eddyfi®

Ectane® 2

Surface Array and Tube Inspection Test Instrument

A Proven Success. Made Better.

With several hundred units in the field, the ***Ectane®*** has become 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 the ***Ectane***. The ***Ectane 2*** preserves 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.

The ***Ectane 2*** remains 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*** — 100 % Eddyfi — improves over the original with:

New CPU board

The ***Ectane 2***'s new board has a faster CPU, which delivers more punch for ultrafast probe nulling and real-time processing. This greatly contributes to making quality inspections with the ***Ectane 2*** easier than ever before with any technology combination, whether it is ECT, ECA, TECA™, RFT, NFT, NFA, MFL, or IRIS.

Improved maximum frequency

The maximum ECT frequency is now 10 MHz, which offers more flexibility and better performance in a variety of tubing and surface applications.

Current source for saturation probes

Available on the 41-pin ***Ectane 2*** connector, this built-in source can be programmed to control the current output that feeds into partial saturation ECT probes and magnetic bias ECT probes.

Motor drive for RPC probes

The ***Ectane 2*** is 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.

Other outstanding new features

The ***Ectane 2*** now:

- 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, among other uses.
- Comes with a programmable alarm to warn users when they reach tube ends, for example.

The ***Ectane 2***'s new speed and capabilities are still harnessed by Eddyfi's complete data acquisition, analysis, and reporting software, ***Magnifi®***.

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

At Eddyfi, performance matters.

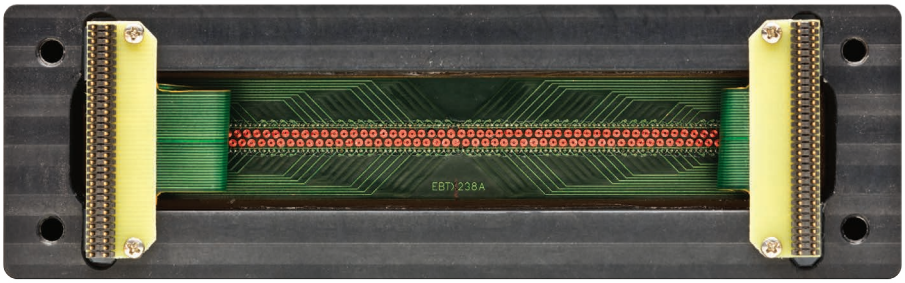
SmartMUX™

The ***SmartMUX*** is the ***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, the ***Ectane 2*** can be retrofitted to increase the channel capacity up to 256 elements.



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 (automatic selection)	100–240 VAC, 50–60 Hz
Power configuration	Direct VAC or removable batteries
Battery type	Lithium-ion, rechargeable, DOT compliant
Battery autonomy (typical)	8 hours
Cooling	Sealed and fanless
Encoders	3 axes, quadrature with individual reset line
Remote controls	Start, stop, balance, next file
Network interface	1000BASE-T
Probe recognition	Automatic probe recognition and setup
Operating temperature	0–45 °C (32–113 °F)
Operating humidity	95 %, non-condensing
Environmental protection	Designed for IP64
Compliance	ASME, EN 61010-1, CE, WEEE, FCC Part 15B, ICES-003, AS/NZS CISPR 22, RoHS

ECT

Probe inputs	8
Frequencies	Up to 160
Frequency range	5 Hz–10 MHz
Generators/Coil drivers	2
Generator output/Coil drive	Up to 20 Vpp
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

ECA, TECA, and NFA

Channels	64, 128, or 256
Frequency range	500 Hz–4 MHz
Multiplexer	SmartMUX™
Connector	Single or double 160-pin array
External multiplexer interface	41-pin Extended ET connector
Generator output/Coil drive	Up to 20 Vpp

RFT and NFT

Probe inputs	4 Extended ET: 8
Frequencies	5
Frequency range	5 Hz–250 kHz
Generators/Coil drivers	2
Generator output/Coil drive	Up to 20 Vpp
Receiver gain	50 dB range, 36–86 dB

MFL

Probe inputs	4 Extended ET: 8
Receiver gain	41 dB range, 18–59 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 continuous output current	1 A
Maximum continuous power	10 W

Ordering Information

	Modules			
	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	●	●

There are 11 different ***Ectane® 2*** models. To order or receive a quote, visit our Web site at www.eddyfi.com.

The information in this document is accurate as of its publication. Actual products may differ from those presented herein.

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