

# **MIZ®-200**

High Performance Eddy Current Instrument for Tubing and Surface Array

# INSPECTION CONFIDENCE IN DEMANDING ENVIRONMENTS



# **When Performance Matters**

The MIZ®-200 portable eddy current instrument for tubing and surface inspections is one of the latest innovations from Zetec. It has been specifically designed for balance-of-plant (BOP) / power generation and oil & gas applications. Developed for demanding inspection environments, the MIZ-200 provides enhanced capability in a compact, rugged, and sealed unit.

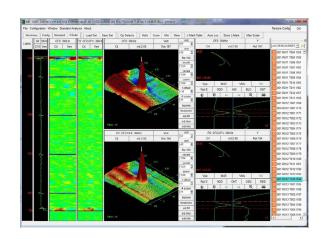
## Flexible and easy to configure

The MIZ-200 was thoughtfully designed and built by industry experts. Choose a model to suit your needs. Select options as needed.



### **Velocity®** Software

Zetec's *Velocity* Software has been customized to the balance-of-plant / heat exchanger market. It is easy to use and offers improved analysis and filter capability.



### **Product Tour**

- 1. Rubber Corner Bumpers
- 2. Cast Aluminum Case
- 3. Multi-Status Display

- 4. ECT Connector Interface
- 5. RFT Connector Interface
- 6. Probe Pusher Interface
- 7. Surface Array Interface

- 8. Plug-and-Play Connectivity
- 9. Integrated Carry Pins



# **Smart Features**

# Rugged and portable

The MIZ-200 is as tough as the inspection environment, but easy on your back with its lightweight and portable size. It is compact and lightweight yet rugged and dependable. The MIZ-200 is conveniently powered from either AC mains or hot swappable lithium-ion rechargeable batteries.

The rugged cast aluminum case is designed to withstand the bumps and drops that inevitably happen in inspection environments, and the sealed unit will withstand dust and water. The rubber corner bumpers serve as convenient handles. They are easily gripped with a bare or gloved hand. Each corner also has integrated carry pins that can be used to affix a shoulder strap or carry handle.

**Enhanced capability** 

The MIZ-200 boasts improvements over competitive products and includes new features in one highly capable eddy current instrument.

- Large Surface Array
- Improved Signal Processing
- Built-in Probe Pusher Control
- Support for a Wide Range of Probes

# Product evolution. Technology Innovation.

Borrowing from our best in class products the MIZ-200 is our latest and best foot forward. The MIZ-200 incorporates the latest technology along with the best features of the Zetec MIZ-85 and ZIRCON® instruments. Velocity Software complements the instrument to create the most effective solution.

- Proven on ZIRCON
  - Enclosure
  - Batteries and battery charging
  - · CPU board
  - · AC-to-DC power adapter
- Proven on MIZ-85
  - MRPC
  - Encoders
  - Amplifiers for French probes
  - Current source for French probes
  - · Pusher control



### **General Specifications**

Dimensions (W x H x D)	11.7 in x 4.2 in x 12.8 in (29.7 cm x 10.7 cm x 32.5 cm)
Weight	14.7 lbs. (6.7 kg) with batteries. 12.7 lbs. (5.8 kg) without batteries.
Battery	8 hrs (typical), hot swappable
Battery Type	Lithium-ion rechargeable
Power	115/230 VAC and self switching
Computer Interface	LAN 10 / 1000 Base T
Operating Temperature	23°F to 113°F (-5°C to 45°C)
Storage Temperature	-4°F to 140°F (-20°C to 60°C)

Eddy	/ Current	(ECT)

Ludy Current (LC1)			
Probe Inputs	8		
Number of frequencies	Up to 160		
Frequency range	5 Hz – 4 MHz		
Generators	2		
Coil drivers	3 (1 is for French probes only)		
Generator output	Up to 20 Volts peak-to-peak		
Injection modes	Continuous and Super-Multiplex		
Receiver gain	23 – 58 dB, 35 dB range		
ADC resolution	16 bits		
Acquisition/sampling rate	Up to 40,000 per second		
Connector	36-pin circular for X-probes and MRPC probes 4-pin for bobbin with adapter #10038239 6-pin for French with adapter #009A801-00 Two 4-pin for AC3 with adapter #009A802-00 8-pin for MFL with adapter #009A804-00		

### Eddy Current Array (ECA)

Ludy Current Array	(ECA)
Probe Inputs	128
Probe Outputs	128
Number of frequencies	Up to 160
Frequency range	5 Hz – 4 MHz
Generator/ Coil driver	2
Generator output	Up to 20 Volts peak-to-peak
Injection modes	Continuous and Super-Multiplex
Receiver gain	23 – 58 dB, 35 dB range
ADC resolution	16 bits
Acquisition/sampling rate	Up to 40,000 per second
Multiplexer	Internal, configures MIZ200 to match the probe coil arrangement (differential, absolute, driver-pickup, transmit-receive, differential driver-pickup)
Connector	160-pin rectangular

### **Low-Voltage Remote Field Testing (RFT)**

Probe Inputs	4
Number of frequencies	5
Frequency range	5 Hz – 250 KHz
Generator/ Coil driver	2
Generator output	Up to 20 Volts peak-to-peak
Injection modes	Continuous
Receiver gain	36 – 86 dB, 50 dB range
ADC resolution	16 bits
Acquisition/sampling rate	Up to 40,000 per second
Connector	19-pin circular

#### **Motor drive for MRPC probes**

The MRPC motor driver is able to regulate the speed of rotating probes to provide a constant speed under varying loads. This allows more consistent data collection for RPC probes.

Speed regulation	Regulation of probe rotating speed to provide constant speed under varying loads		
Output Current	2.7A continuous		
Maximum Power	35 Watts continuous		
Connector	36-pin circular		

### Magnetic Flux Leakage (MFL)

	Probe Inputs	4
	Receiver gain	20 – 58 dB, 38 dB range
	ADC resolution	16 bits
	Acquisition/sampling rate	Up to 40,000 per second
	Connector	36-pin circular, 8-pin with adapter #009A804-00

#### Ordering

The MIZ-200 comes in 6 models. In addition any of the models can be

Model	ECT	RFT/NFT	MFL	ECA
MIZ-200T	X	X		
MIZ-200TM	X	X	X	
MIZ-200A64	X	X		64 CHANNELS
MIZ-200A64M	X	X	X	64 CHANNELS
MIZ-200A128	X	X		128 CHANNELS
MIZ-200A128M	X	X	X	128 CHANNELS





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