



IST-101 Frequency Generator

Simulates speed signals to verify speed monitoring- and protection systems

In a number of situations determining functionality of speed monitoring applications in the field is required, for example to verify over- or underspeed functionality on a 2003 speed measuring system. The standard available function generators do not allow a 3 channel control of all function regarding overspeed, underspeed and acceleration. The compact three channel battery powered speed calibrator has been built based on the input from field service engineers and for its purpose is truly one of the most easy to use and complete service instruments in the field.

Features

- 3 channel frequency generator
- All 3 channels are independent adjustable for frequency, amplitude, offset and phase
- Sweep function
- Loop current monitor

Test functions:

- Over speed, 1001, 2002, 3003, 1002, 2003, 3003
- Under speed, 1001, 2002, 3003, 1002, 2003, 3003
- Zero speed, 1001, 2002, 3003, 1002, 2003, 3003
- Loop okay function, 1001, 2002, 3003, 1002, 2003, 3003
- Sensor okay (current monitoring per channel).
- Reverse rotation / Forward rotation
- Acceleration (speed)

Technical details:

- Maximum DC adjust: 0-16 Volt DC
- Maximum AC adjust: 0-10 Volt (DC +AC Limited to 16 Volt)
- Accuracy: Full range + / - 1%
- Temperature drift: 30 μ V/oC Typical
- Maximum Frequency adjust: 0-30000 Hz.
- Tolerance: @ 30.000 Hz < 0.001 % (+ / - 1 Hz)
- Acceleration: 0- Max 150 Hz/s
- Phase: 360 degrees, per channel adjustable when outputs are coupled
- Maximum load all outputs: 30mA. (Fused 50 mAmp Fast)
- Pulses per Rev / Machine Factor: 1- 195 pulses per Rev / 0.0166 – 3.25
- System is battery operated
- Battery operation: Up to 30 hour continuously. (low battery indication on the display)
- Operating temperature range: 5 oC - 55 oC
- Storage @95% Humidity: -10 - +80 oC with batteries removed.

Models:

- IST-101-A03
3-Channel portable unit

Other products in this range:

- IST-401 - Automated Eddy Current Probe Calibrator
- IST-301 - 3 Channel Vibration Simulator
- Turn Around Reporting SW Package

Options:

- Probe adapter

The IST-101 probe adapter works as a three channel digital pole wheel; it simulates a signal for the speed probes. The adapter offers the possibility to test the complete loop including the sensors in a very efficient way. The universal mounting bracket supports different types and sizes of sensors and is easy to use in the field.



About the company

Istec Rotating and Consultancy offers many years of worldwide experience in machine condition monitoring, preventive maintenance planning and machine diagnostics. We provide products and services to rotating equipment manufacturers, to engineering and construction companies and directly to end-users in the process- and power industry.

Istec International B.V.
Meer en Duin 8
2163 HA Lisse
The Netherlands
Tel: +31 (0)252 433 400
Email: mail@istec.nl
Web: www.istec.nl

