

Apollo Multi-Channel / Multi-Frequency Eddy Current System



Apollo from GE Sensing & Inspection Technologies is a digital multi-channel/multi-frequency eddy current system designed for inspection speed, measurement accuracy, and operational efficiency. Developed to take on the most demanding steam generator and [heat exchanger inspections](#), Apollo drives industry standard eddy current (ET) and remote field (RFT) tubing probes as well as surface scanning arrays.



{tab=Features}

Demanding Solutions

Apollo™ was developed to take on the most demanding heat exchanger inspections. It supports industry



Flexibility for Multiple Applications

Apollo can operate in either multiplexed or simultaneous injection modes meeting the eddy current tubin

The multi-channel/multi-frequency capabilities of Apollo can also solve a vast array of surface solutions.



Dedicated Customer Support

GE Sensing & Inspection Technologies continues to invest in technology and people so we can solve cu

Through local customer and sales support located around the world, GE Sensing & Inspection Technolo

Key Features & Benefits

- 100% digital data acquisition ensures full signal capture
- Configurable up to 1024 channels and 256 frequencies for tubing inspection and array applications
- Supports multiplexed, simultaneous injection, and context switching inspection modes
- Wide frequency range of 1 Hz to 10 MHz and automatic gain control

Advanced Software

Combined with field proven acquisition, analysis, and data management software, Apollo is suited for a v

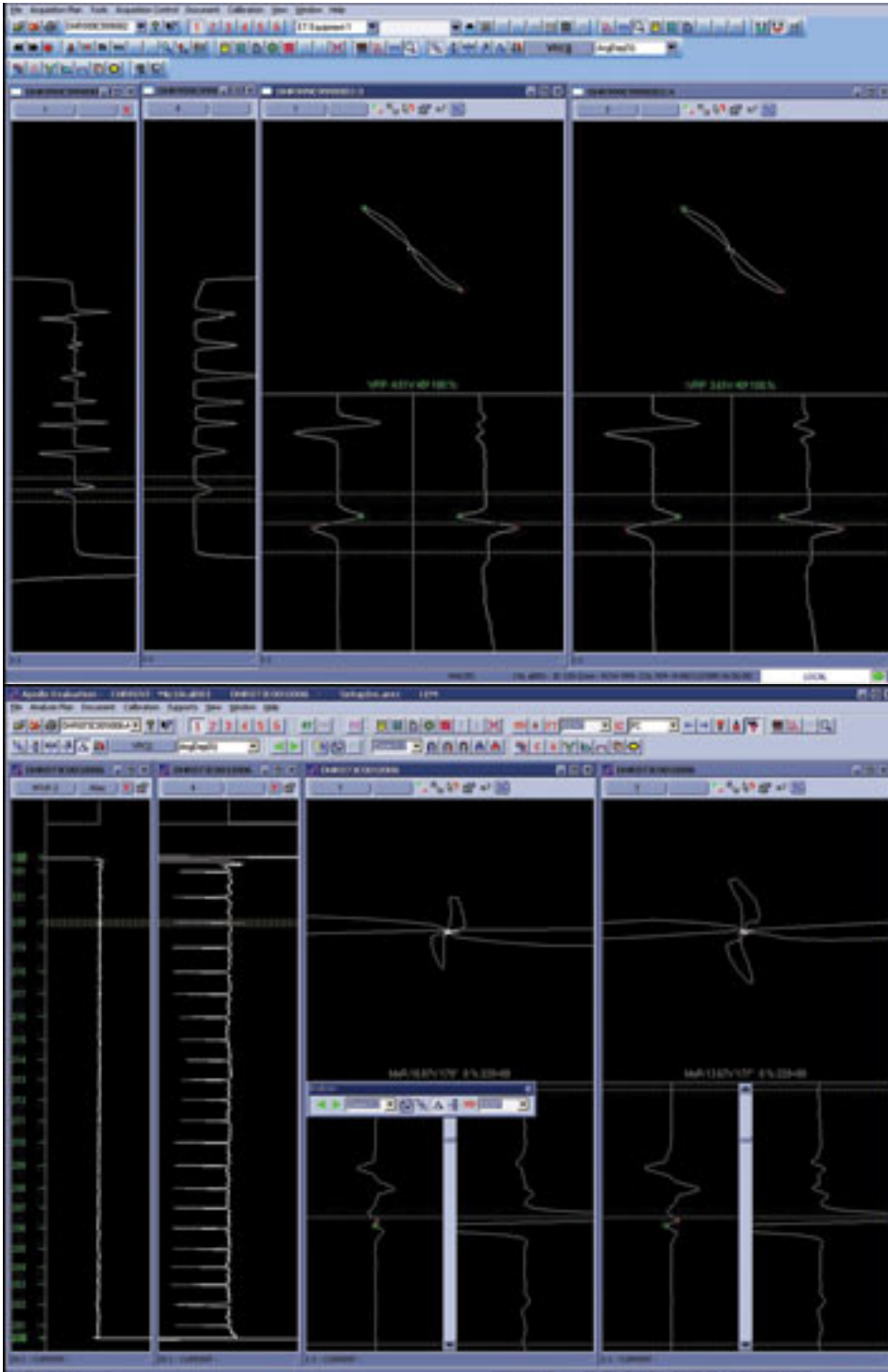


Figure 1. Apollo Multi-Channel / Multi-Frequency Eddy Current System

- Trigger Modes** External, and synchronized with encoder and software
- Sample Rate** 20,000 samples/sec
- Ethernet Speed** 10/100Mbps
- Ethernet Length** 150m
- Data Acquisition**
- Virtual Frame Generation**
- Alarm Generation** Yes
- Algorithms Included** Offset, filters, tube-air detection, array, and

temporal interpolation*

External Algorithms From ethernet or USB® download*

Injectors

Numbers

Outputs 8

Modes Multiplexed, simultaneous, and context switching

Voltage Level 0 - 24 Vpp

Voltage Resolution 1 v

Frequency Number 256

Frequency Range 0 Hz - 10 MHz

Frequency Resolution 0.008 Hz

Impedance Direct 5

Impedance Through R 105 Ω

Maximum Output Current 1A

Test Vout, Iout, and temperature

Input/Output

Encoders

□□□ **Level**

□□□ **Type**

□ 9 (A,B)

LVTTL

Incremental encoder A, B signals 90° out of phase, TTL pulses, or state signals

Digital Inputs

□□□ **Level**

□□□ **Modes** 8

LVTTL

Input, Enable Acquisition, Trigger

Digital Outputs

□□□ **Level**

□□□ **Modes**

□□□ **Width**

□□□ **Pulse** 8

LVTTL

Output, Alarm, Trigger

Programmable (Trigger mode)

H/L programmable

Analog Inputs

□□□ **Range**

□□□ **Bandwidth**