Vibro-Meter®

AGILE

Smart condition monitoring

AGILE: the new modular solution

AGILE (Affordable, Generic, Intelligent, Lightweight Electronics) is Meggitt's next-generation product family of data acquisition, processing and storage units.

AGILE monitoring units bring health and condition monitoring benefits to the whole helicopter or aircraft, as well as expand monitoring functions to smaller assets.
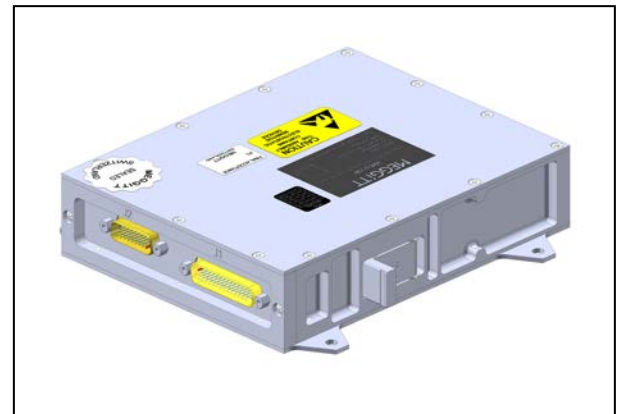

A view of a typical AGILE unit

Benefits

› **Multiple platforms, multiple systems**
 Meggitt's new monitoring system can monitor practically all aircraft systems – e.g. auxiliary power systems, gearboxes and accessories – on all platforms.

› **Versatile, scalable**
 Based on a real-time operation system, the AGILE units support the acquisition of numerous channels from various types of sensors, providing processing power and storage capability to make the best use of any data. The use of powerful processors allows a great variety of embedded software applications. Customer-specific algorithms can also be integrated.

› **Simpler certification and installation**
 Based on a modular design, our family of AGILE units will be more affordable and easier to certify, reuse, adapt and install due to their low weight and size. This additionally makes them ideal for retrofit applications.

› **Trusted by the biggest names in the industry**
 50 years at the forefront of condition and health monitoring means our solutions are trusted by the world's leading rotary and fixed wing aircraft and engine manufacturers.

Meggitt Sensing Systems
Our product competencies and services:
Sensors and machine monitoring | Condition monitoring | Engine vibration systems | Helicopter HUMS | Avionics
Landing gear monitoring | Flight displays

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smart engineering for
extreme environments

AGILE – smart condition monitoring

Basic unit features

Input channels	up to 8 input channels acquired synchronously at a rate up to 100 kSs^{-1} and configurable within the following:

› piezoelectric accelerometers or dynamic pressure sensors

› IEPE accelerometers or dynamic pressure sensors

› rotational speed sensors

› RTD (PT 100, 200, 500) sensors

› resistive bridge sensors

› general purpose analogue inputs (0-5 VDC)

Discrete inputs	up to 8 (Ground/Open)
Discrete outputs	up to 4 (Ground/Open, 20 mA)
Bus	

› 4x ARINC-429 @ 12.5/100 kbit/s (2xRX, 2xTX)

› 1x Ethernet @ 10/100 Mbit/s (ground operation only)

› 1x RS 232 (ground operation only)

› 1x user specific bus (e.g. RS 422, CAN, MIL-1553)

Storage capacity	8 GB

Characteristics

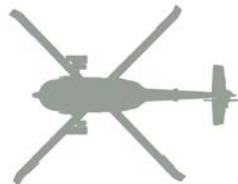|	
Envelope	180mm x 140mm x 38mm (7.1˝ x 5.5˝ x 1.5˝) (excluding brackets)
Weight	900 g (1.98 lbs)
Connector	Sub-D connectors as per MIL-DTL-24308
Power supply	28VDC

Design Assurance

› Designed and developed in compliance with RTCA DO-178 and DO-254

› Suited for Design Assurance Level (DAL) D applications (DAL C on request)

Environment and qualification

Temperature (operating)	-40°C to +85°C (-40°F to +185°F)
Altitude	-609m to 12,192m (-2,000 ft to + 40,000 ft)
Waterproofness	as per DO-160G, chapter 10, category W
Lightning induced transient susc.	as per DO-160G, chapter 22, category A3 (not applicable to ground buses)
Power input	as per DO-160G, chapter 16, category B

Contact

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