Introduction to Nautilus

# Nautilus is GradConn's IP Rated RF Range

1 Pioneering waterproof **IP rated** Coaxial connectors and cable assemblies sit at the heart of our offering

2 100% tested, **IP67, IP68 & IP69K** performance, both **mated and unmated**, make Nautilus products perfect for harsh environments

3 **Cost-effective** price points make GradConn the go-to supplier for waterproof coaxial solutions for companies worldwide
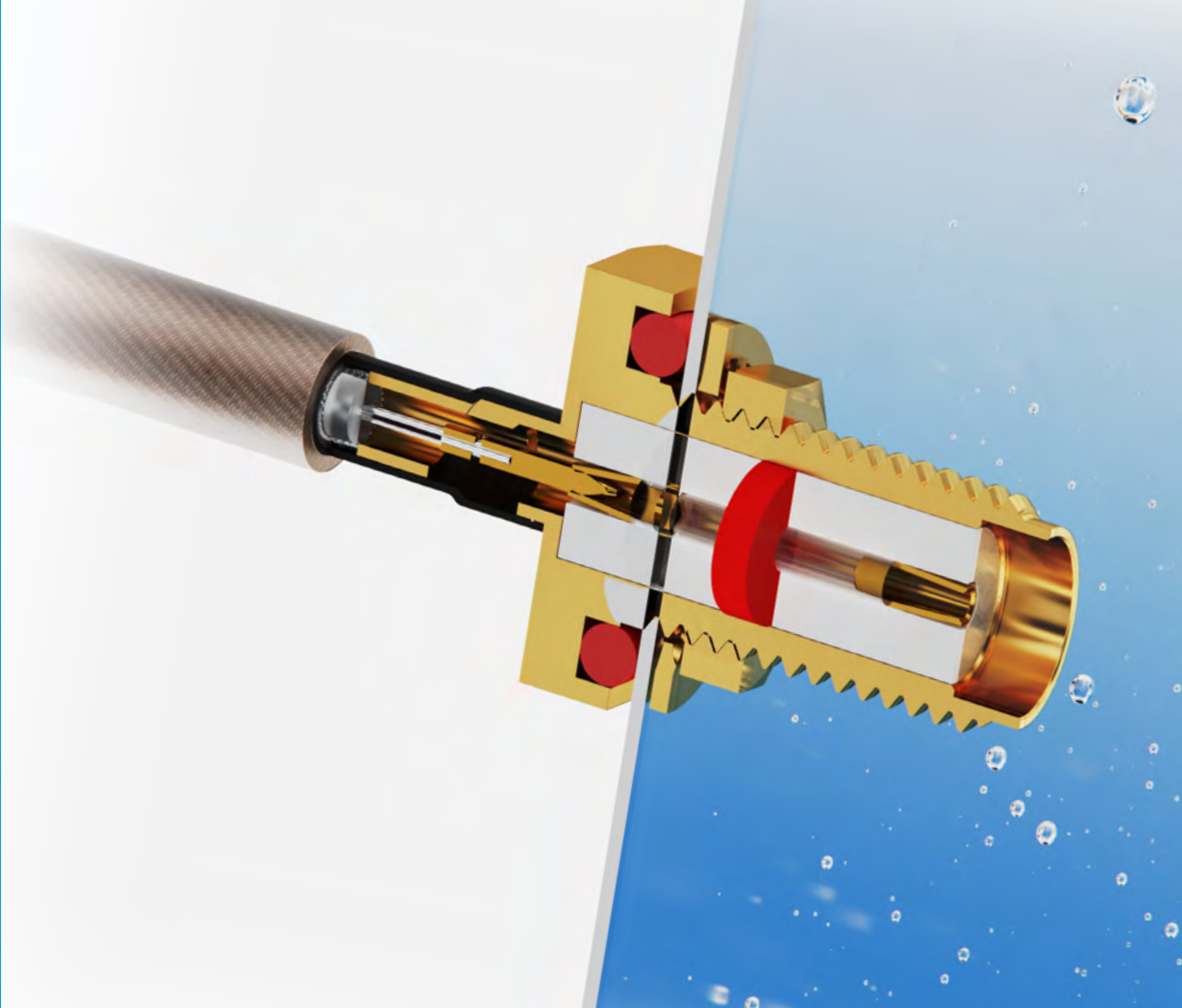
Nautilus

Accelerated Life Testing

GradConn's Nautilus range of IP rated coaxial connectors and assemblies **already provide an excellent level of environmental protection,** but how do they perform over an extended period in the field?

Working closely with independent test labs, GradConn's engineering team has developed a test plan to **simulate prolonged use in demanding environments.**

The aim is to demonstrate Nautilus SMA cable assemblies **can maintain optimal performance throughout its life** when subject to various environmental conditions.

The tests are designed with the aim of replicating five years usage in the field based on accelerated life testing.

Assemblies & Bulkhead Connectors

SMA, BNC, TNC & N variants

100% tested to **IP67, IP68 and IP69K** performance, **both mated and unmated**

Front & rear mount, **standard & reverse** polarity and **flange** mount variants

SMA & TNC available in **Stainless Steel** and with **Isolation**
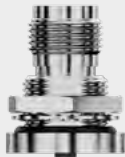
SMA
SMA Connectors

BNC
BNC Connectors

TNC
TNC Connectors
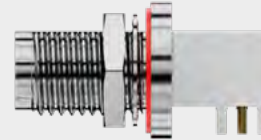
Isolated
Isolated IP67/68 Connectors

Stainless Steel IP69K
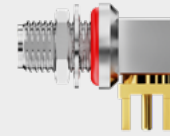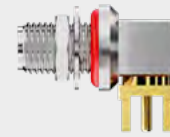S/S IP69K Connectors

N
N-Type Connectors

TNC
Right Angle-TNC

Edge Mount
Straight-SMA

Stainless Steel
SP-SMA

RP-SMA
Right Angle-SMA

Stainless Steel
RP-SMA
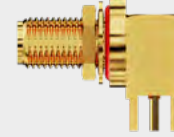
SP-SMA
Right Angle-SMA

Direct PCB Connection

No Cable assembly required

Perfect for applications where the comms module does not include an RF interface connector and protection against liquid ingress is critical. These parts are placed directly onto the PCB in a convenient location for connection to an antenna or extension cable.

Available in **SMA & TNC** formats and rated to **IP67/68** with options for straight & right angle orientation and standard & reverse polarity. A **stainless steel** bodied SMA is available.
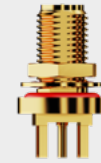
RP-SMA
Straight-SMA
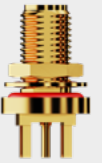
SP-SMA
Straight-SMA

Nautilus
Protective Caps

IP67 rated caps are available for SMA, N Type and TNC interface types to help **prevent the build-up of moisture, dust and dirt collecting in the mating face** of the connector.

Options include with or without chain attachment and **stainless steel** versions.

N
IP67, With Chain

SMA
IP67, With Chain

SMA
IP67, Without Chain

Stainless Steel SMA
IP67, Without Chain

N
IP67, Without Chain

**Stainless Steel TNC**
IP67, S/S

TNC
IP67, With Chain

TNC
IP67, Without Chain

Nautilus
Growth Industries

The market for **waterproof coaxial cables** is growing rapidly.

Connectivity requirements from technology advancement (IoT, M2M) has contributed to this growth and this is only set to accelerate as technology is adapted for more remote and challenging applications.
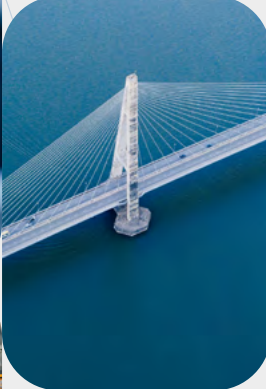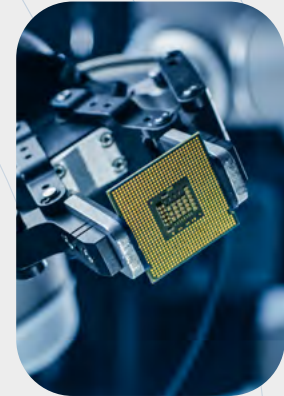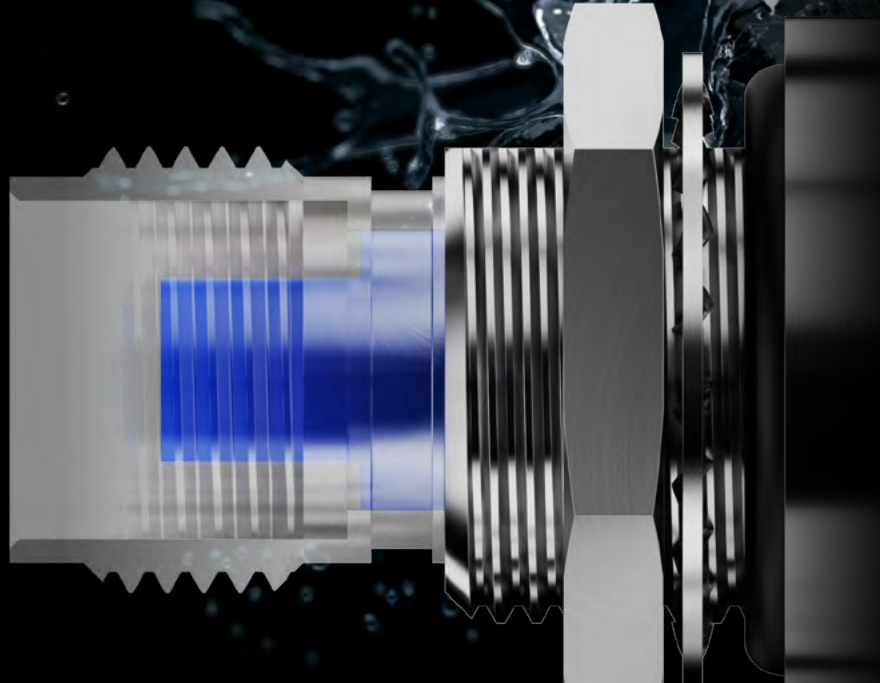
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Isolation

GradConn's Isolated coaxial cable connectors are designed to provide uninterrupted signal and data without crosstalk.

Isolated SMA & TNC connectors are available with IP67 rating for enhanced environmental protection.

Isolation is important in the following applications:

- **Mining**
- **Mission critical**
- **Intrinsically safe**
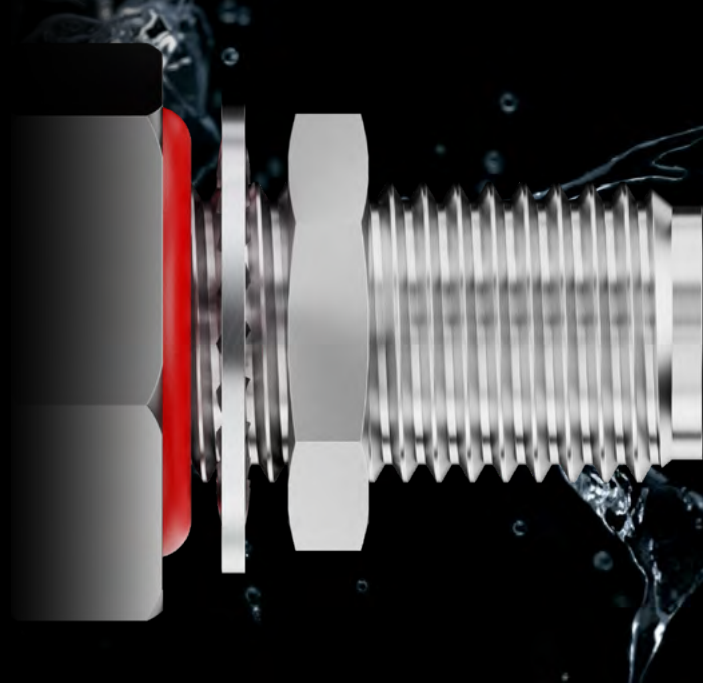
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Stainless Steel & IP69K

Designed to withstand extremely harsh environments, Nautilus cable assemblies with stainless steel SMA & TNC connectors offer peak performance against corrosion where gold plated brass bodied connectors may fail.

Rated to IP67, IP68 and IP69K for high pressure and high temperature washdown protection used in the following applications:

- **Sewage & waste management**
- **Mining**
- **Marine**
- **Food preparation**
- **Agri-tech & hydroponics**

Currently, there are very limited options available in the market for stainless steel SMA & TNC cable assemblies.

The SMA variant is available in both front & rear mount options.

Nautilus
I-PEX®

I-PEX® offer some of the latest and smallest Micro Coaxial connectors available including locking versions suitable for shock and vibration prone applications.

Our partnership with I-PEX® allows us to create cutting edge products keeping GradConn at the forefront of connectivity within the IoT space.
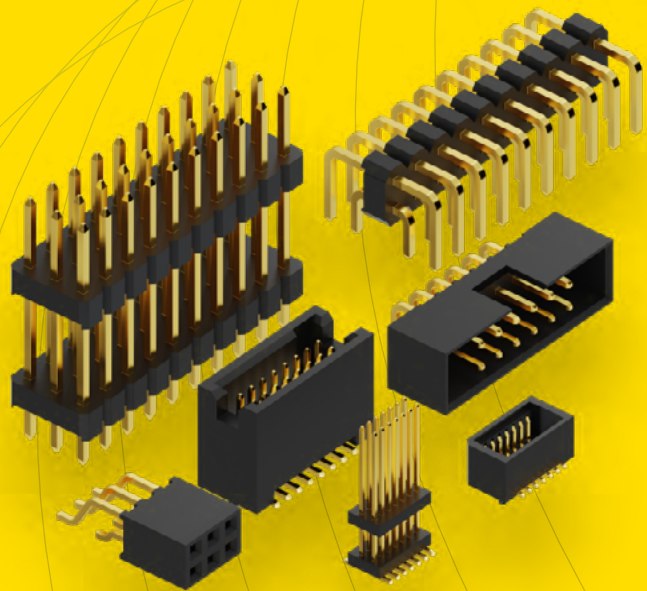

Nautilus
I-PEX Locking Connector Applications

- **Unique latching system**
- **For continuous shock & vibration applications**
- **Ensures against critical failure**

The steep increase in demand for IoT and M2M solutions in harsh environments, requires products that are capable of withstanding challenging conditions over prolonged periods.

Board to Board

SIM Card Connectors

Distributors & Representatives

An expansive network of distributors and channel partners will enable you to source GradConn products quickly and efficiently, wherever you design and build.

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