LIF

Low Insertion Force Connectors

Multiple Applications, One Versatile Connector

SIGNAL LIF

HYBRID LIF

PCB LIF

- Ideal for Rack & Panel and Low I/O Applications
- Combine Signal, Power and Coax
- 20,000+ Mating Cycle Life Expectancy
- Excellent Electrical Characteristics
- Familiar Footprint, Superior Performance

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Interconnect Solutions & Services

Superior Electrical Performance

LIF Connectors use a specially designed hyperboloid pin and socket contact set. This robust contact set offers significantly enhanced electrical performance over paddle spring contact sets available for similar high-density I/O connectors on the market.

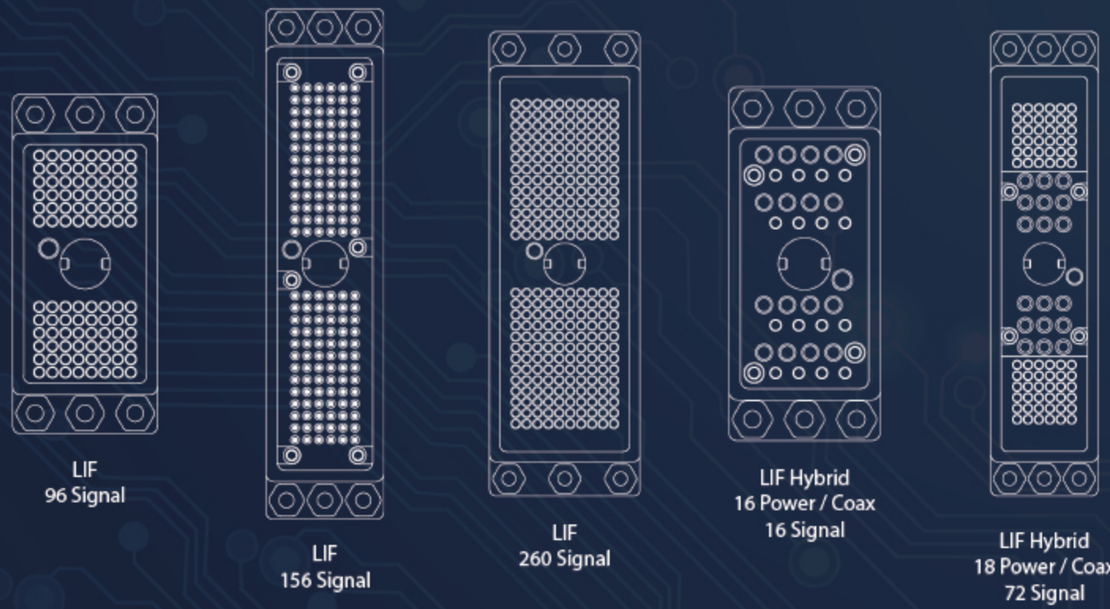
Our pin and socket contacts provide improved contact retention and are self-wiping, thus minimizing the potential for intermittence caused by shock and vibe or debris build up between contacts.

Hyperboloid Socket
Cross-section

For signal and low amperage power requirements, we currently offer a signal contact set supporting operating current up to 3 amps. Our micro-power contact set for higher amperage requirements supports operating current up to 23 amps. Our 50 ohm micro-coax contact set supports RF requirements with a rated frequency range up to 2 Ghz and continuous operating current up to .5 amps.

Versatile Form Factor

LIF Connectors are available in a variety of standard configurations providing 96, 156 or 260 signal positions. LIF is also available in multiple hybrid configurations that support power or RF applications by introducing power and coax contacts within the LIF form factor.



LIF
96 Signal

LIF
156 Signal

LIF
260 Signal

LIF Hybrid
16 Power / Coax
16 Signal

LIF Hybrid
18 Power / Coax
72 Signal

We encourage customers with specific LIF requirements or suggestions regarding future functionality and performance improvements to contact our sales and applications staff. We will be happy to work cooperatively with you to develop a custom LIF configuration to suit your application.

Extreme Durability

LIF Connectors are constructed of the same high quality materials used in high-end mass interface systems such as our SCOUT and TITAN lines. All LIF Connector modules and contacts are designed and tested to maintain high performance for a minimum of 20,000 engagement cycles.

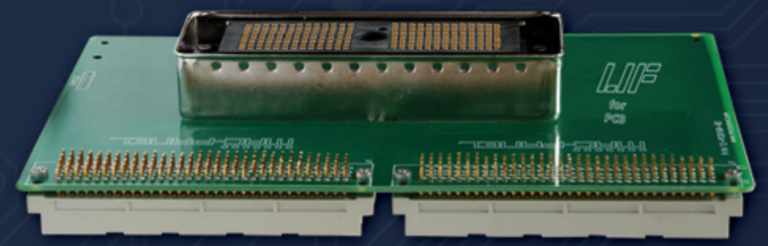
20,000 Mating Cycle Life Expectancy

Module Construction:
Rugged Dielectric Epoxy Composite

Contact Construction:
BeCu or Brass 360 plated
with Gold (Au) over Nickel (Ni)

Expanded PCB Mounting Capability

Leveraging on the superior electrical capabilities of printed circuit board assemblies, all LIF Connector configurations are available with a secondary contact set purpose-designed to allow efficient mounting of LIF receptacle sockets directly onto the surface of a PCB. By eliminating conventional cabling, PCB mounted LIF Connectors provide the best overall electrical performance while also offering easy integration and maintenance.



LIF 156 Signal mounted
directly onto PCB

Optional LIF Accessories

LIF Connectors are available with a variety of optional accessories including back shells to protect internal wiring & terminations, polarizing posts to prohibit the mating of incompatible/incorrect LIF plug and socket combinations and protective covers to protect valuable electrical contacts while connectors are disengaged.

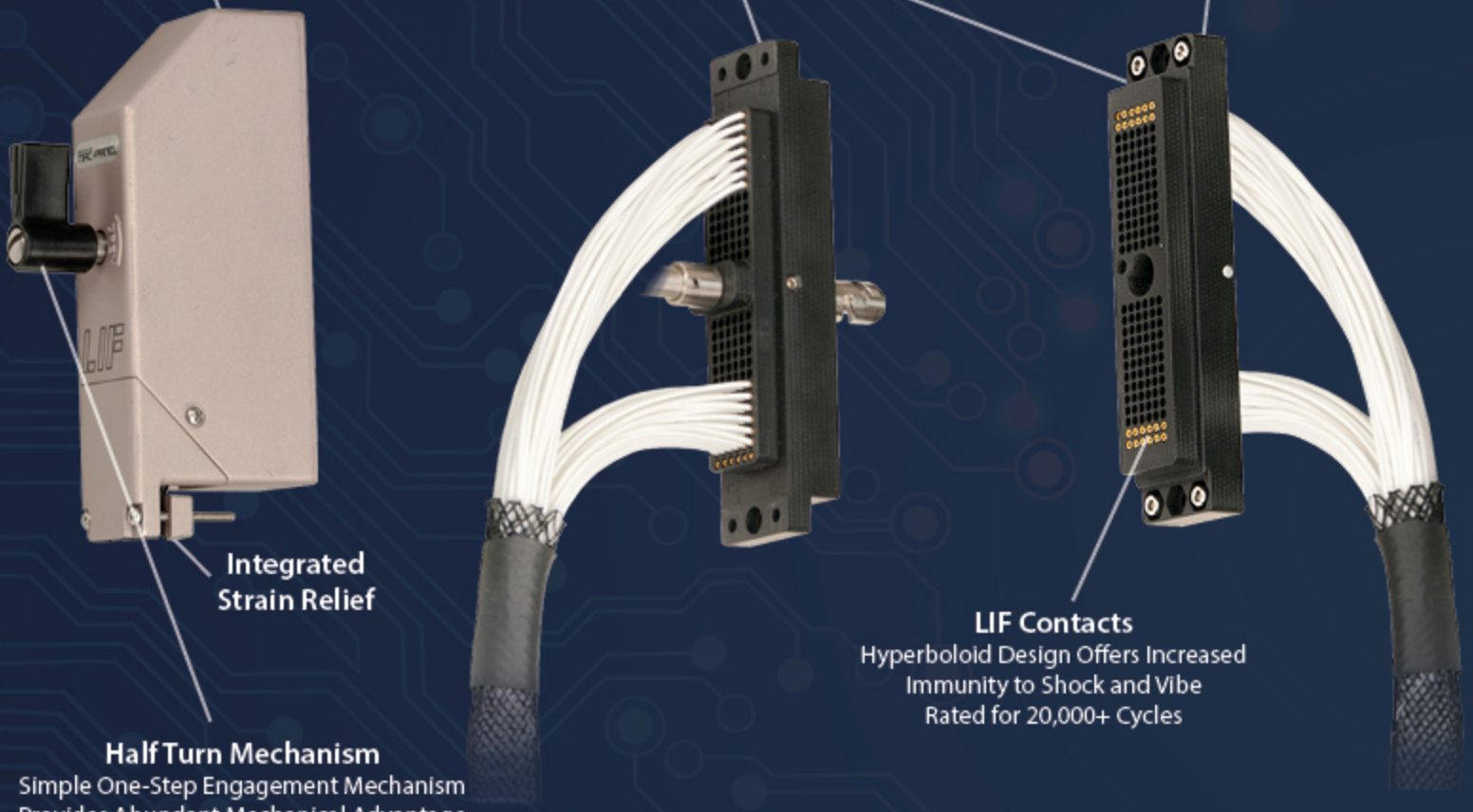
LIF Explained

LIF Connectors are a high performance electrical connector for high-density, low I/O applications. LIF Connectors feature a simple half turn engagement mechanism and support multiple signal, power and coax combinations with up to 260 I/O points per connector.

LIF Socket
Rack and Panel or PCB Mountable
Drop-in Replacement for ZIF Connectors

LIF Modules
Rated for 20,000 Cycles
Drop in Replacement for ZIF Connectors

LIF Back Shell
Provides Protection for Wiring
Available in Plastic or Metal



Integrated Strain Relief

LIF Contacts
Hyperboloid Design Offers Increased
Immunity to Shock and Vibe
Rated for 20,000+ Cycles

Half Turn Mechanism
Simple One-Step Engagement Mechanism
Provides Abundant Mechanical Advantage

Find a complete listing of all LIF components online at macpanel.com

We constantly strive to improve our LIF Connector product offering. We are presently developing a solution for incorporating higher current signal contacts and another solution for thermocouple applications. We encourage customers with specific LIF requirements or suggestions regarding future functionality and performance improvements to contact our sales and applications staff. We will be happy to work cooperatively with you to develop a custom LIF configuration to suit your application.

MAC Panel Company | 551 W. Fairfield Rd. | High Point, NC 27263 | Ph: +1 336.861.3100 | www.macpanel.com

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