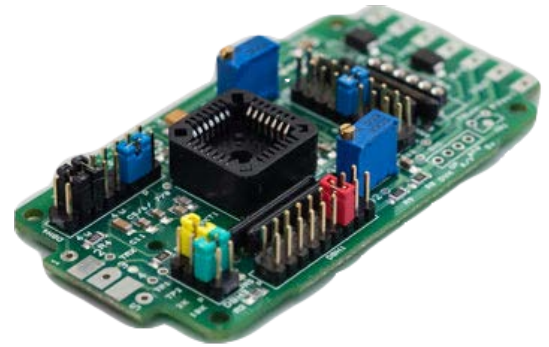


Datasheet Transducer Conditioning Module

Part number TCMB02

Universal conditioning module for use with most LVDT and Half Bridge transducers.



The TCM is a universal transducer conditioning module designed for use with most LVDT and half bridge transducers from the small gauging probe to the very long stroke displacement transducers currently available from IMT or other manufacturers.

Type	TCM			
Transducer Input	LVDT & Half bridge inductive			
Transducer Energizing				
Frequency	5kHz, 10kHz & 13kHz $\pm 10\%$ (selectable)			
Amplitude	2Vrms, 2.2Vrms & 2.4Vrms			
Power Requirements	Min	Typical	Max	Units
A	4.8	5.0	5.2	Volts @ 120mA
B	11.8	12.0	12.2	Volts @ 65mA
C	23.8	24.0	24.2	Volts @ 25mA
D	13.8	15.0	18.0	Volts @ 25mA
Voltage Output	6.8KOhm x2			
Span	-11VDC 0 +11VDC			
Zero Offset	-100% 0 +100%			
Cable length	Transducer to TCMB 50m with some loss of linearity			
Distance from TCM output	Max. 250m with suitable cable			
PCB dimensions	88.5 x 42mm			
Standard Enclosure options	Hammond 1528 & RS Pro DIN Rail Enclosure 507-680			

The TCM is a universal transducer conditioning module designed for use with most LVDT and half bridge transducers from the small gauging probe to the very long stroke displacement transducers currently available from IMT or other manufacturers.

The module is configurable with on board handbag links to enable coverage of a wide range of measurement applications. These links enable setting of sensitivity and energizing frequency as well as offset zero which is fully 100% adjustable, also the selection of LVDT or half bridge is also by simple link placement. Most offset and gain settings are catered for without the need for additional components.

The output from the TCM is nominally ± 10 V dc (max ± 11 V dc) to correspond with the transducer stroke. When in 100% offset mode the output is then zero to 10vdc corresponding to a typical transducer range of, for example, 0 to 10mm when using a transducer with a measurement stroke of ± 5 mm.

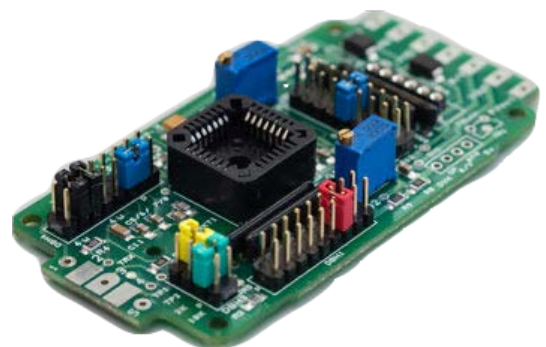
TCM is shown in the illustration as boxed but is also popular taken just as a PCB for many applications. The PCB version being small in size and of low cost will be a very attractive option to the OEM manufacturer for inclusion in electronic equipment needing an inductive transducer front end, especially with the various options for power input that are available for this unit.



TCMB in Hammond 1528 Enclosure (Lid not shown)



TCMB in RS Pro DIN Rail Enclosure 507-680



TCMB PCB - no enclosure

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