

CMCP-TKBC Bias Checker
Swift Voltage Test on Standard Accelerometers



Features

- Small Footprint
- Rechargeable Li-Ion Battery with 13 Hours Runtime
- Checks both Bias and Temperature Channels
- Provides +24 VDC for unpowered Accelerometers
- Measure Bias of Powered Accelerometers

Typical Applications

Verification of Accelerometer Bias Voltages and Temperature Voltage Outputs. In addition, provides power to Dual Parameter Sensors (Acceleration and Temperature) so Data Analyzer (Microlog) can read Temperature output.

Product Overview

The CMCP-TKBC Bias Checker is an ideal tool for engineers and technicians who perform installation, maintenance, troubleshooting, and verification of accelerometers for vibration monitoring systems.

Technical Performance

Control Function	
Power On/OFF Switch:	Turns on 24 VDC for Accelerometer
Selector Switch to Middle Position:	CCD Power (Constant Current Diode) for BNC "A"
Selector Switch to A+B:	Connects BNC A and BNC B together for passthrough from Analyzer to Accelerometer
Selector Switch to B-Pow:	CCD Power (Constant Current Diode) for both BNC "A" and BNC "B" for two Accelerometers or Accelerometers with Temperature that need power on each Channel
Momentary Pushbutton A _{Read} :	Read-out Bias Voltage from BNC "A"
Momentary Pushbutton B _{Read} :	Read-out Bias Voltage from BNC "B"
Connector:	2 BNC's (female)
DC Voltage:	+24 Vdc
Battery:	Lithium Ion 9 Vdc, 500 mAh
Battery Life:	>13 Hours @ 30 mA
Dimensions:	3.27" x 2.13" x 1.20" (83 x 54 x 30.5 mm)
Weight:	3.3 oz (94 g)

Ordering Information

CMCP-TKBC Bias Checker

Includes: Voltage Test Unit (Bias Checker), Smart Charger, BNC to BNC Cable, BNC to Test Clip Adapter Cable, plus Storage Pouch.

Verification of accelerometers in Condition Monitoring Systems

Condition monitoring systems should have all their various input types periodically checked. One way is to measure the bias voltage of the sensors.



Modes of Operation:

1. Accelerometer Test:
Powers Accelerometer to test Bias Voltage
2. Passthrough Test:
Connected in series between accelerometer and Analyzer. No Boost Power Provided. Reads Bias of Accelerometer in Loop by pressing A_{Read} or B_{Read}.
3. Dual Accelerometer Test:
Powers two Accelerometers to test Bias Voltages.
4. Accelerometer with CCD Powered Temperature Test:
Tests Bias Voltage and supplies Constant Current Diode (CCD) Voltage to both Accelerometer and Temperature Sensor.
5. Accelerometer with Slave Temperature Test:
Tests Bias Voltage of both Accelerometer and Temperature Sensor. Only provides power to Accelerometer side.



Shown Above: CMCP-TKBC Read-out of Accelerometer Bias Voltage