

ODU AMC:

<https://www.digikey.com/en/product-highlight/o/odu/amc-miniature-ethernet-connectors-with-cable-assemblies>

<https://www.digikey.com/en/product-highlight/o/odu/amc-miniature-usb-connectors-with-cable-assemblies>

<https://www.digikey.com/en/product-highlight/o/odu/high-density-chrome-plated-advanced-connector-solutions>

<https://www.digikey.com/en/product-highlight/o/odu/amc-high-density-series-assemblies>

<https://www.digikey.com/en/product-highlight/o/odu/advanced-military-connectors>

<https://www.digikey.com/en/product-highlight/o/odu/high-density-miniature-advanced-military-connectors>

<https://www.digikey.com/en/product-highlight/o/odu/odu-amc-series-t-3-way-lock-connectors>

FAQs

Where are ODU AMC® connectors applied for?

These connectors are designed and tested to ensure they can withstand extreme conditions, including exposure to sand, dust, extreme temperatures, humidity, corrosion, solar radiation, shock, vibration, and torque loads. They are thus suitable for applications in the military, security and defense sectors, as well as in agricultural and forestry machinery and equipment.

What different series belong to ODU AMC® connector portfolio?

The **ODU AMC®** with **Break-Away** or **Push-Pull** function was designed for connections that can be mated or demated in seconds, even under field conditions. While the Break-Away is released quickly by a pull, e.g. to avoid dangerous situations, the Push-Pull locks reliably to prevent unintentional release.

The **ODU AMC® High-Density** are robust miniature connectors. They offer high performance transmission, easy handling and high reliability.

The **ODU AMC® Easy-Clean** capability of these connector solutions enables high performance and high usability. The unique pin system and the design of the connector respond to all the stringent requirements of the most challenging environments

The **ODU AMC® Threaded** is particularly suitable for high vibration resistant interlocks with high mating cycles

The **ODU AMC® Series T** is a field-terminable rugged circular connector with innovative 3 on 1 locking principle. Due to the multiple sealed electrical and mechanical components it even meets requirements of MIL-STD 38999.

The **ODU AMC® NP** (Nett Power) is the newest addition to the AMC military connector family, tested to MIL-STD-810H with improved power contacts and USB® 2.0 capabilities. The new ODU AMC® Series NP is compatible with open architecture standards such as NATO STANAG 4695, Nett Warrior, and GOSSRA (General Open Structure Architecture).

Cable assembly can be offered as an option with all connectors.

Which protection class do the ODU AMC® connectors fulfil?

All series in the AMC connector range meet the requirements of protection class IP6K9K when mated. Detailed technical data for the individual products can be found in the [catalogs](#).

Are STEP Files and Data Sheets available?

You can find STEP Files and Data Sheets in the [ODU Product Finder](#).

Which MIL standard does the ODU AMC® meet?

The ODU AMC® connectors meet various MIL standards, including:

- MIL-DTL-38999: This standard covers the requirements for cylindrical connectors with threaded coupling for electrical and optical signals in military applications.
- Noxious gas resistance acc. to SAE AS39029
- Connectors with MIL-Std Accessory thread according to the specifications of MIL-DTL-38999 Series III
- M85049 / AS85049 backshells, MIL-DTL-39029 / AS39029 crimp contacts, MIL standardized flange gaskets
- MIL-STD-810: This standard covers environmental testing procedures and guidelines for

military

- ODU AMC® connectivity solutions meet the MIL-STD-1472 standard, which specifies the design requirements for human interfaces in defense systems. This standard ensures that connectivity solutions are user-friendly, efficient and ergonomically designed to meet the physical and cognitive needs of users.

Environmental requirements acc:

Water Resistance: IPX8 / IPX9K. acc. to ISO 20653:2013-02 and MIL-STD-810G: 2008 512.5.

Dust or Fine Sand Resistance: IP6KX (Settling Dust).gem. MIL-STD-202-110 and ISO 20653:2013-02.

Temperature Cycling: acc. to EIA-364-32G,

Corrosion resistance Salt Spray MIL-STD-810G

Altitude Low Temperature: acc. to EIA-364-105B

Ice Resistance acc. to MIL-DTL-38999M

Insulation Resistance

Contact Resistance and Voltage Drop: acc. to EIA-364-06C:2006-03 and EIA-364-23C:2006-06.

Current Carrying Capacity: acc. to IEC 60512-5-2:2002

Vibration EIA-364-28F

Shock EIA-364-27C

Mould growth IEC 60068

Solar radiation IEC 60068