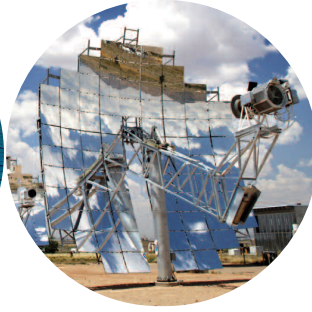




Amphenol[®]

Solar Energy





SOLAR market

At Amphenol we understand that the solar power industry has unique interconnect needs. We know that solar power systems are in service for more than 20 years in some of the harshest environments on the planet, whether residential or commercial.

Amphenol's Helios solar products withstand:

- UV
- Ozone
- Hydrolysis
- Oil, chemicals
- Abrasion, corrosion
- Temperature extremes

Amphenol offers products and solutions for all segments of solar energy, including crystalline silicon PV, thin-film PV, concentrated solar power or solar thermal power generation. Whether you need connectors, cable, cable assemblies, or junction box, we have the right solution for your solar power application. We understand the needs of the solar energy industry and design our products for reliability and lowest power loss.

We also know that you need a partner with a global footprint for service and support. Amphenol has over 85 facilities in 30 countries to support your needs globally.

Amphenol's background in producing high reliability connectors for the harshest environments on Earth and in Space gives us the unique experience needed to produce extremely reliable, cost effective products for solar energy applications. If you need a customized solution, our engineers will work with you to produce the right customized interconnects for your application.

Amphenol connectors are approved by UL, TÜV, and other international standards.

Amphenol can help you power the planet with the sun.

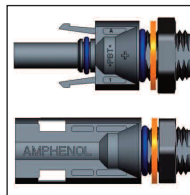
A



HELIOS H4 CONNECTOR

Provides reliable interconnection between panels and other system components. Precision machined contacts with RADSOK® technology for lowest power loss. UV and ozone resistant materials for 25 year life. With a safe NEC 2008 compliant locking system, this is the most advanced solar connector in the industry.

B



HELIOS BULKHEAD CONNECTOR

Used for inverter or combiner box applications, with D-hole mounting and a sealing gasket.

C



HELIOS H4 CABLE ASSEMBLY

Our cable assemblies are available in standard or custom lengths. Incorporating Helios H4 connectors and rugged low loss Helios Power-Link solar cables.

D



HELIOS OVER-MOLDED H4 CABLE ASSEMBLY

Our rugged over-molded H4 cable assemblies are designed for applications where additional durability is required. Available in standard and custom lengths.

E



HELIOS POWER-LINK SOLAR CABLE

Designed for maximum efficiency & durability, our high performance double insulated PV cable meets UL4703 and TUV 2 PfG 1169. Fine stranded, tin plated copper conductor, cross-linked high temperature polymer jackets.

F



HELIOS ARMOR-LINK ARMORED SOLAR CABLE

Our Armor-Link cable has the same performance characteristics as our Power-Link cable but with the additional benefit of armor for rodent resistance. Designed to meet UL4703 and TUV 2 PfG 1169.

G



HELIOS MODULAR SILICONE JUNCTION BOX

Hermetically sealed over-molded design with fully potted connection window. Designed for fully automated placement and connection. Large heat exchange areas prevent thermal runaway even at the highest ambient temperature.

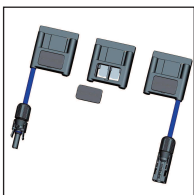
H



HELIOS THIN-FILM JUNCTION BOX

Space saving, low profile, hermetically sealed over-molded design. Optimized for automated placement and connection.

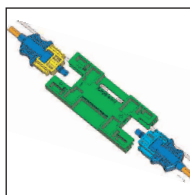
I



HELIOS CUSTOMIZED JUNCTION BOX

We understand that certain solar installations require a customized junction box, we will work with your engineers to design the junction box necessary for your specific application.

J



SUN | MATE

Our SUN | MATE series integrates a junction box & connector system into a single low cost unit, the system is ultra-low profile & designed for use in fully automated production lines.

K



HELIOS H4 ASSEMBLY TOOL SET

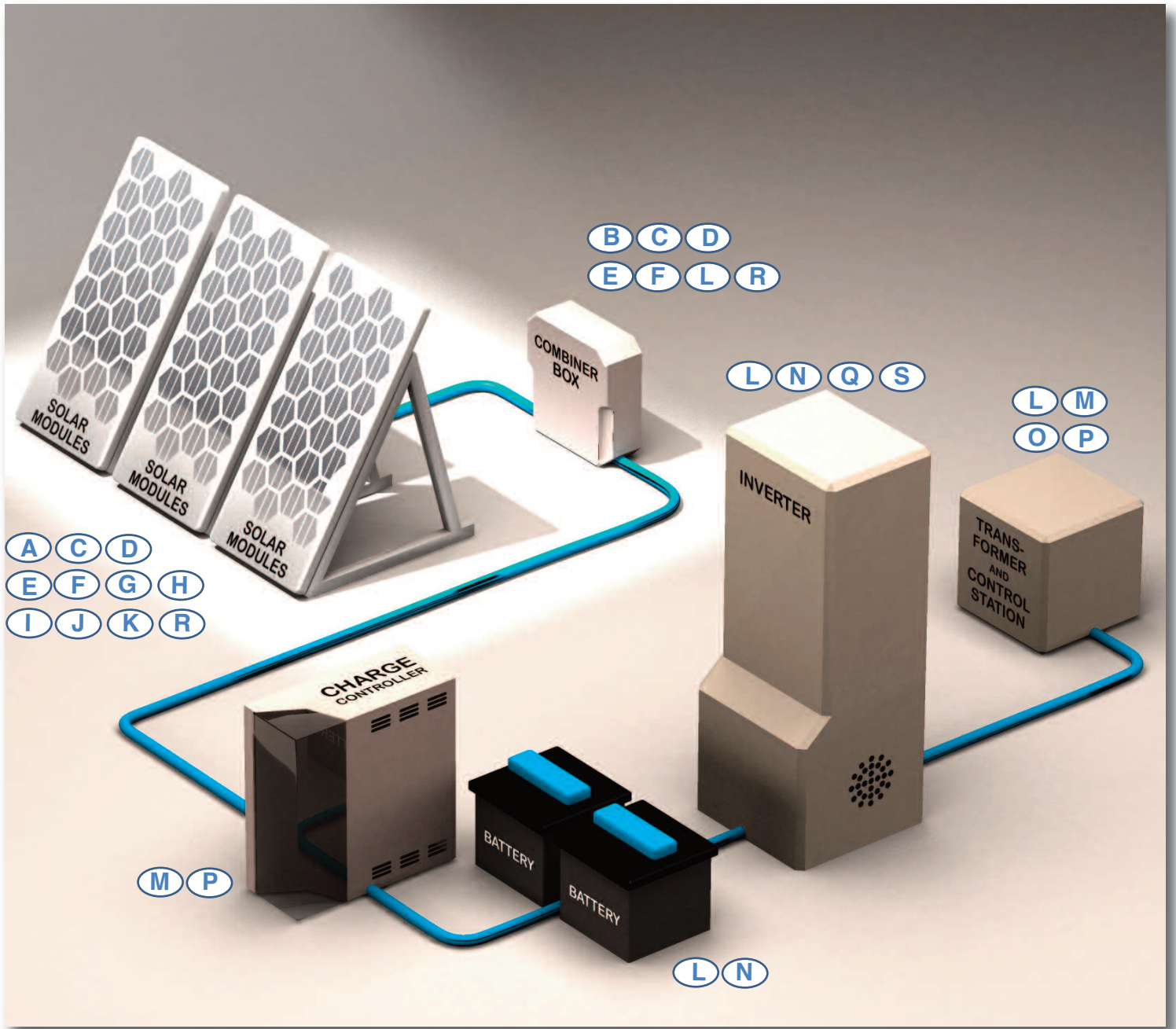
All tools required to make reliable connections in the field and in the shop, including crimping tool, stripping tool, assembly tools and an assortment of spare connector parts.

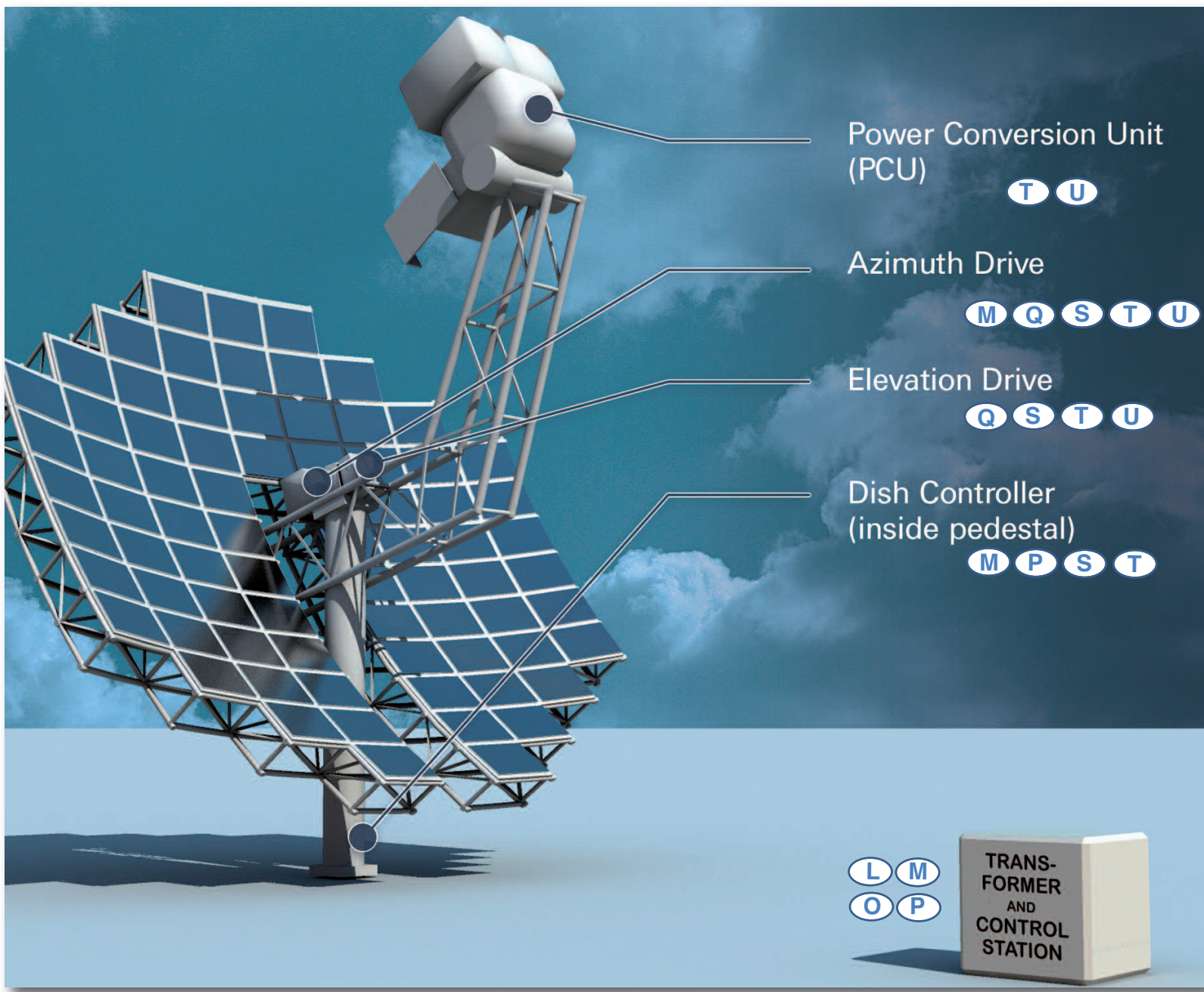
L



SURLOK

Ideal for any power distribution application that uses high current, frequently plugged and unplugged cables or a “plug and play” setup in busbars, PC boards and cable assemblies.





Power Conversion Unit (PCU)

T U

Azimuth Drive

M Q S T U

Elevation Drive

Q S T U

Dish Controller (inside pedestal)

M P S T

L M
O P



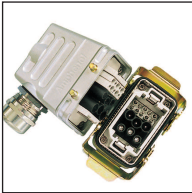
M



M23 & M40 SERIES

The professional standard for motion control, commonly used for suntracking motor systems and other motor interface applications.

O



C146 SERIES

Typically used in power inverter stations in a solar farm, these connectors offer power, signal, ethernet, and fiber in any combination desired.

P



C091 SERIES

Used in automation, test and measurement, medical, sensors and telecommunications. Their proven design and performance make these connectors a recognized industry standard. They are available with a screw or bayonet locking system. Receptacles are available for front or back-panel mounting and offer a variety of connection possibilities.

R



QUICK | MATE

Premium solar connector with outstanding performance. This connector uses Amphenol's patented Radsok® technology. QUICK | MATE comes assembled as an over-molded cable assembly and is available in standard and custom lengths.

T



AMPHE-LITE™ CONNECTOR SERIES

Designed for signal, power, RF or fiber optic interconnect requirements in harsh environments. The Amphe-Lite™ series offers the highest performance capabilities for severe environment applications, yet is cost-effective enough for general-duty and non-environmental applications.

N



GROUND | MATE

With the new GROUND | MATE series, Amphenol is able to replace the now used PE connections, made up of ring terminals in electrical cabinets, with pluggable contacts. By using the well-known and field-proven Radsok® technology in combination with the click | fit locking device, a high-current carrying capacity is achieved. Owing to different locking parameters, it is possible to connect GROUND | MATE contacts with pins or threads.

Q



C16-3 CIRCULAR CONNECTOR

Designed to meet the high-performance requirements of harsh-environment industrial applications. The range includes versions with screw and crimp terminations. A selection of crimp contacts for hand crimp tools and for crimp machines enables a reliable termination resulting in qualitative, technical, and economic advantages. A broad selection of housing styles are available.

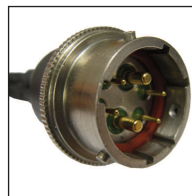
S



ECO | MATE

A circular connector featuring easy operation, reduced dimensions, and a more robust design to withstand harsh conditions. The connector's primary applications are factory automation, machining, and medical. The series comprises a large selection of housings and shapes, as well as models with screw, solder and crimp termination.

U



PT HERMETIC CONNECTOR

These miniature cylindrical connectors offer twice the number of contacts in half the size of a standard connector. These miniature bayonet connectors are available in several series, each with varying design characteristics and customer options to meet cost considerations and provide maximum design flexibility. There are two styles within the family that are MS approval and qualified to MIL-C-26482 Series 1, as well as several proprietary styles.



Powell Electronics

Your Connection for Knowledge, Inventory and Service

Manufacturers

Authorized Distributor For The Following Brands:

- | | |
|------------------------------|---------------------------|
| 3M | ITW Pancon |
| Airborn | ITW Switches |
| Alpha Wire | JKL |
| Altech | Kings |
| AMP | Lemo |
| Amphenol | Memory Protection Devices |
| • Aerospace | NKK Switches |
| • ARINC | Orion Fans |
| • Backplane Systems | Paladin |
| • Canada | Pepperl+Fuchs |
| • Connex | Pomona |
| • FiberOptic | Preci-Dip |
| • Industrial | Regal Electronics |
| • Matrix | RF Industries |
| • PCD | Sloan |
| • Pyle | Steinel |
| • RF | Tri-Star |
| • SpectraStrip | Trompeter |
| • Tuchel | Tyco Electronics |
| Aries | • Agostat |
| Astro Tool | • Alcoswitch |
| AVX/Elco | • AMP |
| ConXall | • Axicom |
| Digitran | • Buchanan |
| Eaton/Cutler Hammer | • CII |
| EECO Switch | • Elcon |
| EnerSys | • Hartman |
| Glenair | • Ident Products |
| Guardian | • Kilovac |
| Harting | • Microdot |
| HellermannTyton | • Nanonics |
| Honeywell Sensing & Controls | • OEG |
| • Clarostat | • Potter & Brumfield |
| • Data Instruments | • Raychem |
| • Electro | • Schrack |
| • Fenwal | Vector |
| • Microswitch | Winchester Electronics |
| • Sensym | Wustlich |
| Hurst Mfg | Xymox |
| Incon | Yamaichi |
| Interswitch | Y-Connect |
| ITT Cannon RF | |

Call Powell

Toll Free: 1-800-235-7880

Fax: 1-888-467-6935

Email: info@powell.com

Web: www.powell.com

Full contact information on reverse



Interconnect

Connectors & Accessories

- 3M
- Airborn
- AMP
- Amphenol
- AVX/Elco
- ConXall
- Elcon
- Glenair
- Harting
- HellermannTyton
- Incon
- ITW Pancon
- Lemo
- Microdot
- Nanonics
- Pomona
- Preci-Dip
- Raychem
- Regal Electronics
- Tri-Star
- Tyco Electronics
- Tyco/Ident Products
- Tyco/Raychem
- Tyton
- Vector
- Winchester Electronics
- Yamaichi
- Y-Connect

RF Connectors

- Amphenol
- ITT Cannon RF
- Kings
- Pomona
- RF Industries
- Trompeter

Sockets

- Aries

Terminals & Terminal Blocks

- Altech
- Amphenol
- Buchanan

Tools

- Astro Tools
- Paladin
- Steinel

Wire & Cable

- 3M
- Alpha Wire
- Amphenol
- Tyco/Raychem

Electromechanical

Batteries & Accessories

- EnerSys
- Memory Protection Devices

Fans, Blowers & Motors

- Hurst Manufacturing
- Orion Fans

Indicators, Switches, Sensors

- Agostat
- Alcoswitch
- Axicom
- CII
- Data Instruments
- Digitran
- Eaton/Cutler Hammer
- EECO Switch
- Electro
- Fenwal
- Hartman
- Honeywell Sensing & Controls
- Interswitch
- ITW Switches
- JKL
- Kilovac
- Microswitch
- NKK Switches

Indicators, switches, sensors, continued...

- OEG
- Pepperl + Fuchs
- Potter & Brumfield
- Schrack
- Sensym
- Sloan
- Wustlich
- Xymox

Relays

- Agostat
- Axicom
- CII
- Hartman
- Kilovac
- OEG
- Potter & Brumfield
- Schrack
- Tyco Electronics

Resistive Products

- Clarostat

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Mil-Spec Products

Connectors

Audio

MIL-C-10544
MIL-DTL-55116

Backshells

MIL-C-28840
MIL-C-85049

Card Edge, One Piece

MIL-C-21097

Card Edge, Two Piece

MIL-C-21097
MIL-DTL-55302

Contacts

MIL-C-23216
MIL-C-39029

Cylindrical

MIL-C-22992
MIL-C-26482
MIL-DTL-26500
MIL-C-27599
MIL-C-28840
MIL-DTL-38999
MIL-C-5015
MIL-DTL-5015 H
MIL-C-81511
MIL-DTL-83723

D-Subminiature

MIL-DTL-24308
MIL-DTL-83513

Fiber Optic

MIL-C-83522

Plugs & Jacks

MIL-C-10544
MIL-DTL-39024
MIL-DTL-55116
MIL-J-641
MIL-P-642

RF/Coaxial

MIL-PRF-55339
MIL-C-22557
MIL-C-23329
MIL-C-3655
MIL-PRF-39012
MIL-C-4919
MIL-C-83517

Sockets

MIL-DTL-22520
MIL-DTL-83734

Tools

MIL-DTL-22520

Power

MIL-C-12520
MIL-DTL-55181
MIL-C-55449

Rack & Panel

MIL-DTL-26518
MIL-DTL-28731
MIL-DTL-28748
MIL-C-28754
MIL-C-81659

Heat Shrinkable

MIL-DTL-23053
MIL-PRF-46846
MIL-DTL-83513
MIL-S-85848

Boots

MIL-DTL-5015
MIL-C-83723
MS-3109
MS-3117

Sleeves

MIL-S-81824
MIL-S-83519

Tubing

MIL-DTL-23053

Relays

AN3303
AN3308
AN3320
AN3324
MIL-DTL-83725
MIL-P-50884
MIL-PRF-28750
MIL-PRF-28776
MIL-PRF-31032
MIL-PRF-55110
MIL-PRF-6106
MIL-PRF-83536
MIL-R-5757
MIL-R-83726

Switches

Boots

MIL-DTL-5423

Dip

MIL-PRF-83504

Switch Guards

MIL-DTL-7703

Pushbutton

MIL-PRF-22885

Rotary

MIL-DTL-3786

Sensitive

MIL-PRF-8805

Thumbwheel

MIL-PRF-22710

Toggle

MIL-DTL-3950
MIL-DTL-83731
MIL-DTL-8834

Wire & Cable

MIL-C-17
MIL-DTL-27500
MIL-DTL-49055
MIL-C-85485
MIL-DTL-24640
MIL-W-22759
MIL-W-81044

Contact Powell

Global Logistics Center

Powell Electronics has moved to a brand new Global Logistics Center!



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Fax: 972-719-5405

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Federal Way, WA 98003
Phone: 253-874-2215
Fax: 253-925-1360



Value Added Services

Design & Assembly

- Design / Technical Assistance
- Electrical/Mechanical Assembly

Quality Certifications

- ISO 9001:2000
- AS9100

Supply Chain Services

- Bonded Inventory Program
- Consigned Inventory Program
- Vendor Managed Inventory (VMI)
- Electronic Data Interchange (EDI)
- Order Online at: www.Powell.com

Mil-Spec Services

- MIL-I-45208A
Value added inspection facilities
- MIL-STD-790
Quality control procedures

Special Packaging

- Preservation Packaging
- Military Packaging
- Bar Code Labels

Small Business Status

Powell is considered a small business under part 121 of the Small Business Administration Regulations



POWELL ELECTRONICS
SWEDESBORO, NJ
CERTIFIED TO ISO9001:2000
FILE NO. A 7080