

# INTERCONNECT SOLUTIONS FOR DEFENSE & SECURITY

Manufacturers in defense and security must meet high expectations in product quality and mission-critical performance. And every system component must meet them too. Finding a trusted source for high-reliability connectivity solutions is essential.

## HIGH-PERFORMANCE CONNECTORS



## FOR HARSH ENVIRONMENT APPLICATIONS

- MISSILES
- DRONES
- COUNTER-DRONES
- GIMBALS
- LAUNCHERS
- RADAR SYSTEMS
- SATCOM SYSTEMS
- LOW-ORBIT SATELLITES

HERE'S HOW TO INNOVATE, DESIGN AND MANUFACTURE MILITARY AND AEROSPACE PRODUCTS WITH MODULAR CONNECTORS AND CABLES FROM A TOP FULL-SOLUTION PROVIDER LIKE NICOMATIC.



## INNOVATE

Innovative engineers push the boundaries of what's possible in defense and security. And taking traditional equipment to the next level demands a collaborative interconnect partner.

- 1 APPLICATION EXPERTISE
- 2 SUPERIOR MATERIALS
- 3 HIGH RELIABILITY
- 4 COOPERATION

### ADAPTABILITY

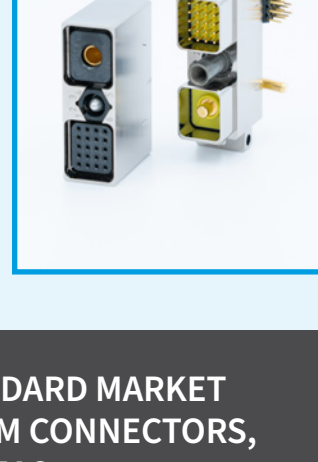
"CAN WE ADJUST THE CONFIGURATION TO DO THIS?"

Not all solution providers are willing to collaborate on custom pieces. Nicomatic is known for customizable solutions renowned for their reliability, durability and performance. We work closely with engineers to understand their goals, problem-solve and adapt connectors and cables to precise specifications for prototyping. And with a flexible supply chain, vendors can be added in special circumstances to source new materials.

NEED SPECIFIC PLATING ON THE CONTACT, BACKSHELL, OR CONNECTOR ITSELF? A PROVIDER SHOULD DO WHATEVER THEY CAN TO WORK WITH YOUR REQUIREMENTS.

### RESPONSIVENESS

- "WHAT IS THIS PRODUCT'S DERATING WHEN WE MOVE FROM 4 CONTACTS TO 8?"
- "WHAT TEST DATA DO YOU HAVE FOR THIS PERFORMANCE TYPE?"
- "WHAT SPEED DO THESE COAX CONTACTS SUPPORT?"



Getting answers to technical questions without going through multiple layers of personnel is a must. An accessible partner can connect you to in-house engineer for expert design assistance or updates on orders.

ASK PROVIDERS HOW THEIR PRODUCTS COMPARE TO STANDARD MARKET OPTIONS FOR A MORE COMPLETE PICTURE. NICOMATIC'S AMM CONNECTORS, FOR EXAMPLE, OFFER SAVINGS IN A FEW KEY AREAS.

- SAVE 40% ON PCB SPACE & STACKING DISTANCE
- SAVE 60-80% ON WEIGHT
- SAVE MORE TIME WITH SHORT LEAD TIMES

## DESIGN

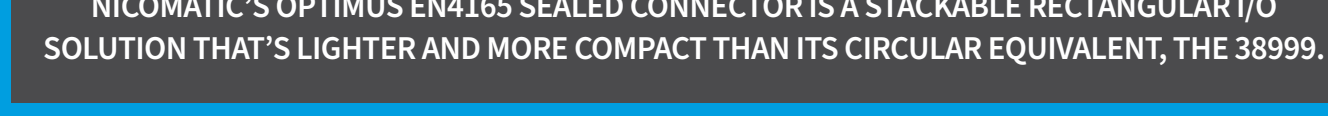
You need rugged interconnect products that pack more power in a smaller footprint. Expand your search criteria beyond the standard cable and connector to design reliable products.

- 1 MINIATURE
- 2 LIGHTWEIGHT
- 3 MODULAR
- 4 CUSTOMIZED

### WEIGHT & SPACE SAVINGS

**CHOOSING MATERIALS:** Material can make all the difference, so explore what's available. Metalized composite is a much lighter material for connectors and still offers EMI protection.

**STACKING:** Piling up slim, high-density connectors can serve weight- and space-constrained applications. Look for products with this functionality for an ideal fit.



NICOMATIC'S OPTIMUS EN4165 SEALED CONNECTOR IS A STACKABLE RECTANGULAR I/O SOLUTION THAT'S LIGHTER AND MORE COMPACT THAN ITS CIRCULAR EQUIVALENT, THE 38999.

**CONSOLIDATING:** Some connectors can integrate mixed power, coax or signal coax contacts to consolidate signals into one unit for a cost-effective solution that takes up less weight and space on PC boards than traditional market connectors—even when using multiple.



NICOMATIC'S MODULAR CMM CONNECTOR SUPPORTS EFFECTIVE CONSOLIDATION.

### CUSTOM CONNECTIONS

Modular tooling means flexible connections. Move beyond stock parts to create unique configurations for your applications, from specifying connector contact number and connection angle to cable shielding for EMI/EMC protection. Create simple and efficient designs with a range of accessories, including backshells, covers and cable clamps.



- Interchangeable Parts
- Grid-Style Layouts
- Quick Lock Features
- Interfacial Seals
- Reverse Fixings
- Integrated Guidance

OPEN ARCHITECTURE SYSTEMS: LOOK FOR CONNECTORS THAT CAN SWAP CONFIGURATIONS TO UTILIZE PARTS FOR MULTIPLE PROGRAMS AND PROJECTS.

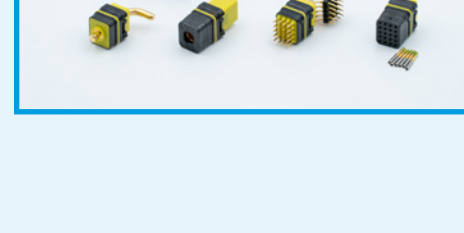
## MANUFACTURE

To manufacture high-performance defense and security systems, interconnect components must be compliant, produced by a provider that works fast to meet tight project deadlines.

- 1 LOW MOQs
- 2 STRICT TESTING
- 3 SHORT LEAD TIMES
- 4 ON-TIME DELIVERY

### IN-HOUSE TESTING

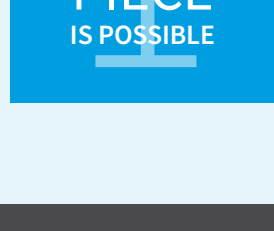
A well-equipped provider can handle product testing internally for faster turnaround times. Nicomatic's in-house testing and qualifications lab designs qualified, compliant products and can test in exact operating environments for small operations when feasible—something most providers aren't willing to do.



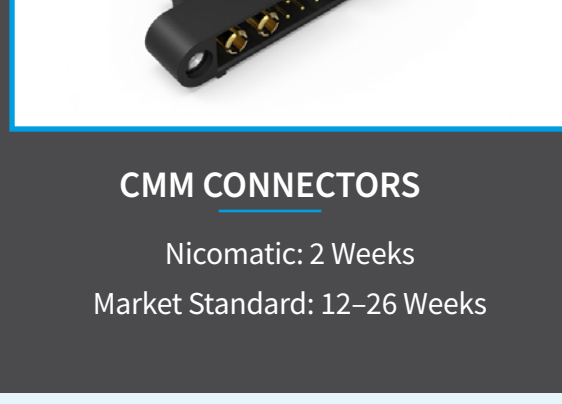
### OPTIMAL ORDERS

Many big-name interconnect companies don't work as hard to fulfill small orders, but Nicomatic does. This lets engineers get their hands on the physical product and move more quickly to a completed program. Avoiding the hoops of endless distributors, custom products from SMEs are often directly ordered and fulfilled to arrive even faster than competitive off-the-shelf solutions.

- 1 Piece Minimum Order Quantity
- See the Physical Product
- Solve Project Challenges
- Start Manufacturing Sooner



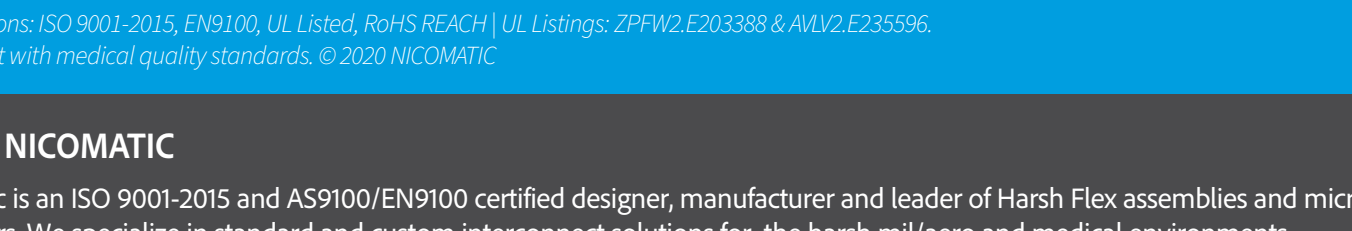
**DMM CONNECTORS**  
 Nicomatic: 8-10 Weeks  
 Market Standard: 15-26 Weeks  
 (Without Customization)



**CMM CONNECTORS**  
 Nicomatic: 2 Weeks  
 Market Standard: 12-26 Weeks

## REQUEST SAMPLES, DRAWINGS & PRICING

Contact Powell to learn more about the unique harsh environment interconnect solutions from Nicomatic.



**ABOUT NICOMATIC**  
 Nicomatic is an ISO 9001-2015 and AS9100/EN9100 certified designer, manufacturer and leader of Harsh Flex assemblies and micro-connectors. We specialize in standard and custom interconnect solutions for the harsh mil/aero and medical environments.

**ABOUT POWELL**  
 Powell Electronics is a value-added authorized distributor, which assures you of receiving all factory warranties and post-sales support with every order. We operate under the strictest quality control standards and have been successfully audited by UL to ISO 9001:2008 and AS9100 Rev. C Standard.