

MISSION-CRITICAL
INTERCONNECT
SOLUTIONS



GLENAIR ITALIA (BLQ)

Mission-Critical Interconnect Solutions

Aerospace and Military-Grade Interconnects



GLENAIR ITALIA (BLQ): MISSION-CRITICAL INTERCONNECT SOLUTIONS

The premier manufacturer and supplier of mission-critical military, aerospace and harsh-industrial-grade interconnect technologies for the European marketplace. Strategically located in Bologna, Italia, the 21.000+ sq. meter facility offers interconnect engineering, warehousing, injection molding, machining, plating, and electrical and fiber optic harness assembly.

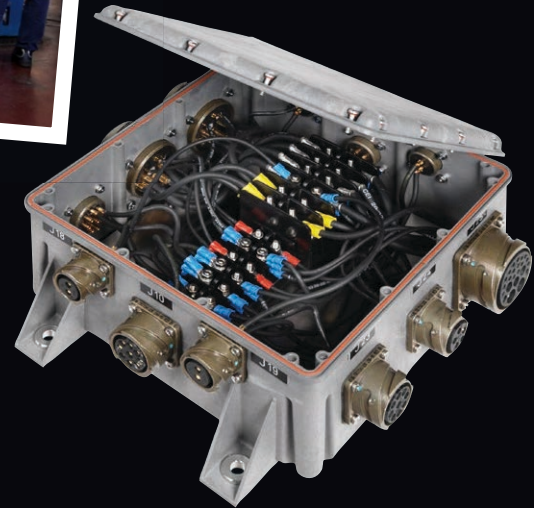
**Total vertical
integration
includes in-house
contact fabrication**



**In-house rubber
and thermoplastic
injection molding (far
left) plus a massive
CNC machining center
(left) provides Glenair
Italia with all the
resources required to
fabricate interconnect
technologies from
scratch without
dependence on outside
suppliers**



**In-house test lab
with capabilities
for both high
voltage as well
as high speed
signal product
qualification.
Credentials include
ISO 17025 and
others**



**Plating line capabilities include VG95328-qualified
Marine Bronze and "Code J" Tin-Zinc plating—VG95211 and VG95212
qualified cadmium alternative for corrosion-resistant interconnects.**



MISSION-CRITICAL
AEROSPACE
CONNECTORS

BLQ
M-GRADE

Ultra high-performance
military-aerospace
grade interconnect
technologies



From air and ground missile launch interconnects to pure air gas assemblies and high-voltage, high-altitude connectors, Glenair BLQ's Aerospace group is positioned to address some of the most difficult and mission-critical interconnect challenges in the manned and unmanned aerospace industry.

UNIQUE CAPABILITIES

- High-voltage electric power distribution connectors for aircraft and space propulsion applications
- Flight line and ground support interconnect technologies
- Cockpit and aircraft headlight interconnects
- Surface-to-air and air-to-air missile launch umbilicals
- High-voltage partial discharge testing

WEAPONS STORES, UMBILICALS, AND MISSILE-LAUNCH INTERFACE CONNECTORS



MIL-DTL-1760 type

New innovative designs

Discrete connectors and harnesses

IN-HOUSE HERMETIC CONNECTOR DESIGN AND MANUFACTURE



Rectangular configurations

Bulkhead feed-thrus

Circular MS type

Custom configurations

PURE AIR HIGH PRESSURE COOLING GAS TUBE ASSEMBLIES



Complete systems and ancillaries for IR guided weapons
and weapons ejection applications

SPACE-GRADE INTERCONNECTS



VG 95328 (M26482 type)
connectors with outgassing
processing

SUPERNINE PWM



Pulse Width Modulation
3kV connectors

MISSION-CRITICAL
MILITARY
EQUIPMENT
CONNECTORS

BLQ
M-GRADE

High-reliability
interconnect
technologies for military-
grade applications



From military land vehicles to
subsea/navy applications—including
signal, power, and fiber optic
technologies.



Special application capabilities include fiber optics and high-frequency RF

CORE CAPABILITIES

- VG-qualified solutions including VG95234 and VG95328
- MIL-DTL-26482 Series I type and derivatives
- MIL-DTL-5015 type reverse-bayonet
- Motor start vehicle and generator connectors
- Subsea / navy fiber optic and high-voltage assemblies
- SuperSeal™ RJ45 and USB field connectors
- Radar and comms shelter assemblies

MILITARY-GRADE

Ruggedized ground, sea, and air solutions for military equipment and vehicles



In-house Tin-Zinc alternative to Cad plating for VG connectors

SUPERSEAL™ FIELD RJ45 AND USB SOLUTIONS



MIL-DTL-5015 type
reverse-bayonet RJ45



MIL-DTL-5015 type
reverse-bayonet USB



Wide range of wire
terminations

MIL-DTL-26482 SERIES I TYPE AND DERIVATIVES



Stainless steel configurations



Marine bronze solutions



GLASS-SEALED
Hermetic
CONNECTORS



Special EMI filter and
hermetic designs

ARCTIC-GRIP RUBBER OVERMOLDED SOLUTIONS



Fully tooled and available for the wide range of Glenair BLQ M-Grade connector solutions

VG96929 SINGLE-POLE POWER



VG-qualified and Glenair BLQ signature solutions

INTEGRATED / WIRED JUNCTION BOXES



High-speed Ethernet and other custom solutions

MISSION-CRITICAL
POWER
CONNECTORS

BLQ
M-GRADE

Ultra high-performance /
military-grade power and
signal connectors



VG-Qualified manufacturing including
aerospace-grade, high-speed, subsea
high-voltage transmission connectors, and
turnkey cable assemblies



OCTOBYTE SERIES RUGGEDIZED ETHERNET CONNECTOR



Tested for compliance according to
EN50173-1 standards for CAT5E and CAT7



Ethernet Cat7A
contacts



Ethernet Cat5
contacts



Coax
contacts



Ethernet MVB -
WBT contacts

MIL-DTL-5015 AND 26482 "SUPER" DERIVATIVES



Example: military ground vehicle RF
communication solution

VG QUALIFIED AND GLENAIR SIGNATURE High-performance industrial strength power and signal connectors



SUPER ITS™ HIGH-PERFORMANCE REVERSE BAYONET



Higher temperature and ampacity rating with rigid insert and mechanical contact retention

ITS-Ex HAZARDOUS ZONE CONNECTORS



IECEx / ATEX qualified explosive zone 5015 type reverse-bayonet connectors for Group IIC, Temperature Classes T6 and T5, Zones 1 and 2

NUCLEAR INDUSTRY



Series NGITS reverse-bayonet power and signal connectors for Class 1E harsh nuclear applications

SUBSEA



Special Stainless Steel / Bronze coupling nut series for mixed power, signal, and fiber optic subsea applications

FIREWALL



Series ITK high-temperature stainless steel connectors with high-temperature ceramic inserts for firewall applications

SPECIAL-PURPOSE POWER AND SIGNAL CONNECTORS



ITS-RG RadGrip rubberized coupling nut series

15kV high-voltage dry-mate underwater connector

Single-pole high-current / medium voltage connectors

MISSION-CRITICAL
INDEPENDENT
TEST LAB

ISO/IEC 17025

Environmental Test Laboratory

Fast and reliable IEC qualified assessment laboratory for electronic components (IECQ)

Environmental testing, consisting of the complete range of mechanical, electrical and environmental stress factors that affect electronic equipment, cabling, and systems is now available from Glenair's IEC/IECQ certified testing laboratories. Test engineers and technicians follow qualified processes, and report generation protocols to deliver timely and professional environmental testing services. As an interconnect component manufacturer and wire and cable assembly supplier, Glenair is well-versed in all aspects of qualification testing including corrosion resistance, solvent resistance, electromagnetic compatibility, dielectric withstanding voltage, current rating and so on. Our test

laboratories are equipped with current-generation equipment, and are maintained in accordance with industry best practices and certification agency requirements. Perhaps most importantly, Glenair environmental test services are offered with accelerated lead times—from initial quoting to final test report delivery. Please contact the factory for more information



- Mechanical / dynamic testing for fiber optic systems, electrical components, wiring harnesses
- Broad spectrum of electrical testing (resistance, current rating, EMC shielding and more)
- Heat, cold, and thermal shock testing
- Corrosion and solvent resistance testing
- Fast turnaround on quotes and testing services
- Decades of experience



Mechanical / Dynamic Testing

IEC QUALITY ASSESSMENT SYSTEM FOR ELECTRONIC COMPONENTS (IECQ)



MECHANICAL / DYNAMIC TESTING

ELECTRICAL AND ELECTRONIC COMPONENTS/DEVICES TESTED
Electrical/Fibre optic connectors
Electro/Mechanical Devices
Wiring Harnesses
Switches
Aerospace Components & Equipment
Automotive Components & Equipment
Railway Components

VIBRATION-SINUSOIDAL (Ambient temperature)	
MECHANICAL/DYNAMIC TESTS	STANDARD
Freq. Range: 5 to 2000 Hz	BS EN/IEC 60068-2-6
Peak thrust: 8,90kN	EIA-364-28
Max pk/pk displacement: 50mm	

VIBRATION/RANDOM (Ambient temperature)	
MECHANICAL/DYNAMIC TESTS	STANDARD
Freq. Range: 5 to 2000 Hz	BS EN / IEC 60068-2-64
Peak thrust: 5,76 kN	EN 61373
Max pk/pk displacement: 50mm	EIA-364-28

SHOCK (Half sine, Sawtooth, and Trapezoidal waveforms)	
MECHANICAL/DYNAMIC TESTS	SPECIFICATION APPLICABLE
Peak thrust : 17,36kN	BS EN / IEC 60068-2-27
	EIA-364-27
	EN 61373

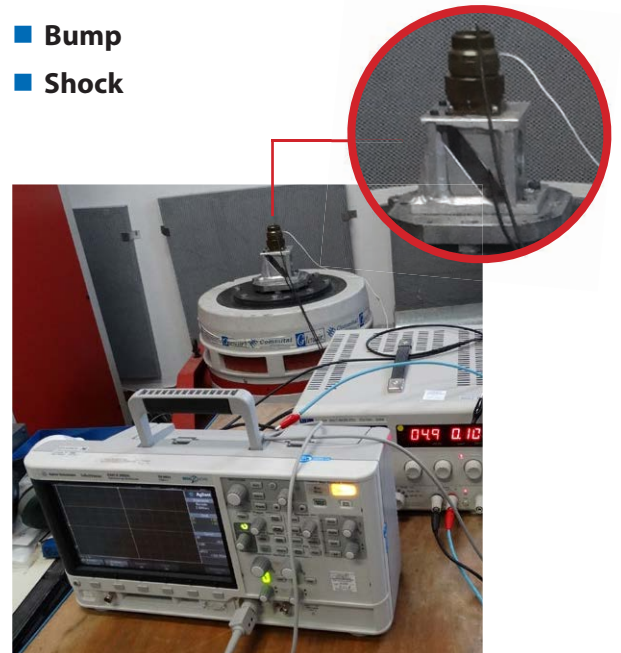
BUMP (Half sine)	
MECHANICAL/DYNAMIC TESTS	STANDARD
Severity: 20/40 gn	BS EN / IEC 60068-2-29:1993

DISCONTINUITY (During vibrations)	
MECHANICAL/DYNAMIC TESTS	STANDARD
1µs Electrical discontinuity	EIA-364-28

Controlled vibration and shock testing ensures electrical and electronic components can withstand specified forms of dynamic stress encountered during operation and shipping.

Available Tests:

- Vibration sine
- Vibration random
- Bump
- Shock



Electrical Testing

IEC QUALITY ASSESSMENT SYSTEM FOR ELECTRONIC COMPONENTS (IECQ)



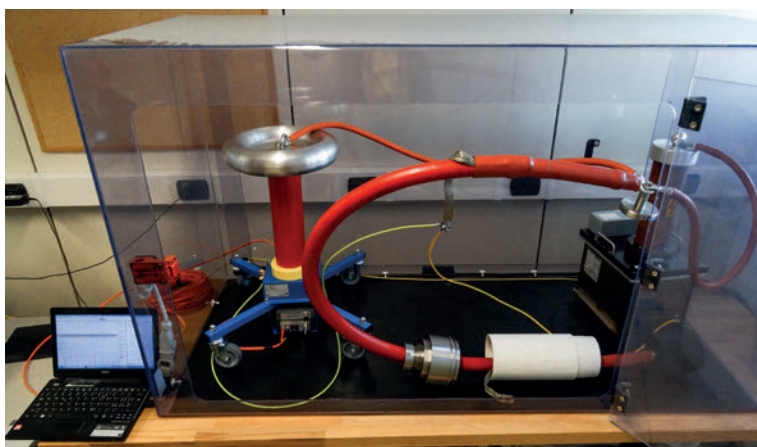
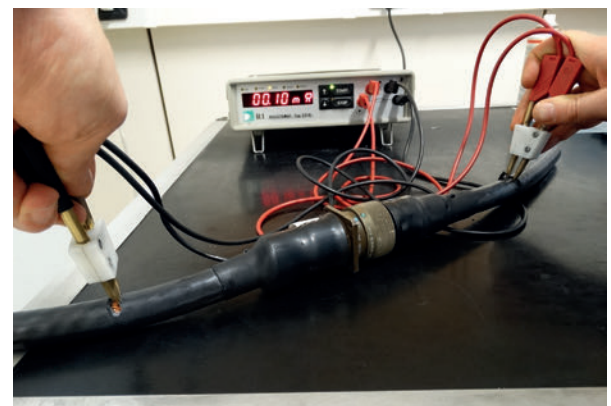
ELECTRICAL / EMC TESTING

ELECTRICAL	
EMC	SPECIFICATION APPLICABLE
Shielding effectiveness	BS EN / IEC 62153-4-7
Tiaxial Method	
9 kHz - 2,6 GHz	
CONTACT RESISTANCE	SPECIFICATION APPLICABLE
DC Voltage	BS EN / IEC 60512-2-1
20 mΩ - 200 kΩ	BS EN / IEC 60512-2-2
1 μΩ	EIA-364-06
INSULATION RESISTANCE	SPECIFICATION APPLICABLE
DC Voltage	BS EN / IEC 60512-3-1
1 - 1500 V	
100 Ω - 2000 TΩ	
EIA-364-21	
DIELECTRIC WITHSTANDING VOLTAGE	SPECIFICATION APPLICABLE
AC Voltage 50 Hz : 0 - 50 kV	BS EN / IEC 60512-3-1
	EIA-364-21
TEMPERATURE RISE AND CURRENT DE-RATING	SPECIFICATION APPLICABLE
DC Current : 0 - 2000 Ampere	BS EN / IEC 60512-5-1
	BS EN / IEC 60512-5-2
	EIA-364-70
PARTIAL DISCHARGE	SPECIFICATION APPLICABLE
Test voltage: 0 - 50KVAC Max I. Leak: 60mA	IEC 60270:2000 BS EN 60270:2001
Test voltage: 0 - 10KVAC Max I. Leak: 300mA	
PD event time resolution: < 2 ns	
PD resolution: 0,01 pC	
Minimum PD level: 3 pC	
PD level accuracy: ± 2 % of calibrated PD value	
Center frequency 0 Hz ±32 MHz	
Frequency domain bandwidth: 9 kHz, 40 kHz,	
100 kHz, 160 kHz,300kHz, 650kHz, 1MHz, 1.5MHz	

Electrical / EMC Testing services cover the complete range of performance requirements for interconnect cabling and electronic components. Glenair brings years of EMC design engineering experience into the testing process, ensuring equipment under test is always correctly fixtured and prepared for the most accurate results.

Available Tests:

- Contact resistance
- Dielectric withstanding voltage (DWV)
- Current rating
- Insulation resistance
- EMC shielding
- Partial discharge



Temperature/Humidity Testing

IEC QUALITY ASSESSMENT SYSTEM FOR ELECTRONIC COMPONENTS (IECQ)



TEMPERATURE / HUMIDITY TESTING

CLIMATIC (High Humidity - Constant)	
DAMP HEAT STEADY STATE	SPECIFICATION APPLICABLE
Temp. Range : +10°C to +90°C	BS EN / IEC 60068-2-3 EIA-364-31
Humidity Range : 10 to 98%rh	
Chamber Size:	
690mmx600mmx610mm 500mmx610mmx500mm	
DAMP HEAT-CYCLIC	SPECIFICATION APPLICABLE
Temp. Range : +10°C to +90°C	BS EN / IEC 60068-2-30 EIA-364-59
Humidity Range : 10 to 98%rh	
Chamber Size :	
650mmx500mmx600mm 800mmx600mmx500mm	
DAMP DRY COLD	SPECIFICATION APPLICABLE
Min Temp : -75°C	BS EN / IEC 60068-2-1 EIA-364-59
Max chamber size :	
800mmx600mmx500mm	
CLIMATIC (High Temperature-Constant)	
TEMPERATURE-DRY HEAT	SPECIFICATION APPLICABLE
Maximum Temp : +300°C	BS EN / IEC 60068-2-2 EIA-364-17
Chamber Size :	
500mmx600mmx600mm	
THERMAL SHOCK	SPECIFICATION APPLICABLE
Temp. Range : -60°C to +300°C	BS EN / IEC 60068-2-14
Manual (two chambers method)	
CHANGE OF TEMPERATURE	SPECIFICATION APPLICABLE
Gradual in air	BS EN / IEC 60068-2-14
Maximum Temp : +180°C	
Minimum Temp : -75°C	
Maximum rate of change :	
-75°C to +180°C: 5°C/Min +180°C to -75°C: 2,5°C/Min	

SALT SPRAY / CORROSION TESTS

CORROSION	
SALT/SO ₂ SPRAY (FOG)	SPECIFICATION APPLICABLE
Max chamber size : 500 Lt	BS EN / IEC 60068-2-11 EIA-364-26

Temperature and Humidity Testing is performed using industry-standard and IEC accepted practices of temperature cycling and humidity exposure. New and high-quality testing equipment ensures accurate results.

Available Tests:

- Dry heat
- Dry cold
- Damp heat steady state
- Damp heat cyclic
- Thermal shock





MISSION-CRITICAL INTERCONNECT SOLUTIONS

Glenair, Inc.

1211 Air Way • Glendale, California • 91201-2497

Telephone: 818-247-6000 • Fax: 818-500-9912 • sales@glenair.com

www.glenair.com

Glenair Power Products Group

20 Sterling Drive
Wallingford, CT
06492

Telephone:
203-741-1115
Facsimile:
203-741-0053
sales@glenair.com

Glenair UK Ltd

40 Lower Oakham Way
Oakham Business Park
Mansfield, Notts
NG18 5BY England

Telephone:
+44-1623-638100
Facsimile:
+44-1623-638111
sales@glenair.co.uk

Glenair Microway Systems

7000 North Lawndale Avenue
Lincolnwood, IL
60712

Telephone:
847-679-8833
Facsimile:
847-679-8849

Glenair Nordic AB

Gustav III : S Boulevard 46
SE-169 27 Solna
Sweden

Telephone:
+46-8-50550000
sales@glenair.se

Glenair GmbH

Schaberweg 28
61348 Bad Homburg
Germany

Telephone:
06172 / 68 16 0
Facsimile:
06172 / 68 16 90
info@glenair.de

Glenair Iberica

C/ La Vega, 16
45612 Velada
Spain

Telephone:
+34-925-89-29-88
Facsimile:
+34-925-89-29-87
sales@glenair.es

Glenair Italia S.p.A.

Via Del Lavoro, 7
40057 Quarto Inferiore –
Granarolo dell'Emilia
Bologna, Italy

Telephone:
+39-051-782811
Facsimile:
+39-051-782259
info@glenair.it

Glenair France SARL

7, Avenue Parmentier
Immeuble Central Parc #2
31200 Toulouse
France

Telephone:
+33-5-34-40-97-40
Facsimile:
+33-5-61-47-86-10
sales@glenair.fr

Glenair Korea

B-1304 Gunpo IT Valley
148 Gosan-Ro, Gunpo-Si
Kyunggi-Do, Korea
435-733

Telephone:
+82-31-8068-1090
Facsimile:
+82-31-8068-1092
sales@glenair.kr

