



# Radio Frequency Systems

## HYBRIFLEX® FullAXS Compatible Connector Installation Guidelines



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# FullAXS Compatible Connector Installation Guidelines

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# FullAXS Compatible Connector Installation Guidelines

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## INTRODUCTION TO HYBRIFLEX®

RFS' HYBRIFLEX Remote Radio Head (RRH) hybrid feeder cabling solution combines multiple elements, including, but not limited to, optical fiber and DC power, for RRHs in a single lightweight cable, making it the world's most innovative solution for RRH deployments. It was developed to reduce installation complexity and cost at macro sites. HYBRIFLEX allows mobile operators deploying RRH architecture to standardize the RRH installation process. HYBRIFLEX with its combined elements all in a single jacketed cable can connect multiple RRHs with a single feeder. Standard RFS CELLFLEX® coaxial cable accessories may be used with HYBRIFLEX cable. Both pre-terminated and on-site terminated options are available. The rugged jacket facilitates easy transportation, handling, and installation.

These short instructions were written for qualified and experienced personnel. They describe, in few words, the main points that **MUST** be noted during installation, without any claim of completeness.

Any liability or warranty for results of improper or unsafe use is disclaimed!

## General remarks

In principle, care must be taken to avoid all such strain that may cause permanent deformation on the cable, e.g., going below admissible bending radii, kinking, applying too high tensile stress or forcible deformation (pulling over sharp edges, over tightening of clamps, etc.).

## FullAXS Compatible Connector Installation Guidelines

### FULLAXS COMPATIBLE CONNECTOR INSTALLATION

Use the following instruction to properly install/attach the FullAXS compatible connector. Failure to follow these procedures entirely may cause damage to the Fiber or Connector. For factory pre-installed assembly, skip to step 4a:

**1**

Carefully feed compression nut over fiber jumper connector and slide onto jacketing. Do not twist or bend the LC connector or fiber. Excessive force or bending may break the fiber or connector components.

**2**

Feed the fiber connector into the sleeve until the Connector comes out. **Caution: do not apply too much force as doing so can cause damage to the fiber and gland spring fingers.**

**3**

Wrap the rubber split grommet around the jacketing and VERY CAREFULLY push it UNDER the clamping fingers until the grommet is flush with the finger ends. **Caution: it will be necessary to gently lift the fingers.**

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Engage the compression nut thread to the body 3-4 revolutions to keep the grommet in place but do not tighten fully to allow for adjustment during RRU connection.

**a:** Remove protective dust cap (top), disengage the compression nut (bottom), adjust the jumper to proper length

5



Slide FullAXS compatible gland body down jacketing to allow access to the fiber end connector. Do not pull the fiber end connector through the sleeve or damage may occur.

6



Remove the fiber dust caps from fiber end face and seat into the RRH SPF card slot until you hear a click. Do not twist fiber end face or kink the fiber during installation.

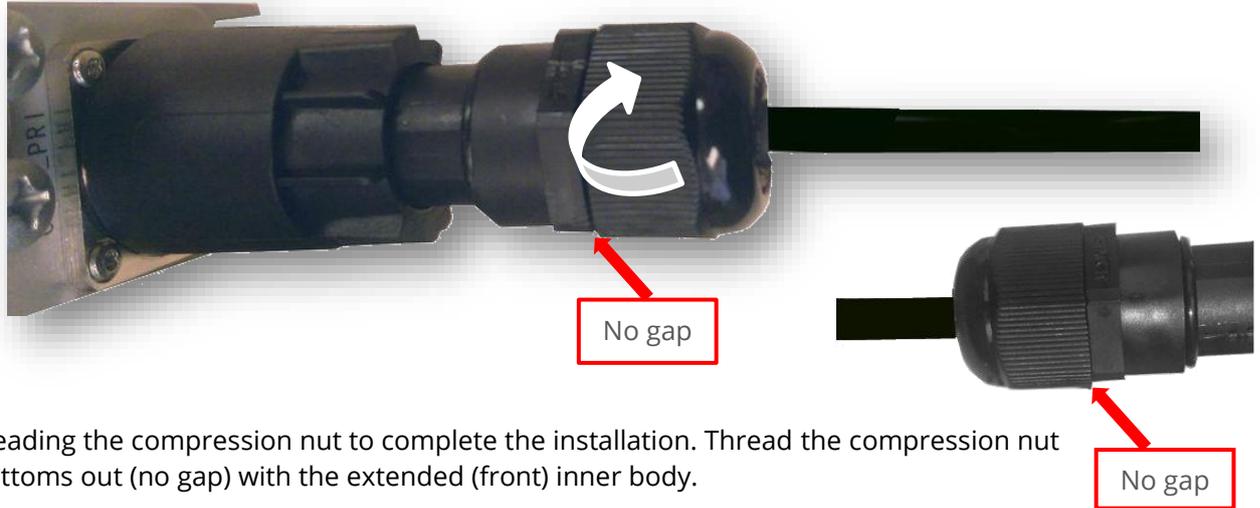
7



Slide the FullAXS compatible sleeve up to the RRH. Turn top nut clockwise to secure to RRH bulkhead connector.

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Finish threading the compression nut to complete the installation. Thread the compression nut until it bottoms out (no gap) with the extended (front) inner body.

Reverse steps 8 to 1 to remove sleeve for maintenance. Once the Nut is tight, spring fingers are compressed tightly. To remove or adjust jumper fiber the grommet must be push from the front using a small bladed, long-shaft screwdriver



Caution: Do not insert the screwdriver blindly.

# FullAXS Compatible Connector Installation Guidelines

## ODC CONNECTOR END FACE

USE CAUTION WHEN REMOVING PROTECTIVE CAP



DO NOT ROTATE NUT AND CONNECTOR BODY

Grasp hand screw nut and body, hold firm while unscrewing Protective CAP





# FullAXS Compatible Connector Installation Guidelines

## TRADEMARKS

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## About RFS

Radio Frequency Systems (RFS) delivers the end-to-end RF solutions and expert services needed to evolve wireless and broadcast networks today and tomorrow. Our cables, connectors, antenna systems and RF conditioning products are based on more than 120 years of experience delivering cutting-edge RF solutions and industry firsts. As a result, our solutions are recognized globally for their innovation, superior performance and unmatched quality.

As an ISO-compliant company with global operations, we bring our customers world-class engineering and manufacturing skills backed with comprehensive local support services. Our customers know they can rely on our expertise and commitment to excellence from initial design to final delivery and beyond — whether they're looking to support 5G, deploy small cells, empower smart cities or improve indoor coverage in the most challenging locations.

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