

Appendix B. VM100T Technical Specifications

TECHNA-CHECK[®] VM100T Vibration Interface

Vibration Sensor Interface

A measurement transducer, which provides Vibration Monitoring for the **TECHNA-CHECK[®]** units.

VM100T measures vibration (acceleration).

- ◆ TTBUS Networked Unit
- ◆ 4 Remotely Programmable Measurement Ranges
- ◆ 4 Remotely Programmable RMS averaging periods
- ◆ Remotely Programmable filters

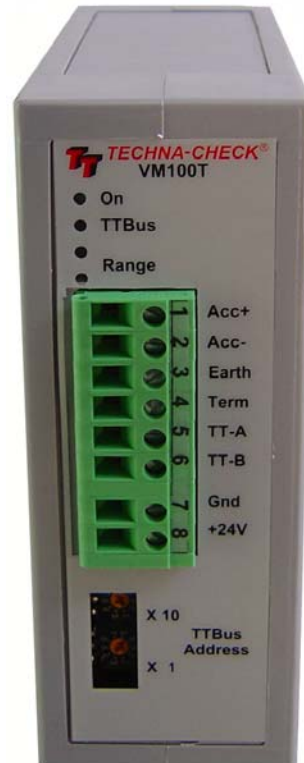
Technical Specification

Mechanical

Housing:	Polycarbonate.
Mounting:	35 mm DIN-rail.
Protection Class:	IP40.
Temp. Range:	-15 to + 50 C.
Weight:	App. 300g (1 lb).
Dimensions:	D 118 x B 45 x H 137,5 mm.
Connections:	Max 2,5 mm ² (AVG 24).

Electrical

Sensor Input:	Proprietary. Sensor supplied with unit.
Vibration Range:	+ - 0.5G, 0 - 1000 Hz
Supply:	18-24 V DC max. 2.5 Watt.
TTBUS:	RS485.

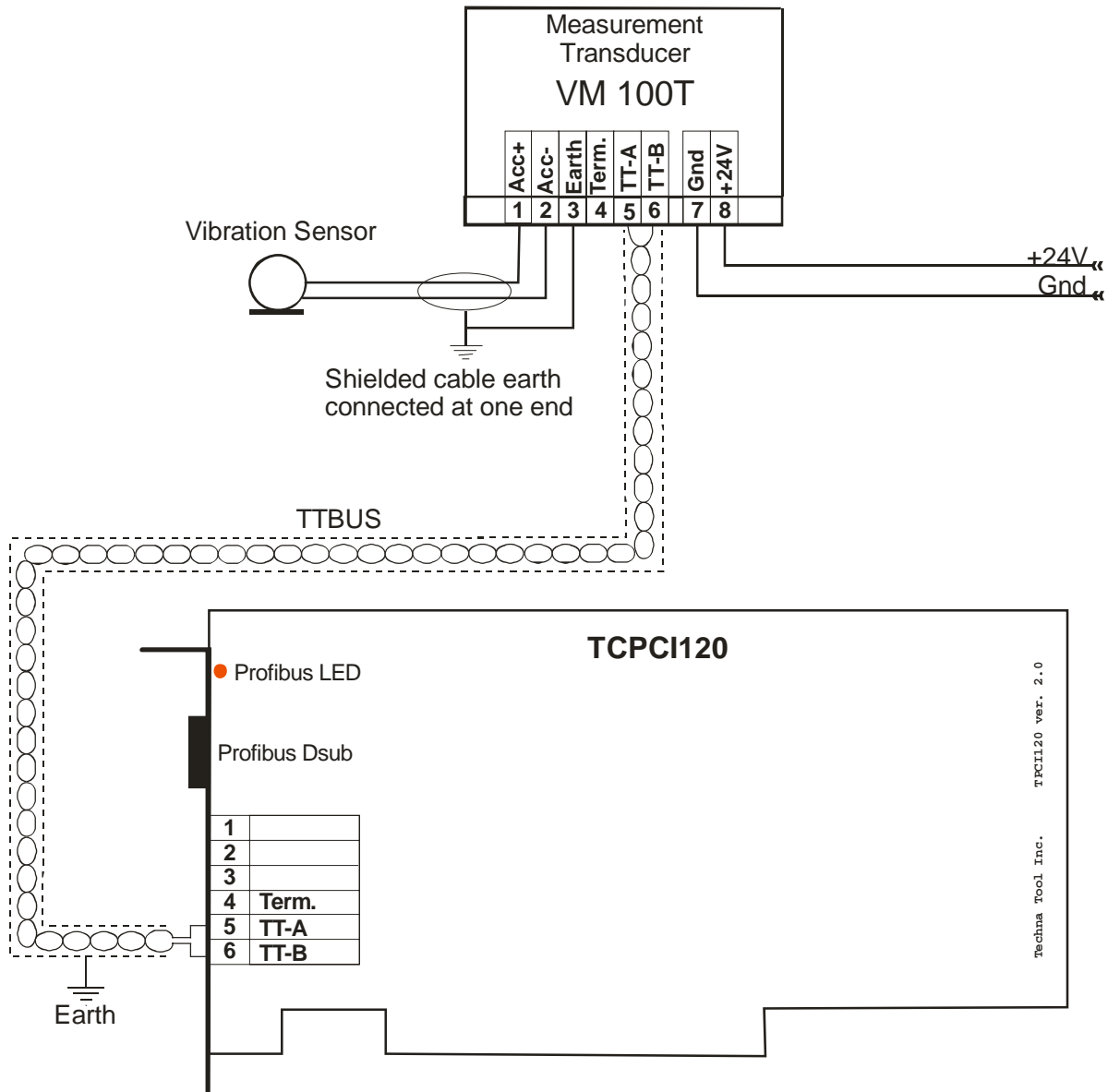


The VM100T interfaces a propriety acceleration sensor to the existing **TECHNA-CHECK[®]** range of Machine Tool Monitors.

The purpose of the vibration monitoring is to catch the damage of a tool like a milling cutter, which has damaged one of its inserts. When one insert is broken the next insert is forced to cut twice the amount of material, which will generate machine vibrations to be picked up by the VM100T.

Another application is to protect high-speed spindles against operation with an unbalanced tool, which may lead to rapid wearing and destruction of the spindle bearings.

TECHNA-CHECK[®] is a registered trade mark of Techna-Tool Inc., Hartland Wisconsin USA.



Note!

Please use **good-quality** low-resistance twisted and shielded cable earth-connected at one or both ends for the TTBUS network.

Last unit in the TTBUS network chain **must** be terminated.

Please connect a wire between terminal 4 and 6 on the VM100T (the TTBUS slave) when termination is required