

# OPTIMUS SERIES OF RECTANGULAR MULTI- CAVITY CONNECTORS

## THE HARSH-ENVIRONMENT EN4165 CONNECTOR

Get out of the box and connect equipment in harsh mil/aero environments with the Optimus series of rectangular multi-cavity connectors, a suite of rectangular I/O solutions from Nicomatic that are lighter and more compact than their circular equivalents, including the 38999, 26482 and 83723 standards. Each Optimus connector is highly modular, with a set of standard interchangeable inserts and shells that create significantly customizable solutions. The Optimus range is designed to meet the strict requirements of the EN4165 standard and is compliant with AS/EN9100 quality standards.

Rugged, Rectangular & Stackable  
Ultra-Modular & Customizable  
Intermateable & Interchangeable

High Mechanical Endurance  
Military & Aerospace Compliant



*THE OPTIMUS SERIES USES  
MIL-C-39029 AND EN3155 STANDARD CONTACTS  
AND IS BUILT FOR PANELS, BACKPLANES, CABLE ASSEMBLIES  
AND HARNESSES. SHELL HOUSINGS CAN BE CUSTOMIZED TO  
ALLOW FOR SPECIAL FIXINGS, SPACE ENVELOPES AND MORE.*

## OPTIMAL CONNECTION COMBOS

Create the ideal connector combination for your application with custom options and large range of accessories, including backshells, covers and cable clamps. Meet miniaturization connectivity needs in the most extreme environments with an adaptive and compliant connector.

- **Rectangular I/O:** Reap the benefits of rectangular design with a shape based on the EN4165 standard for sealing and EMI protection.
- **PCB Adapted:** Trust connectors optimized for easy panel connection and efficient PCB fixing for direct connection to PCBs.
- **Durable & Secure:** Obtain durable robust blind mating with a panel or rack connector that enables connection and realignment without the need for tools.
- **Stackable & Space Saving:** Stack housings with a slim fit and high density compared to circular connectors for weight- and space-constrained applications.

## HIGH PERFORMANCE



TEMPERATURE



VIBRATION



SHOCK



PRESSURE



EXPOSURE



ALTITUDE

## HARSH ENVIRONMENTS

- CIVIL AEROSPACE
- MILITARY VEHICLES
- DEFENSE AVIONICS
- ROBOTICS

## EASY USE & EFFORTLESS MAINTENANCE

The Optimus connector features removable contacts and modules meeting Mil-C-39029 and EN3155 standards that are easy to maintain. Expect superior performance for one or more programs with durable seals, a reliable contact retention system and superior temperature and mechanical endurance.

REMOVEABLE CONTACT  
SIZES: 22, 20, 16, 12, 8

PLUG & NUT COMPONENTS  
ADAPTED TO ANY STANDARD  
EN4165 RECEPTACLE

## VERSATILITY MEETS BEST-IN-CLASS SEALING

Produce simple and efficient designs with a connector that is fully intermateable and interchangeable with existing EN4165 standard solutions and offers reliable connection through a ready-to-plug sealed component.

- Interfacial seal closes between mated modules
- Peripheral seal closes between the module and its housing
- Rear cable seal compresses around wires and avoids harness liquid ingress
- Molded thermoplastic clips provide high contact retention
- Module retention clip allows fitting in any adapted cavity

## THE NICOMATIC DIFFERENCE

World-Class Lead  
& Delivery Times

Competitive Market-  
Leading Prices

Design & Manufacturing  
Innovation

Proven Flexibility  
& Customization



NICOMATIC

### REQUEST SAMPLES, DRAWINGS & PRICING

Contact Nicomatic to learn more about the Optimus EN4165 sealed connector and our other unique harsh environment interconnect solutions.

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Certifications: ISO 9001-2015, EN9100, UL Listed, RoHS REACH | UL Listings: ZPFW2.E203388 & AVLV2.E235596.  
Compliant with medical quality standards. © 2021 NICOMATIC

## ABOUT NICOMATIC

Nicomatic is an ISO 9001-2015 and 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.

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