



Electronics, Inc.

# MIL-STD-1553 MULTIPLEX DATA BUS TRANSFORMERS

**RUGGED MIL-STD-1553 SIGNAL ISOLATION & RELIABILITY.**

**Minimal leakage inductance** and **DC resistance**, Pico Electronics Data Bus Transformers ensure reliable data transmission and electrical isolation. They are specifically engineered for transparent signal processing and **minimal distortion**. These transformers exemplify our commitment to providing compact, high-performance solutions for MIL-STD-1553 interface requirements in critical aerospace and military systems.



## Avionic Systems (MIL-STD-1553)

Allows galvanic isolation between the circuit bus and other connected devices in the overall flight infrastructure. Impedance matching ensures signal integrity in systems such as **radars**, **navigation units**, **flight controls**, and **mission computers**.



## Military & Defense

These Data Bus Transformers perform reliable communication under extreme environmental conditions. Defense applications are where signal transmission and security are highly critical. Applications include **payload systems**, **launch systems**, **engine control**, and **power management**.



## Satellite Communications

Prevents signal reflection and reduce noise, these Data Bus Transformers have impedance matching ratios that guarantee clear signal transfers among **satellite communication buses**. The materials of the component can handle against radiation, vacuum, and temperature extremes.

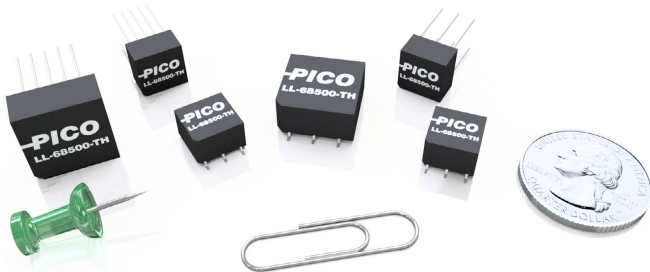


## Railway and Transportation Systems

Isolation is provided by Data Bus Transformers to reject common-mode noise and high voltage transients. These can disrupt **data transmission** and **network errors**.

## MIL-STD-1553 Data Bus Transformer Series Listing >

- Ultra-low leakage inductance down to 2.7  $\mu$ H
- Minimum rise and fall time as low as 50nS
- Droop % is down to 4.5%
- Surface mount and plug-in mounting types
- Size as small as 0.4" x 0.4"
- Multi-output windings with custom turns ratio change available
- Common mode rejection  $\geq$  45 dB over 3K $\Omega$  impedance across 75KHz to 1MHz freq band



### Series LL-68500 – Low Leakage Data Bus Transformers >

3K $\Omega$  Min. & 2.7 $\mu$ H Leakage at 75KHz to 1MHz



### Series 68500 – Electrical SMD Equivalent to QPL MIL-PRF-21038/27 >

3K $\Omega$  Min. at 75KHz to 1MHz

## Contact Us

Need a data bus transformer solution that doesn't compromise on size or reliability? Visit our website or contact our team of engineering experts today to discuss your project requirements.



Certified to  
AS9100D  
ISO 9001:2015



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