

Technical Specification Sheet

1.0 General Requirements

Item	Description	Quantity
1.1	Real-Time Ethernet Converter for MIL-STD-1553 and ARINC data	2
1.2	Associated cable for MIL-STD-1553 communication	2
1.3	Associated cable for ARINC 429 communication	2
1.4	Associated cable for unit power	2

2.0 Performance & Functional Requirements

Spec ID	Requirement	Threshold
2.1	MIL-STD-1553 Interface	Two (2) channels, dual redundant, with full Bus Controller (BC), Monitor (mRT), and Bus Monitor (Mon) capability.
2.2	ARINC 429 Interface	Four (4) shared Transmit (Tx) / Receive (Rx) channels.
2.3	ARINC 717 Interface	Two (2) Rx / Two (2) Tx selectable channels. <i>Note: Each 717 channel utilized replaces two ARINC 429 channels.</i>
2.4	Data Acquisition	Must function as a critical component of a Data Acquisition System (DAS) for lab and field environments.

3.0 Physical & Environmental Requirements

Spec ID	Requirement	Threshold
3.1	Dimensions	Length: 142 mm; Width: 6.3 mm; Height: 35 mm
3.2	Weight	Approx. 265g
3.3	Operating Temperature	0°C to +70°C
3.4	Relative Humidity	5% to 95% (non-condensing)
3.5	Vibration	Must meet or exceed VITA 47, Class V2 & MIL-STD-810G
3.6	Operating Shock	Must meet or exceed VITA 47, Class OS1 & MIL-STD-810G
3.7	Lightning Protection	Must meet or exceed RTCA DO-160G Level 3 (for applicable signals)
3.8	Compliance	RoHS Compliant

4.0 Power Requirements

Spec ID	Requirement	Threshold
4.1	Input Voltage	5-32 VDC (Conditioned) or MIL-STD-704F 28VDC
4.2	Polarity Protection	Reverse polarity protected to 40 Volts
4.3	Max Power Consumption	≤ 7.5 Watts at 99% bus loading
4.4	Idle Power (5V Input)	2.20W @ 0.44A

4.5	50% Bus Loading (5V)	3.30W (1 Ch); 4.30W (2 Ch)
4.6	95% Bus Loading (5V)	4.25W (1 Ch); 6.55W (2 Ch)

5.0 Delivery

Item	Requirement	Timeline/Location
5.1	Hardware Delivery	All items delivered NLT 10 weeks After Receipt of Order (ARO).
5.2	Shipping Address	746 TS/TGGOG, Attn: Franco Gonzalez, 1644 Vandergrift Road, Building 1265, Holloman AFB, NM 88330.