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.

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.
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
Meggitt Sensing Systems
Rte de Moncor 4, 1701 Fribourg, Switzerland
Tel: +41 26 407 11 11 | aerospace@ch.meggitt.com | www.vibro-meter.com | www.meggitt.com
© Copyright 2016 Meggitt Sensing Systems
This document contains advance information intended for informational purposes only and is subject to change without notice.