

## MIZ<sup>®</sup>-85iD

### Advanced Standalone ECT Instrument

#### FEATURES & BENEFITS

- ▶ Available in a dual or single probe configuration to best suit your application
- ▶ Supports all common steam generator inspection techniques
- ▶ Integral probe interface module (PIM) eliminates the need for probe adapters
- ▶ MIZ-iD *Intelligent Device* technology provides automatic probe configuration validation with MIZ-iD equipped probes
- ▶ Integrated probe pusher control which can be used for automatic acquisition



#### FLEXIBLE PERFORMANCE

The MIZ-85iD family leverages the industry leading MIZ-80iD eddy current instrument technology into a modular “instrument only” alternative to the integrated all-in-one approach of MIZ-80iD System. The small rugged module is light weight and integrates easily in a multitude of inspection system scenarios. The completely sealed enclosure provides protection from environmental and radiological contamination to ensure integrity in electronic performance and allow serviceability throughout the life of the product.

Advanced features such as Auto Tube End Detection improve probe life, while the internal electronic differential reference signal and electronic connector pin

multiplexer eliminate the need for reference probes and common probe adapter cables. These features provide superior data quality and promote better analysis results.

Integration with probe delivery systems is provided through two independent Auxiliary I/O control lines to operate probe pushers such as the 10D probe pusher and provide direct integration with peripheral devices such as probe position encoders. On-board independent web servers allow for network configuration management and instrument calibration. Optional calibration module provides traceability in the calibration process to Bureau of Standards.

# MIZ<sup>®</sup>-85iD

The MIZ-85iD is available in one or two probe standard model configurations. Each MIZ-85iD includes a one year license of EddyNet/AQ acquisition software for steam generator inspections or Velocity AQ for heat exchanger inspections.

## General Specifications

- ▶ **Weight (without lid):** 32.5 lbs. (14.75 kg)
- ▶ **Power:** 100-240 VAC, 50-60 Hz Auto Switching
- ▶ **Operational Temperature:** 32°F to 113°F (0°C to 45°C)
- ▶ **Storage Temperature:** -4°F to 140°F (-20°C to 60°C)
- ▶ **Dimensions:** 11.5"H x 16.25"L x 14"W

## MIZ-85iD Eddy Current Instrument

- ▶ **Frequency Range:** 20 Hz to 1.2 MHz
- ▶ **Gain:** 23-53 dB in 1 dB steps
- ▶ **Sample Rate:** 10Hz to 40 kHz
- ▶ **Drive Voltage:** 0-20 Vpp, 0-60 Vpp I-Probe mode
- ▶ **Coil Drive Amplifiers:** Up to 2 per probe connector
- ▶ **Coil Input Amplifiers:** Up to 8 per probe connector
- ▶ **Drive:** 0 – 20 Vpp
- ▶ **Supported Probe Technology:**  
Array Probes, Bobbin Probes, and MRPC<sup>®</sup>
- ▶ **Channel Capability:**  
40 Continuous Mode  
512 Multiplex  
640 Super-Multiplex
- ▶ **Maximum Sample Rates:**  
Continuous Mode: 40,000 Hz  
Multiplex & Super-Multiplex: 20,000 Hz

## Probing System Integration Features

- ▶ Analog servo control lines ( $\pm 0-10$  VDC)
- ▶ Solenoid function control lines (24 VDC)
- ▶ Auxiliary differential encoder inputs (up to 2/probe)
- ▶ Auxiliary limit switch input (1/probe)
- ▶ External acquisition trigger option
- ▶ CAN Bus device network integration option



## Ordering Information

MIZ-85iD Configuration Options<sup>1</sup>:

- ▶ MIZ-85-1 SYSTEM +EDDYNET/AQ
- ▶ MIZ-85-1 SYSTEM +EDDYNET/AQHX
- ▶ MIZ-85-2 SYSTEM +EDDYNET/AQ

MIZ-85iD Eddy Current Inspection System<sup>2</sup>:

- ▶ MIZ-85iD instrument
- ▶ Protection lid
- ▶ Operating Guide
- ▶ MIZ-85iD Certification
- ▶ Power Cords
- ▶ Shipping/Storage Cases

<sup>1</sup> Additional versions are available specifically for the French market techniques. Ask a Zetec customer service representative for more details on the French market versions.

<sup>2</sup> Software development implementation guide is available for customers seeking to integrate with their own acquisition software.

## Zetec: Innovation That Delivers Results

For nearly 50 years, Zetec has advanced NDT standards and science. We provide new insight and control through inspection solutions that protect our customers' most important assets and ensure the quality of their products. By integrating design and engineering with our own manufacturing, Zetec delivers solutions that optimize productivity, safety and total cost of ownership.



Zetec holds ISO 9001  
and ISO/IEC 17025  
certifications



Zetec, Inc.  
8226 Bracken Pl. SE | Suite 100  
Snoqualmie, WA 98065  
Toll Free: 800.643.1771  
P: 425.974.2700