



Winter 2013
Volume 1, Issue 4

Omnetics Releases SureCon 360°

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The **NANO 360°** series has released yet another product to its arsenal, this time in a water tight, overmolded form. This product like the circulars of past utilize Omnetics' rugged and reliable Flex-Pin contact system. Spaced on .025" (.64 mm) centerlines, the **SureCon 360°** line is part of the smallest mil-quality circulars family available today. Extremely small outer diameters range from .325" (8.3 mm) to .384" (9.8 mm).

With the ability to withstand high shock and vibration while maintaining their electrical integrity, these connectors are ideal for the most demanding applications. Gold plated contacts are polarized and shrouded by our unique Liquid Crystal Polymer insulator, and specifically designed to maintain flexibility and low contact resistance which is vital in the interconnect world. Insulator sizes of 6, 11 and 16 contact arrangements are available in a pre-cabled format. All three sizes are available in both inline and protruding panel mount configurations. Elaborate wire harnessing, custom overmolding and custom shells are also available upon request.

Three similar versions will be available, all sharing the above characteristics, with one exception. Each **SureCon 360°** version will use a market specific cable and plastic overmold with characteristics known to be vital for usage within that particular field. Omnetics will release one for Commercial usage, one for Mil/Aero usage, and another intended for the



Medical market. The first, a **Commercial** version will feature a standard 32 AWG cable, with a Gray Jacket material of TPE or TPU depending on pin count. The Second, a **Mil/Aero** version, features a Flame Retardant, Halogen Free, 32 AWG cable with a braided shield, covered by a Black TPU Jacket. Finally, a **Medical** version. This version features a Bio-compatible (per ISO10993) 32 AWG cable, covered with a Light Gray TPU Jacket.

ELECTRICAL SPECS

Current:	1 amp per contact
Dielectric Withstanding Voltage (DWV):	250 Volt AC @ Sea Level
Insulation Resistance:	5,000 Megohms min. @ 100 VDC
Contact Resistance:	25 milliohms (25 mv) max @ 1.0 amp
Temperature:	-55°C to 85°C
Vibration:	20 G's, no discontinuity greater than 10 nano-seconds
Shock:	100 G's, no discontinuity greater than 10 nano-seconds



For more information please visit: <http://www.omnetics.com/images/NanoCircularBreakOut.png>

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Looking for an “Into-the Box” solution? Think Omnetics.....

As the world slowly moves away from heavy bulkhead panel mount connectors, the focus has now switched to miniature, rugged, space saving, aesthetically pleasing designs with heavy emphasis on custom overmolds and strain reliefs.

For years, the general purpose behind panel mount technology centered around the customers general preferences for a simplified, yet reliable mating and assembly option, while at the same time providing application specific sealing and electrical performance needed in rugged environments such as: Mil/Aero, Down-Hole Drilling, Deep Space Applications amongst others. Now these customers requirements have not necessarily changed, however, their physical footprints have, hence spurring the current trend heading towards miniaturization.

Now a days, few companies have embraced this shift in miniaturization more so than Omnetics Connector Corporation, and in a 38999 (Heavy Bulkhead) world, Omnetics engineering has been working overtime. Developing, small, lightweight connectors and incorporating features to existing products to which this industry has never seen. Omnetics **BiLobe®** and **Micro-D** connectors are now available with a quick latch systems, making panel mount connections easier than ever. For applications that require a secure connection, these latches require no tools and offer great ease in handling. Complications from uneven turning of the traditional threaded hardware are now a thing of the past. These high-reliability panel-mount connectors also offer options for connecting inside the equipment, including PCB lead frames and direct wiring. Omnetics tool-less latch design minimizes the time and effort required to plug a connector into a circuit and offers up to 100 lb. retention strength.

Omnetics Connector Corporation also recently released **NANO 360°**, a collection of high-rel circular connectors at .025 pitch. This product

family includes the smallest mil-spec circular connectors ever created. The family itself features three panel mount options, front, rear and protruding panel mount are all available at .025” centerlines. See more at:

<http://www.omnetics.com/products/circular/>



Micro 360° (.050”/1.27mm)

- Sizes available from 1 to 27 contacts
- Mating Pin & Socket models available
- Threaded, Twist-Lock and Break-away versions available.
- Overmolding available upon request
- Custom housing finishes available
- Panel Mount styles include: Front, Rear, and Protruding.



Nano 360° (.025”/.064 mm)

- Sizes available from 1 to 28 contacts
- Mating Pin & Socket models available
- Threaded, Twist-Lock and Break-away versions available.
- Overmolding available upon request
- Custom housing finishes available
- Panel Mount styles include: Front, Rear, and Protruding.



Micro D's (.050”/1.27mm)

- Sizes available from 1 to 51 contacts
- Mating Pin & Socket models available
- Standard jackscrew option, as well as “Tool-Free” Latching versions available
- Overmolding available upon request
- Custom housing finishes available
- Female/Socket version is standard panel mount configuration.

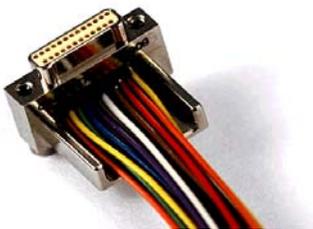


BiLobe® (.025”/.064mm)

- Sizes available from 1 to 85 contacts
- Mating Pin & Socket models available
- Standard jackscrew option, as well as “Tool-Free” Latching versions available
- Overmolding available upon request
- Custom housing finishes available
- Female/Socket version is standard panel mount configuration.



“Omnetics has been rapidly expanding its product line for a number of years and we are pleased to illustrate the broad range of these products in a new, easy to use format.”



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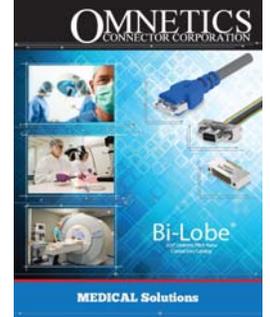
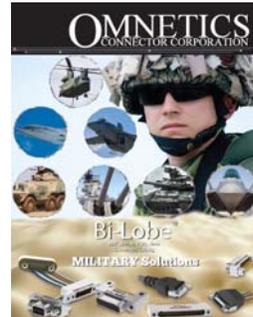
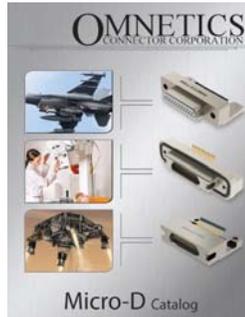
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Omnetics Releases New, Updated Product Catalogs

Marking 29 years of excellence in designing and manufacturing of Micro-Miniature and Nano-Miniature connectors, Omnetics Connector Corporation has released its new, updated, and expanded product line specific catalog series. Omnetics Chief of Engineering Andy Strange notes, “Omnetics has been rapidly expanding its product line for a number of years and we are pleased to illustrate the broad range of these products in a new, easy to use format.”

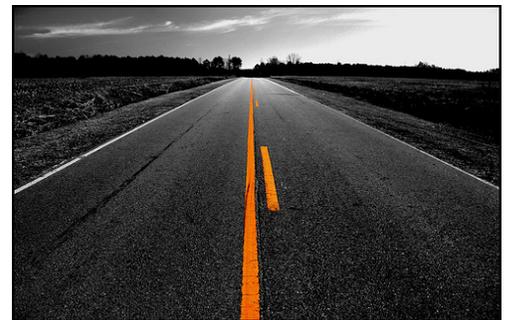
These new catalogs provide the most up-to-date information and specifications for all of Omnetics product lines, ranging from the medical market on down to more military specific interconnect solutions. For hard copy versions consult the factory, or download online today.



To Download online versions please go to: <http://www.omnetics.com/ecatalog/>

Omnetics On the Road.....

- February 12-14: MDM West | Anaheim, CA
- Feb. 26 – Mar. 3: Australia Airshow | Sydney, AU
- March 19-21: Satellite 2013 | Washington, DC
- April 8-11: National Space Symp. | Colorado Springs, CO
- April 9-12: LAAD | Rio De Janeiro, Brazil



About Omnetics

Omnetics was founded in 1984 to deliver rugged, reliable interconnect solutions for the most demanding industries. The company has a fully integrated design and manufacturing plant in Minneapolis, Minnesota USA, where it produces micro and nano miniature interconnect products, featuring COTS, Standards and Custom connectors for industries such as Medical, Military, Aerospace, Defense and other technology oriented OEMs.

Fun Facts



One in 6 Minnesotans own a boat, which is the largest per capita in the U.S. Fishing is a major activity in Minnesota, and 2.3 million residents fish Minnesota's waters each and every year.