



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.

PRODUCT *focus*

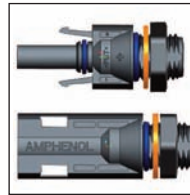
A



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.

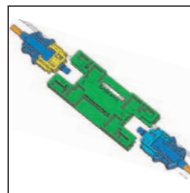
I



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

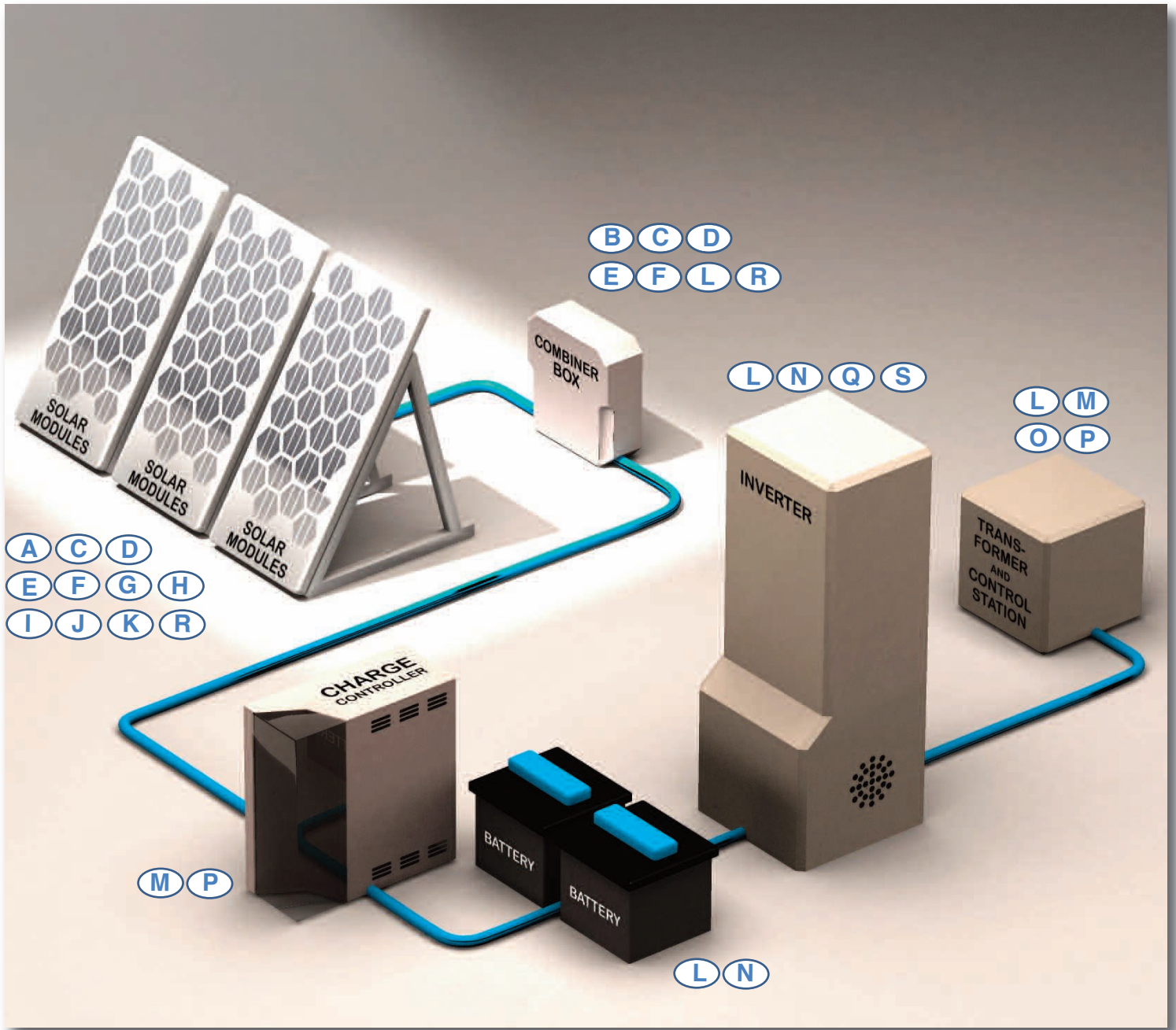
All tools required to make reliable connections in the field and in the shop, including crimping tool, stripping tool, assembly tools and an assortment of spare connector parts.

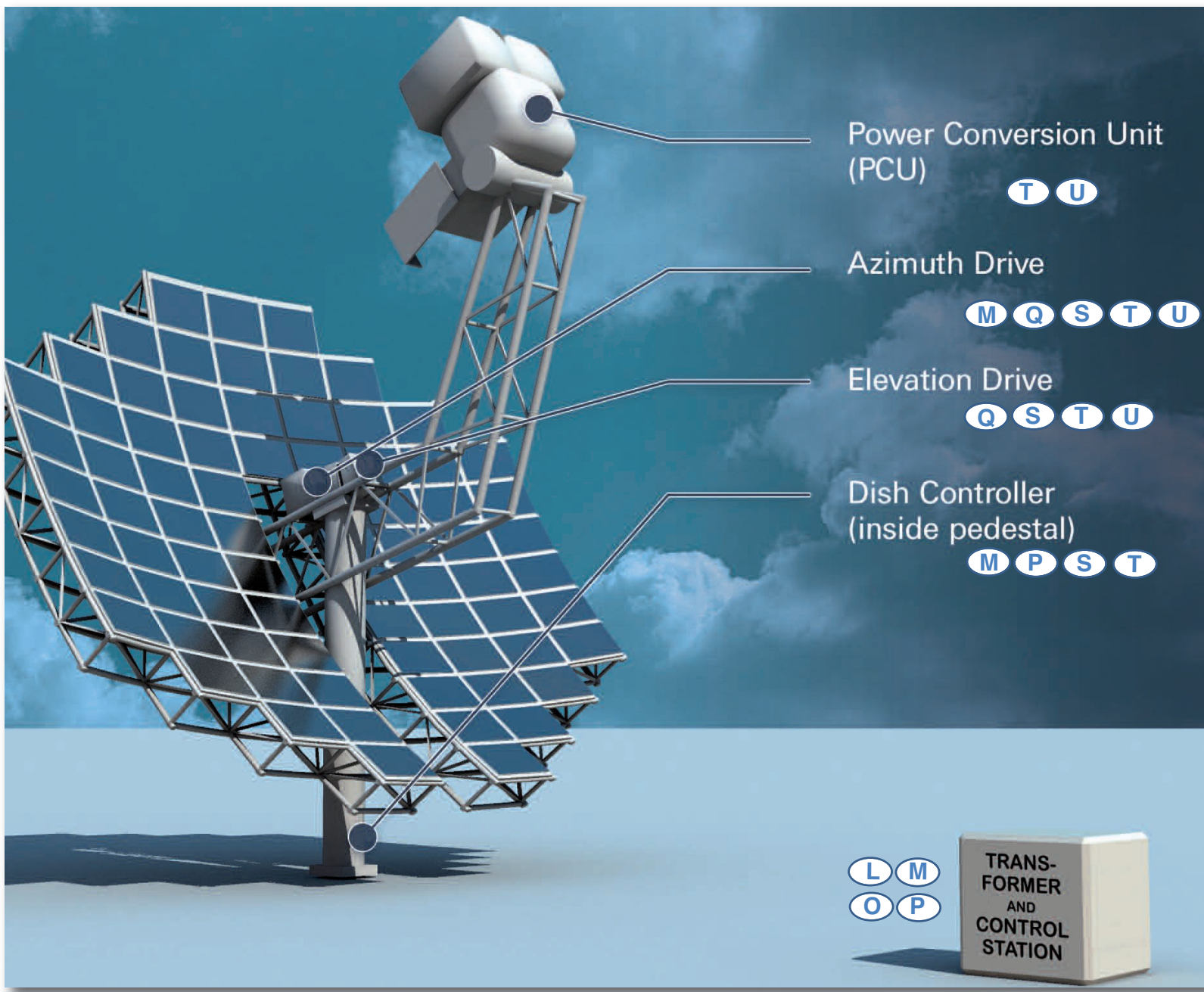
L



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
TRANS-FORMER AND CONTROL STATION

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.

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

Amphenol ITALY

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

Amphenol IBERICA

Edificio Burgosol, 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

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

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 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