

Braided Ground Straps

for electrostatic discharge, lightning strike and power equipment grounding

A single lightning strike can hit an aircraft with as much as 1,000,000 volts. Static electricity can charge an aircraft, particularly in cold and wet air, with enough electrical potential to result in a discharge that can ignite ground fueling equipment or fry avionics gear. Power generation systems (engines, alternators, starters, etc.) can also produce transient electrical current that can damage adjacent electronic systems.

Damage from these events is minimized and managed in aircraft, Navy ships, mass transit systems and elsewhere through the use of electrical bonding. Flexible bonding straps are attached between equipment and airframes as well as between structural elements and flight control surfaces to conduct destructive electrical surges to ground or to bus bar components capable of absorbing significant amounts of transient voltage

Glenair has designed and supplies a broad range of braided ground strap technologies to both commercial and military aerospace customers, as well as US Navy and a broad range of mass transit applications. Our ground strap technologies are exactingly designed with appropriate conductive and dissipative materials for each application.

Lightweight microfilament ground strap with ArmorLite™ technology reduces aircraft all-up-weight







- Ultra-lightweight ground straps with highly conductive or dissipative performance
- Metal-clad microfilament braided solutions
- Significant contribution to weight reduction initiatives in commercial and military aircraft
- Heavy-duty variants for electrical potential grounding from engines, starters, and power units
- Mil-qualified designs for Navy shipboard applications
- Fast turnaround on requests for unusual and build-to-print requirements

Braided Ground Straps

Lightweight, general, and heavy-duty

LIGHTWEIGHT ARMORLITE™ MICROFILAMENT GROUND STRAPS



- Ultra lightweight metal-clad stainless steel braid material
- Low-profile lug design and assembly
- Available in seven widths and any length
- Low electrical resistance and high temperature tolerance
- High conductivity-to-weight / material-cross-section ratio
- Corrosion resistant materials for life-of-system durability
- Bend cycle durability up to 250,000 cycles per EN4199-001

GENERAL DUTY, CONFIGURABLE GROUND STRAPS



- Designed for general-purpose military and commercial aerospace as well as mass transit and industrial applications
- Nickel-plated copper lugs with configurable mounting hole options
- Broad range of standard-duty braid materials, including tin and silver-plated copper, stainless steel, and nickel 200
- Insulated sleeving option for environmental protection

MIL-DTL-24749 TYPE IV QUALIFIED GROUND STRAPS FOR NAVY SHIPBOARD APPLICATIONS



- Meets the rigorous specifications of MIL-DTL-24749 Rev. B Type IV
- Tested to survive 1000 hours salt spray
- Unique Stainless Steel/Nickel hybrid braid
- Available in six standard configurations, with non-standard length/ lug size configurations available
- Rugged square form-factor lug

FAST TURNAROUND ON UNUSUAL/BUILD-TO-PRINT REQUESTS



Hybrid braid materials and customizable lug material options





Heavy-duty braid and lug configurations

Round cross-section braid



Harsh environment and chemical-resistant ground strap jacketing

GROUND CONTROL EARTH BOND SYSTEM



How To Order		
600-120	Hydraulic Setting Tool for 1/4" Earth Bonds	The tools feature one hand operation and
600-123	Hydraulic Setting Tool for 3/8" Earth Bonds	ram retract mechanism actuated by release trigger. Consult factory for control gauges and earth bond part numbers for each material type and size.
600-124	Hydraulic Setting Tool for M6 Earth Bonds	
600-125	Hydraulic Setting Tool for M10 Earth Bonds	