



Product Description

The ITA-1 (known in this office as the Click-R Clack-R) is an analogue strain gauge amplifier that connects to your sensor in line via a 5-pin, M12 connector. It's used to convert the millivolt signal from your sensor into an analogue signal for your display or DAQ. The ITA-1 can be connected to any force, strain, torque or pressure sensor that supplies a millivolt output signal. Output can be either voltage or current.

The ITA-1 is supplied factory configured when supplied with an Interface load cell or torque transducer, but set up can be modified by the user using the tare and scale cables

Specifications

▪ Connection	M12, 5 pin, female to sensor; male to output
▪ Number of channels	1
▪ Input sensitivity	0.1 to 8mV/V
▪ Input resistance full / half bridge strain gauge	60 to 2,000ohm
▪ Excitation	3 V
▪ Output	0-10 V, ± 10 V, 0-5V, ± 5 V, 4-20mA, 0-20mA
▪ Accuracy class	0.1%
▪ Resolution	16 bit.
▪ Temp effect on zero point	0.05% FS at 10 deg. C
▪ Temp effect on sensitivity	0.01% RD at 10 deg. C
▪ Supply voltage	9 to 29 V
▪ Current consumption from	22mA
▪ Stain gauge bridge supply	3 V
▪ Rated temp range	-10 to +70 deg. C
▪ Operating temp range	-25 to +85 deg. C
▪ Environmental sealing	IP66
▪ Data frequency	10 to 25 Hz
▪ Sampling frequency	50kHz
▪ Offset, user selectable	9 steps, 0 to 50%

Wiring

The Click-R Clack-R is factory configured to the correct output when supplied with a Interface force or torque sensor. However, configuration can be modified using the Tare and Scale control cables

Terminal Assignment 5 Pin Socket

M12 plug connector with A-coding;

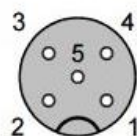


Figure 6: Contact configuration M12 socket

Pin Number	Terminal Assignment	Type 1	Type 2	Phoenix SAC-5P
1	+Us Positive bridge excitation	Brown	Red	Brown
2	-Us Negative bridge excitation	White	Black	White
3	+U _D Positive differential input	Green	Green	Blue
4	-U _D Negative differential input	Yellow	White	Black
5	TEDS input	Grey		Grey

5 Pin Plug

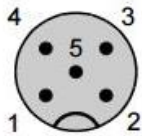


Figure 7: Contact configuration M12 plug

Pin Number	Terminal Assignment	Type 1	Phoenix SAC-5P
1	Voltage supply 12 /24v DC	Brown	Brown
2	Analogue output 4 to 20mA $\pm 10V$	White	White
3	Ground / Earth	Green	Blue
4	Tare (control input for zero adjustment)	Yellow	Black
5	Scale (control input for auto-scale)	Grey	Grey

Dimensions (mm)

