

# REVO MICRO DATA ACQUISITION UNIT (μDAU)

The REVO Micro Data Acquisition Unit (μDAU) series is a miniature hermetically sealed acquisition unit, useful for installation in harsh and remote locations to both simplify wiring harness design and improve signal fidelity by measuring input signals close to the source. Captive fasteners are included to minimize risks of FOD.

FPGA based processing coupled with high speed analog front ends allows both digital (e.g. ARINC-429) and analog (e.g. Synchro) signals to be measured with the same physical hardware in different applications.

Primary output capability is through a high speed ARINC-429 bus.

Total input capability is determined by exact signal selection and pin availability, e.g.

- Differential (input): 11 channels
- Single Ended (input): 22 channels
- Output transceivers: 2 channels
- Auxiliary Outputs: 1 protected 28VDC



## Input signal types include:

- Analog DC (0-5V, +/-5V, +/-10V, +/-20V)
- Thermocouple (Configurable type)
- Analog AC (Single phase, Resolver, Synchro)
- Frequency
- Digital Data Buses (ARINC-429, RS-422, RS-232)

Primary output capability is through a high speed ARINC-429 bus.

PHYSICAL AND ELECTRICAL SPECIFICATIONS			
<b>Dimensions</b>	29mm (1.1") width, 31mm (1.2") height, 102mm (4.0") depth	<b>Mating Connector</b>	MIL-DTL-38999 Series III, D38999/26FB35SN
<b>Weight</b>	Less than 0.25kg (< 0.5 lb)	<b>Signal Connector</b>	MIL-DTL-38999 Series III, D38999/20FC35PN
<b>Mounting Type</b>	Flanged with Qty 2 #8 captive QPL fastener (NAS1352-08-24)	<b>Signal Mating Connector</b>	MIL-DTL-38999 Series III, D38999/26FC35SN
<b>Mounting Orientation</b>	Unrestricted	<b>Operating Temperature (operating)</b>	-55 to +85 degrees Celcius
<b>Construction</b>	Aluminium AMS QQ-A-200/8, ASTM-B221, hermetically sealed (potted)	<b>Operating Temperature (non-operating)</b>	-55 to +85 degrees Celcius
<b>Finish</b>	MIL-DTL-5541 Type II Class 3, painted subject to requirement (excluding faying surface)	<b>Operating Altitude</b>	Up to 55,000 ft
<b>Power supply input</b>	28 VDC nominal, 10 to 80 VDC, DO-160 CAT Z	<b>Environmental Qualification</b>	RTCA DO-160G
<b>Power supply consumption</b>	Maximum 5 watt (excluding inrush and external powered loads)	<b>Design Assurance</b>	RTCA DO-254 and DO-178C (as applicable)
<b>Power supply hold-up energy</b>	Nil	<b>Production Approvals</b>	FAA PMA (where PMA assist applies), otherwise Certificate of Conformance
<b>Input Connector</b>	MIL-DTL-38999 Series III, D38999/20FB35PN		

## Diagnostic Solutions International, LLC

ISO9001 & AS9100D Certified

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