

MINIATURE solutions

Miniature and Micro Interconnect



UAV



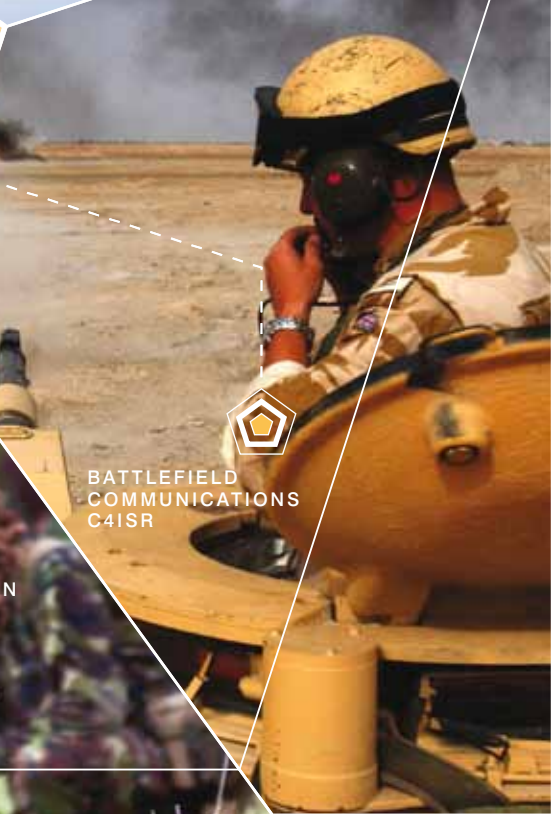
COMMERCIAL AEROSPACE



MOBILE COMMUNICATIONS



SOLDIER WORN EQUIPMENTS



BATTLEFIELD COMMUNICATIONS C4ISR

MINIATURE solutions



Amphenol is the world leader in the design, manufacture and supply of high-performance interconnect systems for military and commercial aerospace harsh environment applications. Amphenol offers a wide variety of products which meet current and future trends towards a reduction in connector size and weight without compromising exacting technical and safety performance levels.

Through innovations in design and material science, Amphenol offers a broad range of circular and rectangular miniature connectors to suit requirements for small physical form and high density interconnect. Amphenol offers miniature products with excellent electrical characteristics designed to transmit the latest high speed data protocols and offer the best possible performance solution even in high vibration or blind mate conditions.

Amphenol's engineering expertise enables us to fully exploit the benefits of different shell materials, for example Aluminium and Composite materials are used for their strength: weight ratio, Brass for its ruggedness and Aluminium Bronze for its corrosion resistance in marine applications. A variety of different contact designs and termination methods are available dependant on the product application and environment, these include closed face, Winchester slot, twist pin and traditional split tine contacts. Utilising equipment at the forefront of technology Amphenol can also provide connectors fully populated with pre-tinned contacts ready for loading straight onto PCB boards thus offering increased reliability and time saving.

Most product series are available "off the shelf" from our broad range of distribution partners. Alternatively, our experienced engineering team can support customisation through additional filtering, hermetic sealing, cable harnessing, flex assembly or design of complete integrated system solutions. Each product series also has an extensive range of options and accessories detailed in the full product catalogue.

Using Amphenol's range of miniature interconnect products allows designers to optimise the size and weight of equipments whilst retaining the highest levels of system functionality and signal integrity.

Please contact the factory for more information on any of the product series shown below.



Terrapin

- Designed for harsh environment, radio and soldier worn communication systems
- Miniature circular interconnect with push-pull or locking mating style
- IP68 sealed mated and unmated
- From 7 to 37 contacts



62GB 10-76 Planform

- Designed for military ground and harsh industrial applications
- Recognised industry standard Mil-C-26482 product
- High density planform extensively used in UK "Bowman" project
- 6 size 22AWG and 7 size 20AWG contacts in size 10 shell



HD38999

- Designed for high reliability aerospace and defence applications
- 30-50% higher contact density than Mil-DTL-38999 of equivalent size
- Many components common to Mil-DTL-38999
- From 9 to 187 contacts



2M Micro-Miniature

- Designed for high reliability aerospace and defence applications
- Broad product family with various mating styles
- Greater than 70% weight saving compared to Mil-DTL-38999
- From 3 to 130 contacts



Nexus Mini-TAC

- Designed for radios and rugged communications systems
- Miniaturised M55116-type TAC connectors
- Sprung loaded, self cleaning contacts
- From 6 to 10 contacts



Luminus

- Designed for commercial aerospace applications including aircraft lighting systems
- Easy, secure mating mechanism resistant to high vibration
- Tough polyamide housing and standard Mil-C-39029 contacts
- From 1 to 9 contacts



HD SIM Rectangular

- Designed for commercial and military aviation applications
- Modular lightweight interconnect with push-pull mating and blind mate
- Fully compatible with EN4165 SIM Modules
- 30 size 23AWG contacts



Micro-D

- Designed for military, aerospace, medical and space applications
- Rectangular interconnect with reduced space and weight
- Meets and exceeds M83513 requirements
- From 9 to 152 contacts

Product	Type	Contact Type	Mating Mechanism	Contact Current Rating	No of Ways	Connector Material	IP Rating
Terrapin	Circular	Pin/Socket	Push Pull, Latch	3/7.5A	7-37	Brass	IP68
62GB 10-76	Circular	Pin/Socket	Bayonet	5/7.5A	13	Aluminium	IP68
HD38999	Circular	Pin/Socket	Tri-Start ACME Thread	5A	9-187	Aluminium, Composite, Stainless Steel	IP67
2M Micro Miniature	Circular	Pin/Socket	Tri-Start ACME Thread, Bayonet, Push Pull	5/7.5/13/23A	3-130	Aluminium, Stainless Steel	IP68
Nexus Mini-TAC	Circular	Butt	J-Slot	0.5A	6-10	Stainless Steel	IP68
Luminus	Circular	Pin/Socket	Latch	5/7.5/13A	2-9	Plastic	IP67
HD SIM Rectangular	Rectangular	Pin/Socket	Push Pull	5A	30	Thermoplastic	IP67
Micro-D	Rectangular	3 Type compression	Screw	3A	50-152	Plastic, Aluminium, Stainless Steel, Composite, Durmalon	N/A

Amphenol®

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