



**Amphenol**®

Solar Energy





# SOLAR market

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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



### AMPHOTON JUNCTION BOX

Standard PV junction box, designed for both crystalline silicon and thin-film solar module application.

H



### HELIOS THIN-FILM JUNCTION BOX

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

I



### HELIOS H4 ASSEMBLY TOOL SET

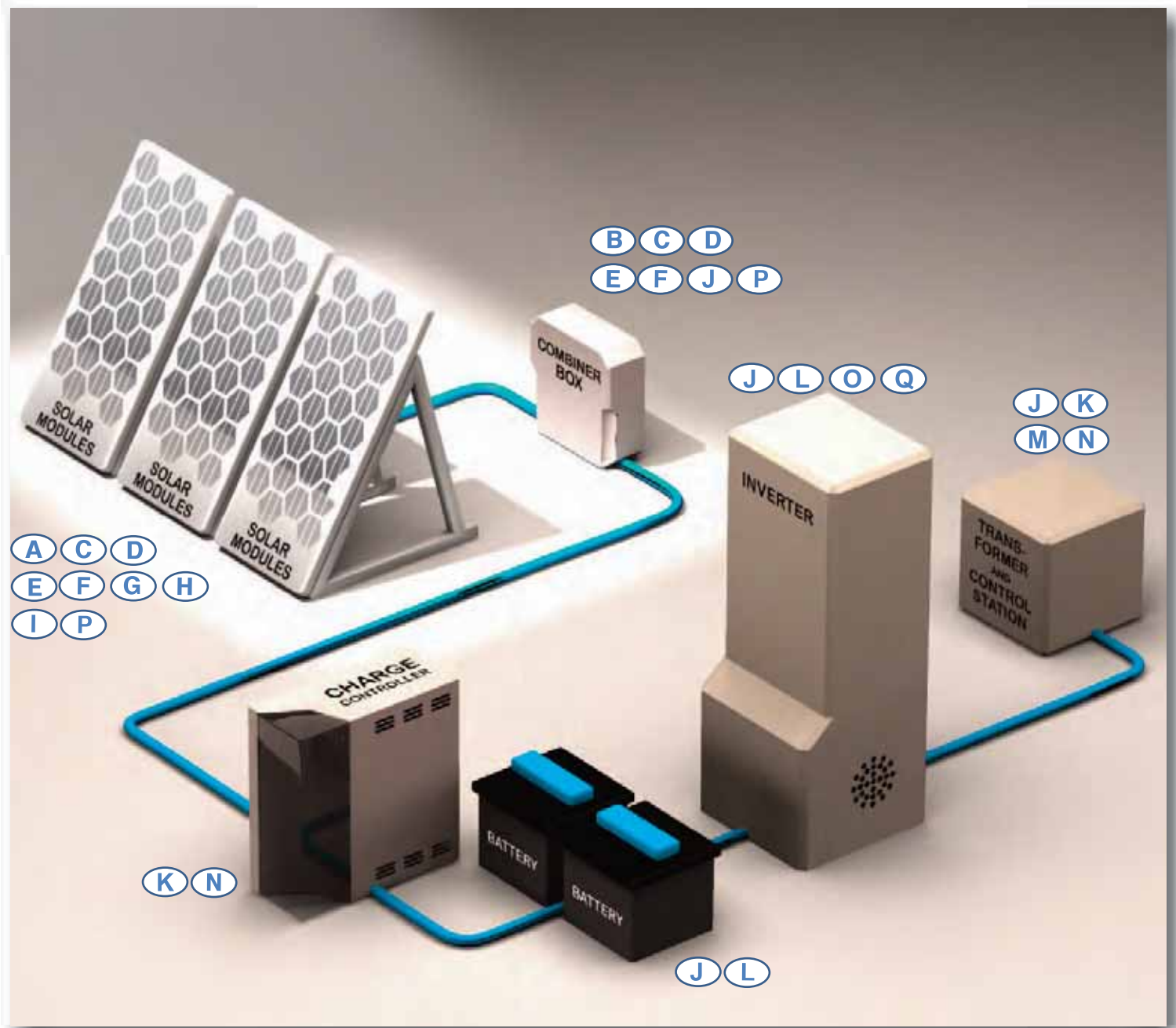
All tools required to make reliable connections in the field and in the shop, including crimping tool, stripping tool, assembly tools and an assortment of spare connector parts.

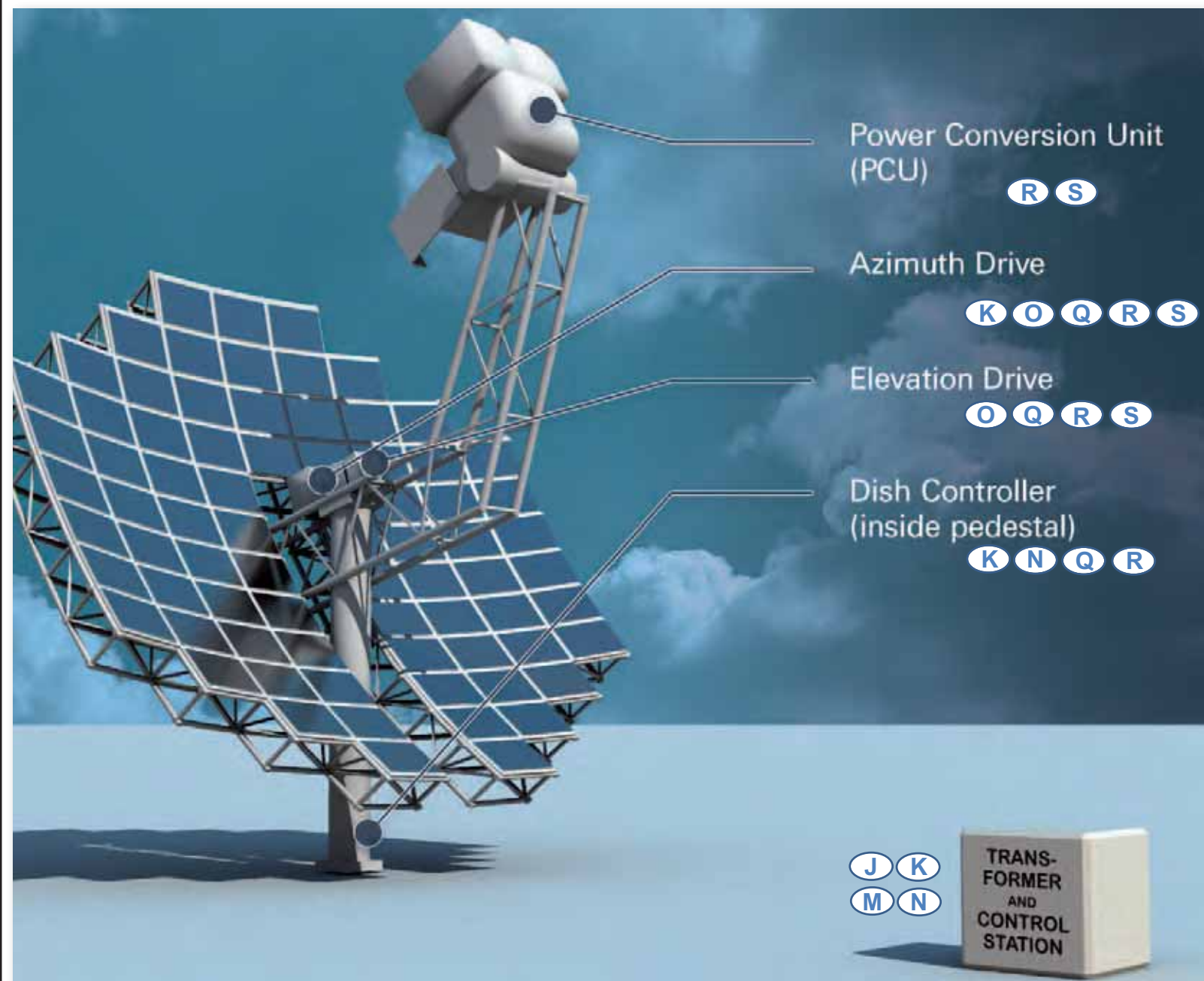
J



### 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.





**K**



### M23 & M40 SERIES

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

**M**



### C146 SERIES

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

**N**



### 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.

**P**



### 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.

**R**



### 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.

**L**



### 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.

**O**



### 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.

**Q**



### 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.

**S**



### 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.

# Amphenol®

Since 1932 Amphenol has been the interconnect technology provider of choice to industry leading companies throughout the world. With a broad and diverse product portfolio, Amphenol is able to develop the right solutions for our customers across the diverse segments of the rapidly expanding electronics market.

With dedicated employees working at 85 facilities in more than 30 countries. Amphenol has the unique advantage of having both diversified global reach while still being a focused organization. Our focus comes from our entrepreneurial management team dedicated to specific markets and regions.



## NORTH AMERICA

### Amphenol INDUSTRIAL OPERATIONS

40-60 Delaware Street  
Sidney, New York 13838-1395 - USA  
Telephone: 1-607-563-5011 • Fax: 1-607-563-5157

### Amphenol INDUSTRIAL OPERATIONS Amphenol POWER SOLUTIONS

34190 Riviera Drive  
Fraser, MI 48026 - USA  
Telephone: 1-586-294-7400 • Fax: 1-586-294-7402  
www.radsok.com

### Amphenol TECHNICAL PRODUCTS INTERNATIONAL CO.

2110 Notre Dame Avenue  
Winnipeg, MB Canada R3H 0K1  
Telephone: 1-204-697-2222 • Fax: 1-204-694-6164  
www.tpil.com

### Amphenol STEWARD CABLE, INC.

1921 Alta Vista - Midland, Texas 79706 – USA  
P.O. Box 11270 - Midland, Texas 79702 – USA  
Telephone: 1-432-687-2553 • Fax: 1-432-687-2278  
www.stewardcable.com

### Amphenol TUCHEL ELECTRONICS

6900 Haggerty Road, Suite 200  
Canton, MI 48187 – USA  
Telephone: 1-734-451-6400 • Fax: 1-734-451-7197

### Amphenol SINE SYSTEMS

44724 Morley Drive  
Clinton Township, MI 48036 – USA  
Telephone: 1-586-465-3131 • Fax: 1-586-913-9618

## EUROPE

### Amphenol TUCHEL ELECTRONICS GMBH

August – Haeusser Strasse 10  
74080 Heilbronn, Germany  
Telephone: +49 7131 929 0 • Fax: +49 7131 929 486  
www.Amphenol.de

### Amphenol SOCAPEX

948 Promenade de l'Arve - BP29 - 74311 Thyez - France  
Telephone: 33-4 50 89 28 00 • Fax: 33-4 50 6 29 75

### Amphenol LIMITED WHITSTABLE

Thanet Way - Whitstable - Kent, CT5 3JF - United Kingdom  
Telephone: 44-1227-773-200 • Fax: 44-1227-276-571

### Amphenol AIR LB GmbH

Am Kleinbahnhof 4 - 66740 Saarlouis - Germany  
Telephone: 49-6831-981-00 • Fax: 49-6831-981-030

### Amphenol AIR LB

10 Rue Champ Raymond - 08110 Carignan - France  
Telephone: 33 3 2422 3270 • Fax: 33 3 2422 3872

### Amphenol POLAND & CENTER EAST EUROPE AUSTRIA, POLAND, CZECH REP, SLOVAKIA, ROMANIA

Wiener gasse 68 - 2380 Perchtoldsdorf - Austria  
Telephone: +43 699 10396 071 • Fax: +43 699 40396 071

## ASIA

### Amphenol TECHNOLOGY (SHENZHEN) CO., LTD

Block 5, Fu An 2nd Industrial Park,  
Dayang Road, Fuyong, Shenzhen - China 518103  
Telephone: 0755-2991-8389 • Fax: 0755-2991-8310  
www.amphenol-industrial.com.cn

### Amphenol SINCERE FLEX CIRCUITS CO. LTD

No.A, WanAn Industrial Park  
LanHe Town, Panyu District, Guangzhou - China 511480  
Telephone: 020-3483-9801 • Fax: 020-3483-9800  
www.amphenol-gasf.com

### Amphenol JAPAN MIL/AERO INDUSTRIAL

689-1, Iseochi, Ritto-shi Shiga 520-3044 - Japan  
Telephone: 81-77-553-8501 • Fax: 81-77-551-2200

### Amphenol SHENZHEN MANUFACTURING SERVICE

The 4th Industrial District Industrial Headquarters, Dong  
Keng Road.  
Gong Ming Town, Shen City, China  
Telephone: (86-755) 2717 7845 • Fax: (86-755) 2717 7622

### Amphenol ITALY

Via Barbaiana n. 5 - 20020 Lainate - Milano - Italy  
Telephone: 39-293-254-214 • Fax: 39-293-254-444

### Amphenol IBERICA

Edificio Burgosal, Oficina nr 55 - C/Comunidad de Madrid  
35-bis Las Rozas (Madrid) - Spain  
Telephone: 34-91-640-73-06 • Fax: 34-91-640-73-07

### Amphenol NORDIC

Appelboms vag 2 - SE 18642 Vallentuna - Sweden  
Telephone: +46 (0) 768418600 • Fax: +46 (0) 702203197

### Amphenol BENELUX

Zadelmaker - 121 NL - 2401 PD Alphen aan den Rijn  
The Netherlands  
Telephone: 31-172-444-903 • Fax: 31-172-240-254

### Amphenol SWITZERLAND & SOUTH CENTER EUROPE

SWITZERLAND, SLOVENIA, SERBIA, MONTENEGRO,  
YUGOSLAVIA GREECE, BULGARIA  
948 Promenade de l'Arve – BP29 - 74311 Thyez - France  
Telephone: 33-4 50 89 28 00 • Fax: 33-4 50 96 29 75

### Amphenol EAST ASIA LIMITED

2201 Railway Plaza, 39 Chatham Road South  
Tsmishatsui, Kowloon - Hong Kong  
Telephone: 852-2699-2663 • Fax: 852-2691-1774

### Amphenol INTERCONNECT INDIA PRIVATE LIMITED

105 Bhosari Industrial Area - Pune 411 026 - India  
Telephone: 91-20-712-0363/0463/0155  
Fax: 91-20-712-0581

### Amphenol DAESHIN

558 Sosa SongNea Bucheon-city, Kyunggi-DO  
Korea 420-130  
Telephone: 82-32-610-3800  
Fax: 82-32-673-2507/665-6219

### Amphenol SINGAPORE

300 Beach Road #34-06 The Concourse  
Singapore 199555 - Singapore  
Telephone: (65) 6294-2128 • Fax: (65) 6294-3522

## REST OF THE WORLD

### Amphenol MEXICO

Prolongacion Reforma 61-6 B2  
Col. Paseo de las Lomas - C.P. 013130 Mexico  
Telephone: 52-55-5258-9984 • Fax: 52-55-5081-6890

### Amphenol SOUTH AFRICA

30 Impala Road 1296 Chislehurst-Sandton  
South Africa  
Telephone: 27-11-783-9517 • Fax: 27-11-783-9519

### BAR TEC LTD

4 Hagavish S, PO Box 279 – Kfar Saba 44102  
Israel  
Telephone: 972-9-767-4097 • Fax: 972-9-767-4324

### Amphenol ARGENTINA

Av. Callao 930 2do piso Oficina B "Plaza"  
C1023 – AAP Buenos Aires  
Argentina  
Telephone: 54-11-4815-6886 • Fax: 54-11-4814-5779

### Amphenol AUSTRALIA PTY LIMITED

2 Fiveways Blvd., Keysborough - Melbourne,  
Victoria 3173  
Australia  
Telephone: 61-3-8796-8888 • Fax: 61-3-8796-8801

### Amphenol DO BRAZIL

Rua Diogo Moreira, 132, 20 andar, rooms 2001-2-3  
CEP: 05423-010 Sao Paulo SP  
Brazil  
Telephone: 55-11-3815-1003 • Fax: 55-11-3815-1629

### Amphenol RUSSIA

8 bldg., 2 Yaroslavskaja Street, 129164 Moscow  
Russia  
Telephone: 7 495 937 6341 • Fax: 7 495 937 6319

### Amphenol TURKEY

Ayazaga Mah. Meydan Sok  
No:28 Beybi Giz Plaza Kat:26  
34396 Maslak - Istanbul  
Turkey  
Telephone: 90-212-335-25-01 • Fax: 90-212-335-25-00