

Amphenol®



HELIOS H4

Industrial Operations (AIO) offers products and solutions for all segments of the solar electric system. AIO understands the need for efficient (low loss) power transfer, highly reliable, and cost effective solutions that are required to be competitive in this industry. We can provide panel manufacturers, installers, and OEM's with connectivity products for both thin film and crystalline silicon technologies. **Amphenol®** has a broad range of technologies to help minimize the cost of inverters and power conditioners. **Amphenol®** Industrial can help you power the planet with the sun. The Helios H4 connector is just one of the solar connector solutions **Amphenol®** Industrial has to offer.

H4 Features:

- UL and TÜV dual approval
- Fully intermateable with industry standard
- Meets all new NEC 2008 requirements
- Quick and easy secure snap lock mating
- Simple unlocking tool meets NEC requirements
- Long-term UV and Ozone resistance
- Highest current rating in industry
- RoHS compliant
- Complete Cable Assemblies available
- Low contact resistance means low power loss
- Ready for field assembly

Helios H4

Amphenol solar connector



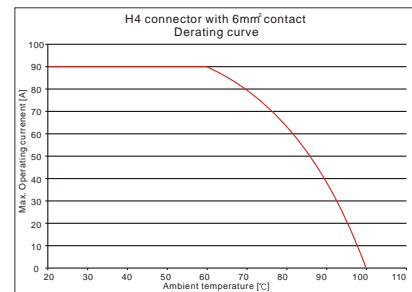
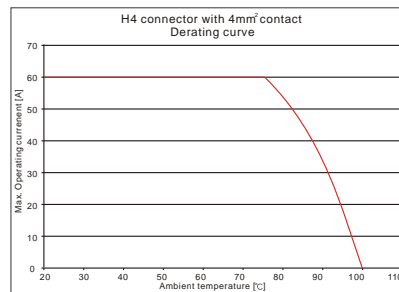
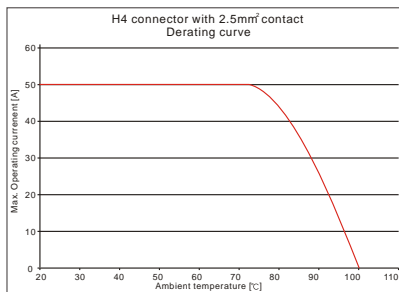
RADSOK® Contact

Technical Data

Rated current	36A(2.5mm ² ,AWG14),45A(4.0mm ² ,AWG12),52A(6.0mm ² ,AWG10),60A(10.0mm ² ,AWG8)
Rated voltage	1000V (IEC/CEI), 600V(UL)
Test voltage	6kV for 1 minute, 10kV impulse (1.2/50μS)(IEC)
Typical contact resistance	0.25mΩ
Contact material	Copper, tin plated
Contact system	Machined/cold formed contact with Radsok® insert
Insulation material	PC
Locking mechanism	Snap-lock, special unlock tool required to un-mate as required by NEC2008
Cable strain relief	Compression gland with ratcheting gland nut
Degree of protection	IP68 (1 meter, 1 hour) mated
Safety class	II (IEC61140)
Pollution degree	2 (IEC60664)
Overvoltage category	III (IEC60664)
Flame class	UL94-V0
Ambient temperature range	-40°C --- +90°C



Derating curves



How to order

1	2	3	4	5	6	7	8	
H	4	C	F	C	2	D	I	
Product line	Product type	Product	Gender	Cable entry	Cable size	Approval	Package	Variation
Helios solar line	H4 solar connector	C Connector	F Female + (standard)	C cable gland	2 2.5 mm ² /AWG14	T TUV approved	I Single	
		P Protective cap	M Male - (standard)	M bulkhead M12	4 4.0 mm ² /AWG12	U UL approved	C Bulkpack, 100 purchase	
		Y Branch connector	P mated pair	N bulkhead M14	6 6.0 mm ² /AWG10	D dual approval	D Bulk pack, 500 purchase.	
			G female -	O over-mold	8 10.0mm ² /AWG8		M Bulk pack, 1000 purchase.	
			N male +				N Bulk pack, 2000 purchase. (default package)	

How to order assembly tools

Description	Ordering code
H4 Strip tool	H4TS0000
H4 Crimp Tool	H4TC0000
H4 Wrench Tool	H4TW0000
H4 Ring Tool	H4TR0000
H4 Universal Unlocking Tool	H4TU0000

Tooling part numbers



Crimp tool for 2,5SQMM-6SQMM (AWG10-AWG14)



Universal unlocking tool



Unlocking ring tool



Wrench/disconnect/assembly tool



Strip tool for 2,5SQMM-6SQMM (AWG10-AWG14)

For further information on your individual application requirements, contact: Amphenol Corporation

North America:

Amphenol Industrial Operations
40-60 Delaware Avenue,
Sidney, NY 13838-1395
Tel: 1-520-285-5114 1-888-364-9011
Fax: 1-520-397-7169
E-mail: energy@amphenol-aio.com

Europe:

Amphenol Industrial Operations
Europe Via Barbaiana 5
1-20020 Lainate (MI) Italy
Tel: +39 02 93254.204
Fax: +39 02 93254.444
Email: info@amphenol-aio.com

Middle East:

Amphenol Middle East Enterprises FZE
Office C-37 PO Box 21107
Ajman Free Zone, UAE
Tel: +9716-7422494
Fax: +9716-7422941
Email: ameeffe@eim.ae

Asia:

Amphenol Technology Shenzhen Ltd
Block 5 Fuan 2nd Industrial Park Dayang Rd,
Fuyong Baoan Baoan, Shenzhen, China 518103
Tel: +86 755 2881 8389
Fax: +86 755 2991 8310
Email: enquiry@amphenol-industrial.com