

120Ω Lightweight CANbus Terminator

WHEN SIGNAL INTEGRITY AND DENSITY MATTER

Carlisle Interconnect Technologies' (CarlisleIT's) CANbus terminators terminate high-speed Controller Area Network buses. These lightweight terminators are specifically engineered for the challenges of aerospace which include damp environments, exposure to harsh chemicals, and high vibration.

The extruded outer jacket strips easily, simplifying termination while the small diameters and short cap lengths simplify harnesses routing through tight spaces on the aircraft.



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FEATURES & BENEFITS

Feature	Customer Benefit
Terminator size is 0.425" diameter by 2.250" length	Small terminators facilitate harness installation on the aircraft
High strength copper alloy, silver plated, twisted pair conductor strands with shielded construction	Quality materials for reliable data transmission
Extruded enhanced fluoropolymer insulation	Eases termination to databus network over tape wrapped jackets while providing a high level of abrasion protection
Designed to withstand chemicals commonly found in aerospace applications, high vibration and wet environments. Operating temperatures range from -65°C to 150°C	Optimized for aerospace use
Standard product is available in #22, 24, and 26 AWG, 121Ω. Custom product available upon request	Standard configurations for speedy adoption. Options available to facilitate a variety of databus applications
Constructed of fungus resistant materials	Terminators do not aide in the growth of common fungi and are suitable for installation in damp environments
RoHS compliant	Complies with regulations

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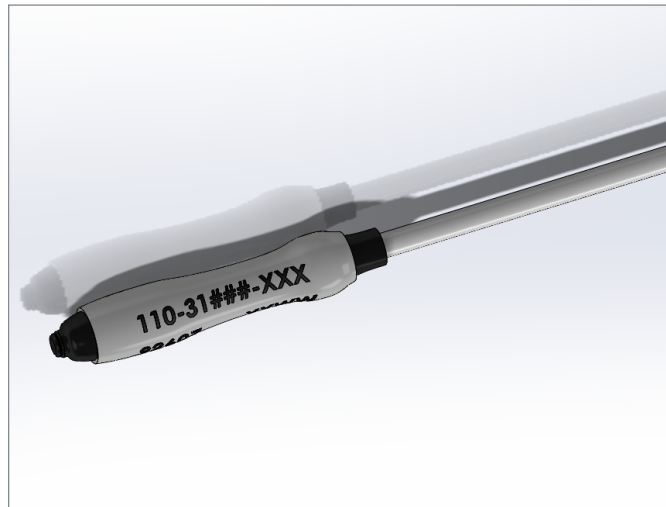
OPERATIONAL PERFORMANCE

Parameter	Specification
Operating temperatures	-65°C to +150°C as per EIA 364-32, test condition IV
Resistance to common aerospace chemicals including:	Fuel Jet A, ASTM D1655 Isopropyl Alcohol, TT-I-735 Methyl Propyl Ketone, BMS11-9, Grade 1 Potassium Formate (Aviform) Propylene Glycol (Dowfrost) BMS3-11 Type IV, Class 1 Hydraulic Fluid, Fire Resistant (Skydrol) Hydraulic Fluid, MIL-PRF-5606 Hydraulic Fluid, MIL-PRF-87257 Lubricating Oil, MIL-PRF-23699
Random vibration	Frequency range 10 to 2,000 Hz, RMS Level 15.3 GRMS, 5 hours per axis (X and Y), with no loss of electrical continuity (per EIA-364-28)
Mechanical shock	Half-sine, 490 m/s ² peak acceleration, 6 shocks per axis (X and Y), per EIA-364-27, Condition A
Altitude immersion	75,000 feet, per EIA-364-03
Smoke and toxicity	FAR 25.853 and Boeing/Airbus requirements

Terminator Schematic

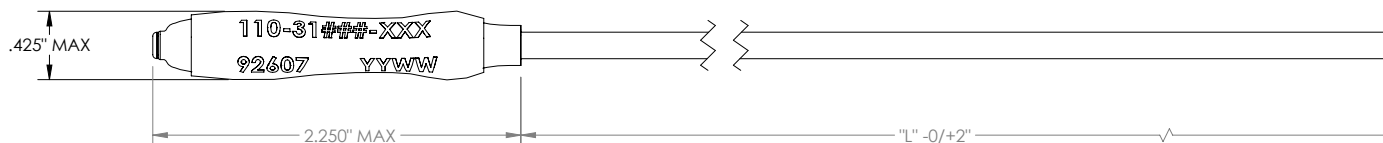


$$R_t = 121\Omega \pm 1\%, 1W$$



PART NUMBERING

Part Number*	Conductor	Shield	Terminator Weight	Assembly Weight**
110-31298-XXX	#22 AWG, silver plated blue and white twisted pair copper, 120Ω	Tin plated round and flat copper braid	4.8g	86g
110-31299-XXX	#24 AWG, silver plated blue and white twisted pair copper, 120Ω	Tin plated flat copper braid	3.6g	46g
110-31300-XXX	#26 AWG, silver plated light violet and white twisted pair copper, 120Ω	Tin plated flat copper braid	3.4g	34g



* XXX in the part number denotes the length "L" of the assembly in inches, e.g. 110-31298-064 = #22AWG, 64 inches

** Maximum weight of terminator assembly and 64 inches of cable

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