Technical
Specifications

EDDYFI ECTANE2

Surface Array and Tube Inspection Test Instrument

Eddyfi Technologies

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.

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 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.

The Ectane 2 test instrument improves over the original with:

More powerful cpu

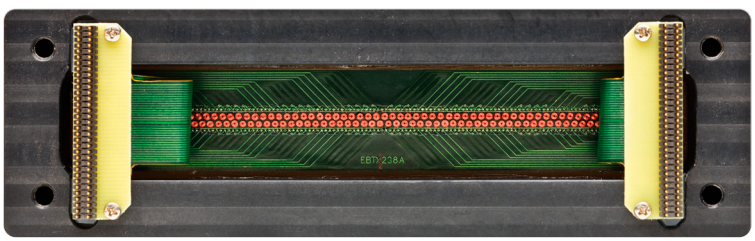
Ectane 2 has a faster CPU, with more punch for ultrafast probe nulling and real-time processing. It greatly contributes to making quality inspections easier than ever before with any technology combination, whether it be ECT, ECA, TECA™, RFT, NFT, NFA, MFL, or IRIS.

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.

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.**

	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 (W×H×D)		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^3)
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 Vpp

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

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
Maximum peak output current	1 A
Maximum continuous power	10 W

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www.eddyfi.com info@eddyfi.com

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