

Description

The DAQ Series comprises ruggedized data acquisition systems engineered specifically for aerospace and defense applications. The series features eight single-ended voltage and current-loop analog inputs optimized for high-precision sensor integration—including a dedicated interface for pressure and temperature sensors within the user interface software. Additionally, the system provides eight single-ended or four differential channels for RTD, strain gage or resistive bridge measurements.



Data transmission is facilitated via an industry-standard RS485 interface, utilizing MIL-DTL-38999 circular connectors for secure connectivity. Through the intuitive GUI software, users can configure operating modes, including signal interpretation, resolution, sampling rates, data post-processing and logging. Custom configurations for alternative sensor interfaces or specific requirements are available upon request.

DAQ Series Specifications

Signal Interface	
Analog ¹⁾	8 Single Channel 0.5-4.5V
	8 Single Channel 2-10V
	8 Single Channel 4-20mA
Resistive ¹⁾ (RTD, strain gage or bridge)	8 Single Channel PT100
	8 Single Channel PT1000
	8 Single Channel Quarter-Bridge strain gage
	4 Diff Channel Resistive Full-Bridge
Resolution ¹⁾	24 bits @ 19 kS/s
Sample Rate ¹⁾	153 kS/s @ 16 bits

Communication Interface	
Communication protocol	RS485
Analog input interface	D38999/24WF35SN
Power & communication interface	D38999/24WD35PN

Electrical Specifications	
Supply voltage	15-32VDC
Current consumption	< 100 mA
Analog Channel Max Input Range	11V
Electrical Compatibility	Designed in accordance with MIL-STD-704A
Surge protection	✓
Overcurrent protection	✓
Reverse voltage protection	✓
Holdup time	50ms
Electromagnetic Interference	Designed in accordance with MIL-STD-461G

Environmental Specifications	
Temperature (Storage)	-40°C to +85°C
Temperature (Operating)	-40°C to +85°C
Shock	Meets 40G 11ms Half Sine 3-axis
Vibration	Meets Random: 15 to 2000 Hz @ approx. 50G (peak)

Mechanical Specifications	
Enclosure	Environmental & EMI/RFI Sealed alodine coated aluminum case
Dimensions	144 W x 180 L x 66 H (mm)
Weight	2 kg (max.)

Please contact us for custom solutions.
1) Software selectable.

Ordering Information

You can contact us for data collection system solutions specific to your needs.

For stock and price inquiry please contact us at: sales@taelco.com or www.taelco.com/en/contact-us/

Shipping, customs fees etc. are not included in the price quotation. TAE LCO is not responsible for customs clearance.

Revision History

Rev. A

First revision.

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