

# EDDYFI ECTANE2

Surface Array and Tube Inspection Test Instrument



# A PROVEN SUCCESS. MADE BETTER.

With several hundred units in the field, Eddyfi® Ectane® became the most popular multi-technology test instrument on the market. It's time for the next generation — Ectane 2.



## More powerful cpu

Users from a wide variety of markets in over 50 countries use Ectane. Ectane 2 retains all the characteristics users love about the original — the built-in inspection technology flexibility, the compact size, the ruggedness, and the stylish design, to name just a few.

Ectane 2 has a faster CPU, with more punch for ultrafast probe nulling and real-time processing. It greatly contributes to making quality inspections easier than ever before with any technology combination, whether it be ECT, ECA, TECA™, RFT, NFT, NFA, MFL, or IRIS.

Ectane 2 is just as autonomous as its predecessor with 8 hours of battery power, resists just as well to the most inhospitable inspection environments by being thoroughly sealed, and it is just as portable.

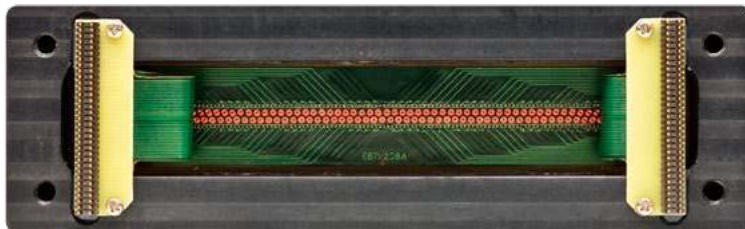
## Better maximum frequency

Ectane 2's maximum ECT frequency is 10 MHz, which offers more flexibility and better performance to a variety of tubing and surface applications.

The Ectane 2 test instrument improves over the original with:

## Current source for saturation probes

Available on the 41-pin Ectane 2 connector, you can program the built-in source to control the current output feeding into partial saturation and magnetic bias ECT probes.



## Motor drive for rpc probes

Ectane 2 is also capable of driving motorized rotating pancake coil (RPC) probes, thanks to its powerful built-in motor drive. This is useful in applications where RPC probes are used to find longitudinal and circumferential cracks.

## SMARTMUX™

The SmartMUX is Ectane 2's integrated and programmable multiplexer. It's the solution to all the problems caused by external multiplexers and less powerful systems.

Such versatility offers you the freedom to use any absolute, differential, or transmit-receive eddy current coil topologies.

## Up to 256 elements

The Ectane 2 is available in three different array configurations: 64, 128, or 256 elements. More elements means better probe coverage, more uniform sensitivity, higher resolution, and faster inspections. Modular by design, Ectane 2 can be retrofitted to increase the channel capacity up to 256 elements.

## Other outstanding features

- Automatically recognizes probes, making setup a cinch.
- Comes with eight probe inputs for RFT, NFT, and MFL.
- Has three programmable outputs that can be used to automate inspection sequences, for example.
- Comes with a programmable alarm to warn users when they reach tube ends, for example.

Ectane 2's speed and capabilities are harnessed by the complete data acquisition, analysis, and reporting software, Magnifi®.

Ectane 2 builds on the foundations laid out by its predecessor, taking it several steps further and making an already strong platform even stronger.

## Available models

To order or receive a quote, visit [www.eddyfi.com](http://www.eddyfi.com).

	ECT	ECA/ TECA/ NFA	RFT/ NFT/MFL	IRIS
ECTANE2-E	●	●	●	●
ECTANE2-ERNM	●	●	●	●
ECTANE2-ERNMI	●	●	●	●
ECTANE2-I	●	●	●	●
ECTANE2-E64	●	64 channels	●	●
ECTANE2-E64RNM	●	64 channels	●	●
ECTANE2-E64RNMI	●	64 channels	●	●
ECTANE2-E128	●	128 channels	●	●
ECTANE2-E128RNM	●	128 channels	●	●
ECTANE2-E128RNMI	●	128 channels	●	●
ECTANE2-E256	●	256 channels	●	●

# SPECIFICATIONS

## GENERAL

Dimensions (WxHxD)	279.6 × 254.0 × 158.8 mm (11.00 × 10.00 × 6.25 in)	
Weight	With batteries	6.8 kg (15 lb)
	Without batteries	5.9 kg (13 lb)
Volume	10 L (610 in <sup>3</sup> )	
Power requirements	100–240 VAC, 50–60 Hz	
Power supply	Direct VAC or onboard batteries	
Batteries	Type	Li-ion, rechargeable, DOT compliant
	Typical life	8 hours
Cooling	Sealed and fanless	
Encoders	3 axes, quadrature with individual reset line	
Remote controls	Start, stop, balance, next file	
Connectivity	1000BASE-T	
Probe recognition and setup	Automatic	
IP rating	Designed for IP64	
Operating temperature	0–45 °C (32–113 °F)	
Operating humidity	95%, non-condensing	
Compliance	ASME, EN 61010-1, CE, WEEE, FCC Part 15B, ICES-003, AS/NZS CISPR 22, RoHS	
Probe inputs	4–8	
Channels	64, 128, 256	
Frequency range	5 Hz–10 MHz	
Generator output/Coil drive	Up to 20 V <sub>pp</sub>	

## ECT

Frequencies	Up to 160
Generators/Coil drivers	2
Injection modes	Multiplexed, simultaneous, continuous
Receiver gain	41 dB range, 23–64 dB
Data resolution	16 bits
Acquisition/Sampling rate	Up to 50 000 samples/s

## MFL

Receiver gain	41 dB range, 18–59 dB
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## ECA, TECA, NFA

Connector	Single or double 160-pin array
Multiplexer	SmartMUX
External multiplexer interface	41-pin EXTENDED ET connector

## RFT AND NFT

Frequencies	5
Generators/Coil drivers	2
Receiver gain	50 dB range, 26–86 dB

## IRIS UT

Channels	1, pulse-echo
Internal pulser/receiver	0–200 V drive
	0–70 dB (1 dB steps)
	0–40 dB DAC
Filters	4 user-selectable filters 25 MHz system bandwidth
Transducer frequency	5–20 MHz
Digitizer	12 bits, 100 MHz
Maximum pulsing rate	Up to 26 kHz
Views	Real-time A, B, and C-scans
Wall thickness measurement	50 % thinner than competitors (patent pending)
Turbine speed	Up to 100 RPS for fast pulling

## CURRENT SOURCE FOR SATURATION PROBES

Range	0–1 A
Maximum output power	10 W
Maximum output voltage	15 V

## MOTOR DRIVE FOR RPC PROBES

Voltage	0–24 V
Maximum peak output current	2 A
Continuous max. output current	1 A
Maximum continuous power	10 W