# **EDDYFI** REDDY

Bringing Innovation to the AC/HVAC Market





## MADE FOR AC AND FCT TUBING INSPECTIONS

This version of Eddyfi Reddy is designed to replace a wide range of aging ECT instruments used to inspect air conditioners and perform other ECT tubing inspections. Existing ECT instruments are unwieldy and have evolved very little since their introduction, making them incompatible with modern inspection conditions where productivity and profitability are crucial.

#### Designed for ACs

Reddy® is designed to supports all current AC and ECT probes on the market without adapters or reference probes to balance the absolute channel. No other portable system is battery-operated or sealed, or features a large display, automated acquisition sequences, or an analysis software for on-the-fly reporting. Furthermore, data recorded with Reddy is compatible with the industry-standard TubePro tubesheet mapping-reporting software for in-depth analysis.

#### Portable and Intuitive

Because air conditioners are similar to small heat exchangers (HX) in terms of number of tubes, for example, portability and minimal setup time are essential. Reddy is roughly 30% lighter than the most widespread instruments currently in the field, and it features probe plug-and-play capabilities and a setup wizard for increased productivity.

#### Perfect AC Probe Match

The Eddyfi's AC probes are designed with the best probe coils configuration, providing a low fin noise with a higher defects detection, at straight, supports, tube expansions, and land areas. Moreover, in a single pass, the probe gives the inspector all the required data information for detection and defects characterization from the ECT bobbin and AC coil. The AC coil is required to detect circumferential cracking by substracting the tube expansion effect, where cracks mostly found. Moreover, they are mechanically highly durable, water resistant and detachable, perfectly made to turn your inspection as a success.

#### Designed for Field Use

Reddy is sealed and designed to IP65 requirements. The magnesium alloy casing is heavy-duty, cools without fans or external airflow, and is water and dust resistant. The adjustable stand and the top handle only add to the system's practicality in on-site inspections.



### CONFIDENCE IN YOUR RESULTS WITH POWERFUL REPORTING

Eddyfi Reddy combines on-the-spot data acquisition, recording, and management completely doing away with handwritten reports. When an inspection is complete, reports can be generated in a single click—complete with screenshots of detected defects—signed, and handed to customers.

#### Optimized Inspection Time

Automated acquisition sequences are a huge time saver, because they minimize the number of required operations to perform a complete inspection, such as starting and stopping the acquisition, recording data, and using foot pedals. Magnifi® GO also allows you to create tube lists, and features a dedicated setup wizard, automated data recording sequences, and a unique reporting format further enhancing productivity.

#### Massive Multi-Touch Display

The premium-quality 26.4 cm (10.4 in) LED display is optically bonded, non-reflective, and comes with 3 mm (1/8 in) strengthened glass. It's designed for gloved hands and all lighting conditions. The multi-touch capabilities make it easy to zoom and rotate views.

#### Modern PC Capabilities

Equipped with a robust, 100 GB internal solid-state disk drive (SSD) for secure inspection data. The embedded system offers standard connect-anywhere capabilities and advanced productivity tools optimizing field testing.

#### **Embedded Software**

Magnifi GO, Eddyfi's powerful and easy-to-use acquisition/analysis software, is tailored for air-conditioner and tubing inspections, and has a well-designed wizard to create setups. Furthermore, Magnifi GO makes collecting and reporting data incredibly intuitive. Fast, from setup to reporting.

#### **Desktop Data Analysis**

Magnifi GO is compatible with its full-fledged big brother Magnifi R. You can configure inspection setups for Reddy and perform in-depth inspection data analysis on your desktop or laptop computer.



# **SPECIFICATIONS**

INSTRUMENT			
Dimensions (W × H × D)		355 × 288 × 127 mm (14.0 × 11.3 × 5.0 in)	
Weight	w/batteries	6.6 kg (14.5 lb)	
	w/o batteries	5.7 kg (12.5 lb)	
Volume		13 L (791 in3)	
Power Requirements		100-240 VAC, 50-60 Hz	
Power Supply		Direct VAC or onboard batteries	
Maximum Input Current		1.5 A	
Batteries	Туре	Li-ion, rechargeable, DOT compliant	
	Typical life	6–8 hours	
Display		26.4 cm (10.4 in)  Non-reflective (AR coating)  Anti-fingerprint (Oleophobic coating)  3 mm (1/8 in), chemically strengthened glass cover Optically bonded LCD and touchscreen  Passive backlight enhancement	
Video Output		HDMI	
Storage		SSD, 100 GB	
Cooling		Sealed and fanless	
1/0		Encoder or external control device	
Connectivity		Gigabit Ethernet, Wi-Fi, Bluetooth®, USB 2.0 (×3)	

ECT		
Frequency range	5 Hz-10 MHz	
ECT Bobbin/AC Connectors	4 pins	
I/O Connector	18 pins	
Dedicated Connector	30 pins	
Generator Output/Coil Drive	Up to 20 Vpp	
Injection Modes	Simultaneous, Continuous	
Receiver Gain	41 dB range, 23–64 dB	
Data Resolution	16 bits	
Acquisition/Sampling Rate	Up to 50 000 samples/s	

ENVIRONMENT		
IP Rating	Designed for IP66	
Operating Temperature	0-40°C (32-104°F)	
Operating Humidity	95%, non-condensing	
Pollution Degree Rating	2	
Compliance	ASME, EN 61010-1, CE, WEEE, FCC Part 15B, ICES-003, AS/NZS CISPR 22, RoHS	