

# Industrial Connectivity Solutions



Reliable connections that make innovation possible

Wire

Xtra-Guard®

EcoGen®

Customs



## For over 100 years, Alpha Wire has developed wire, cable, and tubing solutions

designed to offer superior performance and reliability across demanding markets, including industrial automation, semiconductor fabrication, medical devices, and many more.

Alpha Wire delivers purpose-driven, hazard-matched connectivity solutions designed to meet the specific safety and performance demands of each application.

With responsive and consultative customer support, Alpha Wire acts as a true partner — guiding customers to the right solution from selection through implementation. Infrastructure makes all the difference.

## Partnering with Alpha Wire for high-flex cable

Manufacturing high-flex cables for over 95 years has taught us a few things about making these cables last. To ensure long-term performance, we do a few things differently:

- We use finely stranded conductors to support more flex and repeated bending
- Our careful material selection ensures protection against jacket abrasion
- Our broad portfolio ensures that you can find exactly what you need for any application, no matter how specific

**Alpha Wire's ability to accommodate small put-ups and short minimum runs gives customers the flexibility to order exactly what they need, reducing waste and inventory costs.**

From highly engineered custom cable solutions and heat-shrink and wire management products suited for varied environments, to a wide selection of complimentary samples, Alpha Wire ensures customers can evaluate and specify with confidence.



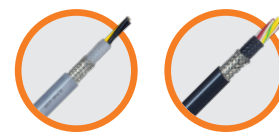
## Wire

Hook-up Wire  
Premium Hook-up Wire  
ThermoThin  
High Temperature rated



## Xtra-Guard® Performance Cable

Xtra-Guard® 1, 2, 4  
Xtra-Guard® Flex 1, 2, 4, 5



**Alpha Wire's extensive hook-up wire range** ensures you'll find the perfect match for any application — from control cabinets in protected environments to machine tools, high-temperature ovens, or off-road equipment. Available in a variety of insulations, our hook-up wire meets your requirements for temperature, abrasion resistance, electrical properties, and chemical resistance.

**EcoWire®** is the latest innovation in hook-up wire. A true engineering breakthrough, EcoWire® combines increased performance with a minimized environmental impact. EcoWire® derives its advantage from modified polyphenylene ether insulation (mPPE). It is inherently lighter, tougher, and more durable than PVC.

**Xtra-Guard®** provides excellent signal integrity, ensuring reliable transmission of electrical signals. Alpha Wire offers Xtra-Guard® cables in three shielding options to handle any electrical environment. Preferred cable for unsurpassed maximum temperature and chemical performance.

**Exceptional Signal Protection** against conducted or electrical noise in high and low-frequency environments where EMI/RFI interference is pervasive sets Alpha's Xtra-Guard® line apart. Xtra-Guard® provides low noise, controlled impedance, and minimizes cross-talk with its superior shielding performance.

### APPLICATIONS

- **Medical:** smaller and lighter cables. Easy installation, EMI/RFI protection, high-performing flex capabilities
- **Industrial Automation:** Shock and vibration proofed, RFI & EMI shielding
- **Military:** High performance wiring solutions
- **Semiconductors:** RFI & EMI shielding, vibration and chemical resistant

### APPLICATIONS

- **Energy - Solar, Windpower:** Chemical, UV and temperature resistant to withstand the most hazardous environments.
- **Robotics:** Abrasion resistant, EMI protection with supra shield, Wide variety of flexing applications. Oil and abrasion resistant to withstand mechanical abuse.
- **Military:** High performance cables, Advanced high/low-temperature performance.
- **Warehousing & Logistics:** Continuous Flex Cables

### Why Alpha Wire's Hook Up Wire?

Every application is critical and wire failure is not an option when the safety of your equipment and personnel is paramount. Specify Alpha hook-up wire for harsh environments and crucial applications; since the integrity of your system is only as robust as the products you use.

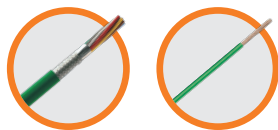
Alpha Wire is the intricate solution for your most complex problems.

**Alpha Wire's EcoWire®** delivers halogen-free, phthalate-free, and heavy metal-free connectivity that fully meets RoHS and WEEE requirements — without compromising performance. The superior dielectric properties of mPPE allow for reduced wall thickness, resulting in cables up to 45% smaller in diameter and up to 40% lighter than equivalent PVC wire. With a specific gravity of just 1.03 — up to 40% lower than PVC and polyethylene — EcoWire® offers significant weight savings, making it the smarter choice for space-constrained, weight-sensitive applications. Choose EcoWire: better performance, less weight, and a cleaner planet.

### Alpha Wire's Xtra-Guard® cables

come in three shielding options to suit virtually any electrical environment. Unshielded cables offer the smallest diameter for low-noise environments, while foil-shielded cables use an aluminum/polyester shield with a tinned copper drain wire for moderate EMI needs. For maximum protection, Alpha's exclusive Supra-Shield combines a triple-layer foil with 70% tinned copper braid coverage, delivering exceptional EMI performance across both low- and high-frequency noise. High-flex applications are also covered, with double-jacket configurations offering 85% braid coverage and spiral wound shielding at 90% coverage for torsional flex needs.

EcoWire®  
EcoCable® (Control Cables)  
EcoCable® Mini  
EcoFlex® 600V Cable  
EcoFlex® PUR Cable  
EcoWire® Plus



Customised solutions  
MOQ 500



**Alpha Wire's EcoGen®** is the next generation of eco-friendly, high-performance wire and cable, designed to provide better performance in a smaller package due to reduced insulation and jacket thickness. EcoGen® wire and cable is smaller and lighter than other cables while still performing at the highest levels. The superior dielectric properties of mPPE make a reduced wall thickness possible while maintaining the same electrical properties as a thicker PVC control.

## Design the highly engineered cabling solutions you need.

### Complex Designs

Combine high conductor counts and composite designs in a single cable

### Alternative Materials

Insulation and jacketing materials to achieve design requirements and environmental resistances

### Unique Construction

Designed specifically to meet the application requirements

## APPLICATIONS

- **Industrial Automation:** Innovative mPPE insulation and jacket materials
- No halogens, phthalates or heavy metals
- RoHS and WEEE compliant
- Zero Halogen
- Low outgassing



## APPLICATIONS

- **Not in any catalog?**  
**We'll suggest an off-the-shelf alternative**
- Hybrid cables
- Complex cable
- Cables with "Exotic" materials
- Cable tubes
- Non-standard industrial cables
- Non-standard data cables
- Coaxial cables

### EcoGen® Products

are the next generation of eco-friendly, high-performance wire and cable designed to provide better performance, in a smaller package.

#### All EcoGen® products contain:

- Innovative mPPE insulation and jacket materials
- No halogens, phthalates or heavy metals
- RoHS and WEEE compliant

EcoWire® – Up to 45% smaller, Up to 40% lighter  
EcoCable® (Control Cables) – Up to 47% smaller, Up to 65% lighter  
EcoCable® Mini Cable – Up to 32% smaller, Up to 44% lighter  
EcoFlex® 600V Cable – Up to 47% smaller, Up to 65% lighter  
EcoFlex® PUR Cable – Up to 40% smaller, Up to 44% lighter  
EcoWire® Plus – Up to 45% smaller, Up to 40% lighter

### When off-the-shelf simply isn't enough

Alpha Wire's custom cable program delivers solutions engineered precisely around your needs – spanning a wide variety of materials, configurations, sizes, and shielding options to ensure perfect performance in any environment. From prototype to full production, Alpha Wire's expert team works alongside you every step of the way, because with Alpha Wire, **custom isn't a premium add-on – it's a promise.**

# The cables you trust. The service you deserve.

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