



# COMPANY OVERVIEW

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POWER | PROTECT | CONNECT



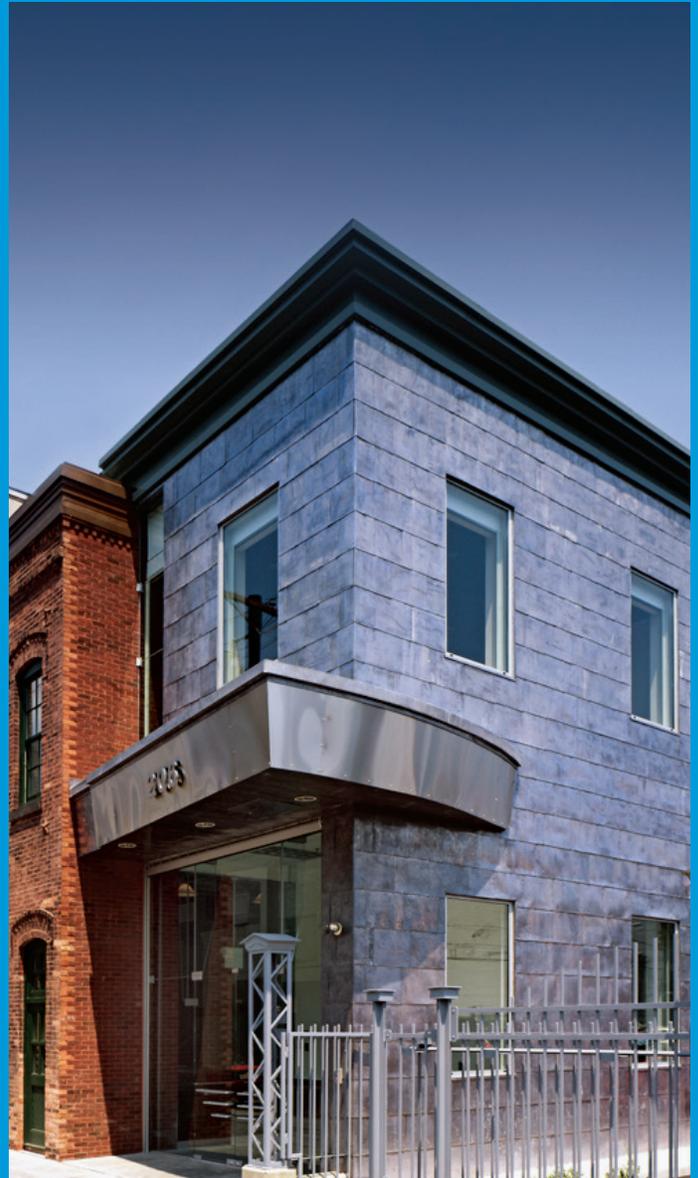
# ABOUT BEL

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Elliot Bernstein founded Bel Fuse Inc. in 1949 as a maker of automobile fuses. Bel has created and delivered power, protection and connectivity solutions for major customers ever since—from the early days of RCA television sets and IBM mainframe computers to serving leading customers in the military, aerospace, industrial, eMobility, consumer, and networking/cloud markets.

Publicly held since 1967, Bel has grown and thrived under the continuous leadership of the Bernstein family. It operates manufacturing sites, sales offices and design centers across North America, Europe and Asia. Web news service Funding Universe says: “Bel enjoys a long-standing reputation as a financially stable, world-class manufacturer—the result of its ability to engineer optimal solutions to meet changing market demands and grow through strategic partnerships.” President and CEO Dan Bernstein puts it more simply: “As new technologies evolve, Bel evolves with them.”

Bel’s transformation has been made possible through innovation and organic growth, however, acquisitions continue to be a key aspect to the growth strategy. Since 1998, Bel has acquired sixteen companies to help build out the **POWER | PROTECT | CONNECT** portfolio that exists today. Of these acquisitions, seven of them were divestitures from large conglomerates including CUI, Emerson, ABB, TE, Safran, Insilco, and Lucent. As in the past, Bel is committed to growing the company organically and through strategic acquisitions.



*Bel corporate headquarters in Jersey City, NJ*



# POWER

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Bel Power Solutions, CUI and Signal Transformer products can **POWER** your devices. From AC and DC power supplies to an expansive portfolio of transformers, chokes and inductors, Bel has a broad lineup of power conversion solutions. Whether it is a standard or highly-customized requirement, Bel has the expertise and support to design, manufacture and deliver the perfect product for your application.

## Bel Power Solutions

Bel Power Solutions provides intelligent, efficient and reliable AC-DC and DC-DC power conversion devices. Applications range from board-mount power to system-level architectures for servers, storage, networking, industrial and transportation. We continue to focus on the growth of our business with strategic customers and distributors.

### Custom Modules

The Modules business incorporates both OEM and ODM design solutions over a wide range of technology fields. The Custom Modules Group provides fast turnkey application-specific solutions as well as manufacturing solutions to a range of customers worldwide.



## CUI Inc

CUI Inc provides easy access to power supply products and information that help drive an engineer's design. CUI is proud to offer a diverse range of internal and external AC-DC power supplies and DC-DC converters.

CUI's wide range of products are available immediately through their channel partners and serve global customers in the medical, industrial, IoT, and consumer industries.

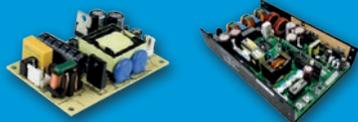
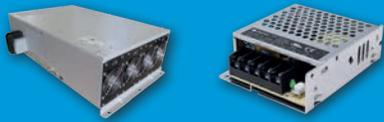


## Signal Transformer

Since 1959, Signal Transformer has been a trusted manufacturer of wire wound magnetic solutions for a wide variety of industrial electronic markets. Today, Signal Transformer is a world leader, offering chassis, DIN rail, PCB or surface mount transformers, chokes, inductors, and custom or modified standard products to suit the most complex design requirements. With our vast engineering, manufacturing, quality, and regulatory resources, count on Signal Transformer to excel in the design, manufacture, and supply of cost-effective, reliable, and specialized magnetic solutions-today and tomorrow.



# BEL POWER SOLUTIONS & CUI INC

<b>Front-End &amp; Rack Power Solutions</b>	
<b>Open Frame</b>	
<b>Configurable &amp; Enclosed Power</b>	
<b>DIN Rail &amp; Compact PCI</b>	
<b>Rugged Cassettes</b>	
<b>BMP Converters &amp; Input Filters</b>	
<b>eMobility Products</b>	
<b>Desktop &amp; Wall Plug Power Adapters</b>	
<b>Communication Modules</b>	
<b>Custom Solutions</b>	

# SIGNAL TRANSFORMER

## Linear Magnetics

### Transformers

- Power
- Safety Isolation
- Auto
- Class 2
- Step up / Step down
- Toroidal
- Chokes / Inductors
- Encapsulated
- International Low Profile
- ECO-Friendly



## Surface Mount Devices

### Inductors

- Unshielded / Shielded
- Low Profile
- High Current / Low Current

### Common Mode Chokes

### Power over Data (PoE / PoDL)



## High Frequency Magnetics

- Switch Mode Transformers
- Flyback Transformers
- Surface Mount Inductors
- Current Sensors
- High Current Toroidal Inductors & Chokes
- Wireless Charging Coils
  - » Transmitters
  - » Receivers



## Custom Designs

- 50/60 Hz Linear
- High Frequency
- Toroidals
- Wire Harness Assemblies
- Wire Wound Chokes





# PROTECT

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Bel Fuse circuit protection products **PROTECT** your circuits and are found in every major market. Bel continues to push the envelope by introducing innovative products with higher current, voltage and interrupting ratings in the smallest package size possible. The company has been at the forefront of the industry's shift to surface mount fuse designs, such as brick and chip fuses, that incorporate the need for small, compact technology.

## Bel Fuse

The Bel Fuse circuit protection portfolio includes one of the broadest ranges of circuit protection products on the market today, including PCB mount, radial fuses, as well as all standard glass and ceramic cartridge fuses including axial leaded board mounted options. Bel Fuse Circuit Protection also offers a complete product offering in PPTC resettable fuses. In addition to the standard products, a wide range of value-add options are available.

### Surface Mount Fuses

Surface Mount fuses come in two different designs - the **Chips** are available in standard 0402, 0603 and 1206 packages, while the **Bricks** are offered in 2410, 3912 and 4818 case sizes.

### Through-hole Mount Fuses

Our wide selection of through-hole mount fuses as well as standard glass and ceramic cartridge fuses allow the components to be PCB mounted. In addition, we offer traditional cartridge fuses with much higher voltage and interrupting ratings than what was traditionally accessible.

### PTC Fuses

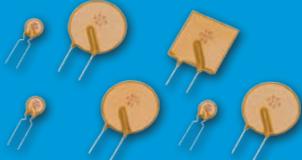
Circuit protection's polymer PTC (positive temperature coefficient) devices offer superior functional life performance due to a unique polymer formulation. Surface Mount PTC Resettable fuses are available in seven different size packages ranging from 0603 to 2920. Through-Hole Mount radial PTC Resettable fuses are offered in eleven different series. Compared to traditional devices rated to a maximum ambient temperature of 85°C, our High Temperature rated PTC Resettables (0ZT Series) are suitable for use up to 125°C. Our product portfolio collection also includes Battery Strap PTC Resettable fuses suitable for rechargeable battery packs and lithium cell battery packs.

### EV Fuses

Circuit Protection Electric Vehicle (EV) fuses are used for protecting high power battery charging and management systems ranging from 500 VDC up to 1000 VDC.



# BEL FUSE

<p><b>Brick Surface Mount Fuses</b></p>	
<p><b>Chip Surface Mount Fuses</b></p>	
<p><b>Surface Mount PTC Resettable Fuses</b></p>	
<p><b>Radial PTC Resettable Fuses</b></p>	
<p><b>250 / 277 / 350 Volt Radial Fuses</b></p>	
<p><b>High Voltage / Power Fuses (up to 600 VAC; 500 VDC)</b></p>	
<p><b>Glass and Ceramic Tube Fuses</b></p>	
<p><b>EV Fuses</b></p>	



# CONNECT

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Bel's Connectivity Solutions helps **CONNECT** the world and makes global communication a reality by manufacturing electronic components for the computer, networking, telecommunications, defense/aerospace and transportation industries. Bel is recognized as a world class RF connector, cable assembly and microwave component supplier, providing solutions for harsh environment, fiber optic and expanded beam connectivity applications.

## Cinch Connectivity Solutions

For 100 years, Cinch Connectivity Solutions has manufactured high-quality and reliable high-performance connectors, cable assemblies, microwave components, and optical products to Aerospace, Military/Defense, Commercial, Rugged Harsh Environments and Communications markets.

Our custom solutions deliver creative, hands-on engineering whilst utilizing multiple contact technologies including fiber optic expanded beam and QPL listed products. We aim to exceed our customers' expectations and continually provide innovative solutions to the rapidly changing needs of the markets and customers we serve.



## Stewart Connector

Stewart Connector offers one of the broadest product portfolios in the industry including passive jacks, plugs and cable assemblies. Creating reliable Ethernet connectivity for networking equipment, our modular plugs and cable assemblies are used within the structured cabling system, known as premise wiring.

All connector products are designed to meet current performance standards, including Category 6a regulations for Gigabit Ethernet and 10Gigabit Ethernet applications.



## Bel Magnetic Solutions & TRP Connector

Bel Magnetic Solutions offers an extensive line of Integrated Connector Modules (ICM), where the Ethernet magnetics solution is integrated into a connector package. The ICM product line covers every Ethernet application in the market today.

Our products include one of the broadest ranges of magnetic-based solutions for high-speed networking and computer applications. ICMs cover a range of Ethernet speeds and technologies from 10/100Base-T, 1GBase-T, 10GBase-T and Power over Ethernet (PoE).



# CINCH CONNECTIVITY SOLUTIONS

MIL-DTL-M26500, BACC45 & BACC63	<b>Omega</b>	
QPL Mil-Spec, Galley & Filter Connectors	<b>CINCH MIL/AERO Circulars</b>	
Passive Microwave Components, QPL Supplier	<b>MIDWEST MICROWAVE</b>	
RF Connectors, Adapters & Cable Assemblies	<b>JOHNSON</b>	
Coax, Twinax / Triax, Patching & 1553 Data Bus	<b>TROMPETER RF connectivity</b>	
High Performance Microwave Cable Assemblies & Bulk Cable	<b>Semflex microwave solutions</b>	
ARINC 809 & EN4165 Modular Connectors	<b>C-DMX</b>	
EN 4644 Rectangular, Modular & Composite Interconnect	<b>c-enx</b>	
M83513, Micro-D & T-Block	<b>Dura-Con™</b>	
Expanded Beam Fiber Optics & Interconnect, EBOSA & M83526 QPL	<b>FIBRECO</b>	
Active Optics, Transceivers & Media Converters	<b>STRATOS optical technologies</b>	
Jones Plugs, Barrier Blocks, Edge, M24308, Commercial D-sub's & Accessories	<b>INDUSTRIAL CINCH</b>	
Ruggedized Enclosure Systems, I/O SHS Header & Harness Connectors	<b>ModICE®</b>	
Compression Interconnect Products	<b>CIN::APSE®</b>	
Fuel Quantity Indicating System for Commercial Aerospace	<b>FQIS</b>	
RF, CATV, Data / Telecom Connectors & Cables	<b>AIM CAMBRIDGE</b>	
RF Coaxial Interconnect & Cable Assemblies	<b>VITELEC ELECTRONICS</b>	

# STEWART CONNECTOR

## Modular Plugs

Performance levels from Cat3 through Cat6a supporting 10G BASE-T Ethernet

Numerous wire management systems to ease plug assembly and improve performance

Slim-line strain relief boots with latch protection available



## Modular Jacks

45, 90, and 180 degree single port connector configurations available for 1G, 2.5G, 5G and 10G applications

Multiport single row & stacked connectors for 1G & 2.5G applications

Numerous LED and shield options available in all configurations



## Harsh Environment

### S-RJFTV D38999 Series

IP68 rated connector and cable assemblies for military and heavy industrial applications

### SealJack

IP67 rated connectors & cable assemblies for industrial applications



## Specialty

ARJ45 Cat8.2 connector system

RJ point five connectors and cable assemblies

MRJ21 cable assemblies and patch panels

EPP-918A protective sealant

CableJack connectors supporting Gigabit Ethernet data transmissions

Compu-Shield connectors for demanding environments

Punch down blocks for wire to PCB connection



# BEL MAGNETIC SOLUTIONS & TRP CONNECTOR

## Single Row ICMs

10/100BASE-T, 1GBASE-T (10/100/1000-BASE-T), 2.5GBASE-T and 5GBASE-T, 10GBASE-T, 60W/100W, 4P Power over Ethernet (PoE)

LEDs, EMI tabs, through hole, low profile packages and vertical mount

Wide variety of pin out and footprint configurations

LAN discrete magnetic ICMs available for 1G thru 10G under single port header



## 1xN Port ICMs

10/100BASE-T, 1GBASE-T, 2.5GBASE-T, 5GBASE-T, 10GBASE-T and 60W/100W PoE 1x2 through 1x8 configurations, low profile

LEDs, Tab-up and Tab-down configurations

Open Compute 1x4 compatible ICMs



## 2xN Port ICMs

10/100BASE-T, 1GBASE-T, 2.5GBASE-T, 5GBASE-T, 10GBASE-T and 60 W/100W PoE

2x1, 2x2, 2x4, 2x6 and 2x8 configurations

LEDs, Press-fit and shield flanges with gaskets

Compressed height version designed for 1U Advanced TCA rack applications



## Specialty ICMs

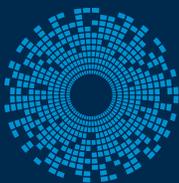
10/100BASE-T, 1GBASE-T and 10GBASE-T

RJ45, LEDs and USB-1A or USB-2A connectors

USB 2.0 and 3.0 compliant



POWER | PROTECT | CONNECT



bel

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