BE, T: +44 (0) 1983 810310 F: +44 (0) 1983 810318

E: web@datum-electronics.co.uk W: datum-electronics.co.uk

## Type 131 Load Cell Amplifiers

### DESCRIPTION

The Type 131 Load Cell Amplifier's basic function is to amplify the signal from any load cell with full bridge connection. Amplifying this signal allows the user to use the data from the load cell in a more efficient and productive way. Reading its signal is difficult, but with an amplifier the job is made simpler, easier and more efficient.

### FEATURES

The Type 131 Amplifier is designed to interface to a full bridge strain gauge based load cell or similar sensor. It can be calibrated to provide a 4-20mA output for a fixed load range from the sensor. The new design is now RoHS compliant to required industry standards with enhanced features including:

- Bridge Resistance between 120 - 2,000ohms
- 4 wire connection to Load Cell
- 12V - 24V power supply
- - 20°C to 50°C operating Temperature
- Provides Bridge Excitation Voltage 8.0V
- Linearity 1:4000
- Bipolar Output is an optional configuration

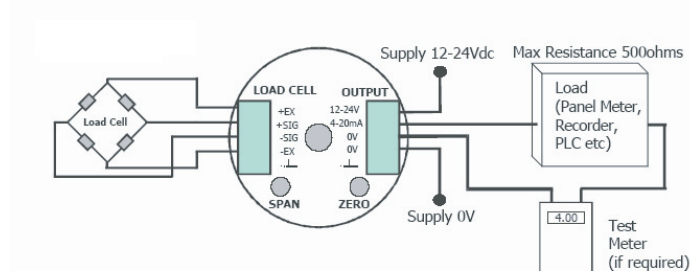
*The amplifier is housed in an ABS enclosure allowing easy installation or mounting to a suitable surface with a single screw.*

### BRIEF SETUP SPECIFICATION TABLE

SETUP VALUE	MIN	TYP	MAX	UNITS
Bridge Resistance (12V supply)	120	350	2000	Ohms
Bridge Resistance (15V supply)	150*	350	2000	Ohms
Bridge Resistance (18V supply)	180*	350	2000	Ohms
Bridge Resistance (24V supply)	350*	-	2000	Ohms
4-20mA Load impedance	0	-	500	Ohms
Supply current (Load Variable)	-	35-50	-	mA

\* To limit thermal dissipation, minimum bridge resistances are limit at higher voltages.

### CONNECTIONS



### SPECIFICATIONS

The Type 131 sensor amplifier is available in 4 ranges to suit most applications

PRODUCT	FULL SCALE INPUT RANGE
Type 131 (A)	0.25mV/V - 0.85mV/V
Type 131 (B)	0.65mV/V - 1.65mV/V
Type 131 (C)	1.5mV/V - 2.5mV/V
Type 131 (D)	2.25mV/V - 3.25mV/V

Alternative Output Options and Custom Ranges can be provided

OUTPUT TYPE	AMPLIFIER
4 - 20mA	Type 131 (standard)
12 +/- 8mA*	Type 131M (non-standard)
0 - 10VDC	Type 132 (standard)
5 +/- 5VDC*	Type 132M (non-standard)

\*This output also allows for Bipolar load ranges (custom specification)

### SENSOR DIMENSIONS

