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Honeywell

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Zing™ Test

1000 Series 1087

Honeywell

THE INDUSTRY'S MOST CAPABLE AIRCRAFT DIAGNOSTIC SYSTEM

Rotor Smoothing System and Portable Machinery Diagnostic

Zing™ Test 1000 Series 1087 Rotor Smoothing System and Portable Machinery Diagnostic

The industry's most capable aircraft diagnostic system.

Easy to operate and provides easy-to-understand corrective actions

Integrated Technologies

Rugged and fully programmable, the 1087 performs helicopter rotor smoothing, engine performance checks, component balancing, vibration surveys, and complex vibration component analysis.

Maintenance actions are displayed with a demonstrated easy-to-use and easy-to-understand Zing™ Ware Personal Computer – Ground-Based System (PC-GBS) that can dramatically increase aircraft availability and readiness. The 1087 can be configured for virtually any machinery diagnostic application.

Benefits

- Reduces dedicated maintenance flights
- Helps reduce maintenance errors
- Reduces unscheduled maintenance
- Operation similar to RADS-AT™/AVA
- Reduces troubleshooting time
- Reduces operations and support
- Easy to understand corrective actions

The 1087 is offered with a Basic Kit and aircraft-specific adapter kits. The Basic Kit contains the Data Acquisition Unit (DAU), PC-GBS analysis software, vibration sensors, cables and accessories. Aircraft specific adapter kits consist of sensor mounting brackets, cables and additional sensors required. All cables, brackets and sensors are fully compatible with the RADS-AT™/Aviation Vibration Analyzer (AVA). The Windows®-compatible PC-GBS diagnostic software triggers DAU measurements producing easy-to-understand OEM-recommended maintenance actions to maintainers for rotor smoothing, engines and the entire drive train.

Technical Specifications	
Dimensions	DAU: 4.83"(H) x 3.83"(D) x 12.13"(W) without handles Transport Case: 15(H) x 17(W) x 29(L)
Weight	DAU – 7lbs 10oz / Transport Case – 37lbs
Temperature Range	-40C to +55C
Input Power	10-40VDC, MIL-STD-704D 600ms Power Loss Hold-Up
Power Consumption	<18 W
Interconnection	Standard Military Type connectors
Environmental Qualification	MIL-STD-810F & DO160D
Built-in Self-Test	Integrated into PC-GBS software application
EMI/RFI Qualification	MIL-STD-461E
Card Slots	4 (1 empty for expansion)
Processor / SDRAM	Pentium / 128MB
DiskOnChip	96MB (stores over 500 flights)
Compatibility	PC/AT compatibility, Army Vibration Analyzer (AVA)
Communication Channels	RS232/422/485, USB and Ethernet
Data Acquisition	2 or 3 wire accelerometers with programmable sensitivity
	2 iBT or compatible with RADS-AT UTD

The 1087 is part of a growing portfolio of adaptable and interchangeable hardware and software machinery diagnostic products offered by Honeywell. Available options include the Honeywell 1047 iMDS-Server, the iMDS Database Setup Tool and the iMDS Matlab® Development Toolbox.

Features

- Most advanced rotor smoothing technology on the market
- Leverages off-the-shelf technology for an extremely capable, well supported and upgradeable system
- Demonstrated advanced diagnostics forrotor smoothing, drive train, turbine engines and gearboxes
- Flexible design-configurable for use on any aircraft or application
- Software compatible with entire productline
- Designed for the flight line-solid cast aluminum enclosure is moisture and shock resistant
- MIL-STD EMI shielded connectors compatible with RADS™/AVA
- State-of-the-art signal processing and diagnostic algorithms
- Print to any printer
- Electronic technical manuals and Help files
- Rugged transport case with rollers

Zing™ Ware PC-Based Host Software Application

The PC-GBS Windows®-compatible software program receives measured data from 1087, stores this data into a database, then analyzes this data to produce easy-to-understand corrective actions for maintainers. The PC-GBS software can also act as a simple mechanism to collect and transfer data from the field to a centralized web server. This provides users with remote monitoring, trending, data analysis and automatic software upgrades for the 1087.

Honeywell IAC1087 Data Channels In/Out

Commercial-off-the-shelf technology with the following capabilities:

Channel Type	QTY	Comment
Accelerometer Channels	24	1.5 to 96 kHz Bandwidth 6 simultaneous channels acquired
Tachometer Channels	8	4 configured for magnetic interrupters 4 configured for general purpose digital inputs 2 simultaneous
Blade Tracker	1	Configured for RADS-AT™/AVA Universal Tracking Device or equivalent
General Purpose Analog or Discrete	8	High accuracy analog channels capable of measuring both discrete and low frequency analog signals ±28 volts signal range.
Low level Analog Signals	8	Instrumentation amplifier interface that can measure low level signals from devices such as RTDs, thermocouples, pressure transducers.

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