



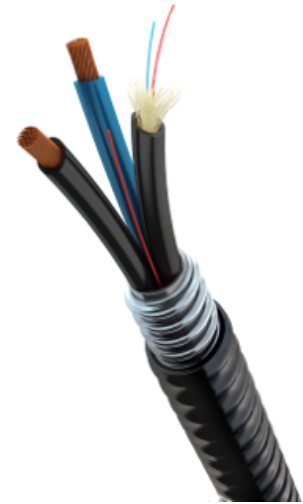
RFS' HYBRIFLEX™ cabling solution for Remote Radio Unit (RRU) combines optical fiber and DC power in a single lightweight aluminum corrugated cable, making it the world's most innovative solution for RRU deployments. It was developed to reduce installation complexity and cost at Cellular sites.

HYBRIFLEX™ cabling solutions allows mobile operators deploying RRU architecture to standardized installation process and eliminates the need and the cost for an internal grounding wire.

The HYBRIFLEX™ cable is part of a site installation kit. It consists of an armored bundle of 2 DC cables, 1 F/O distribution cables and a rip cord to adjust the breakout part of the cable.

**FEATURES / BENEFITS**

- A corrugated armor with excellent bending characteristics minimizes installation time and enables mechanical protection and EMC shielding
- Outer conductor grounding eliminates typical additional grounding requirement and saves on installation costs
- Lightweight solution and compact design decreases tower loads
- Robust cabling eliminates need for expensive cable trays and conduits
- Installation of stripped fiber optic cable pairs directly to RRH reduces CAPEX and wind load by eliminating need for junction boxes
- F/O and DC housed in single corrugated cable saves CAPEX by standardizing RRH cable installation and reducing installation equipments



HYBRIFLEX Series

**External Document Links**

- [Handling Instruction.pdf](#)
- [Ordering\\_code.pdf](#)
- [Solution Overview\\_2.pdf](#)

**Notes**

**Technical features**

**STRUCTURE**

|                         |  |                                |
|-------------------------|--|--------------------------------|
| <b>Cable Type</b>       |  | Single RRU HYBRIFLEX™ Standard |
| <b>Size</b>             |  | 1/2                            |
| <b>Fire Performance</b> |  | Halogene Free                  |

**DC POWER CABLE SPECIFICATIONS**

|  |                       |                          |
|--|-----------------------|--------------------------|
| <b>Number of DC Pairs</b>                |                       | 1                        |
| <b>Maximum DC-Resistance Power Cable</b> | Ω/km (Ω/kft)          | 4.95 (1.51)              |
| <b>Cross Section of Power Cable</b>      | mm <sup>2</sup> (AWG) | 4 (12)                   |
| <b>Shielding</b>                         |                       | provided by the Al armor |
| <b>DC Wire Jacket Material</b>           |                       | Polyethylene, PE         |
| <b>DC Wire Jacket Thickness</b>          | mm (in)               | 0.5 (0.02)               |
| <b>DC Cable Single Bending Radius</b>    | mm (in)               | 25 (0.98)                |
| <b>DC Cable Diameter</b>                 | mm (in)               | 4 (0.157)                |
| <b>DC Cable Jacket</b>                   |                       | UV stable black PE       |
| <b>DC Standards (Meets or Exceeds)</b>   |                       | IEC 60228                |



**MECHANICAL SPECIFICATIONS**

|  |              |                    |
|--|--------------|--------------------|
| Cable Weight                           | kg/m (lb/ft) | 0.23 (0.155)       |
| Minimum Bending Radius, (Operating)    | mm (in)      | 70 (2.7)           |
| Minimum Bending Radius, (Installation) | mm (in)      | 125 (5)            |
| Tensile Strength                       | N (lb)       | 150 (33.7)         |
| Recommended / Maximum Clamp Spacing    | m (ft)       | 0.6 / 1 (2 / 3.25) |

**CABLE JACKET**

|  |         |                    |
|--|---------|--------------------|
| UV-Protection Individual and External Jacket |         | Yes                |
| Jacket Material                              |         | UV stable black PE |
| Outer Diameter Nominal                       | mm (in) | 15.8 (0.62)        |

**ARMOR SPECIFICATIONS**

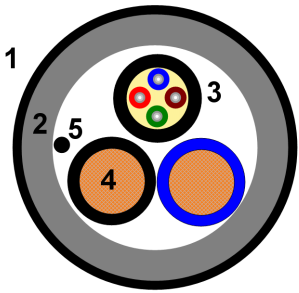
|  |                       |                          |
|--|-----------------------|--------------------------|
| Armor Type                               |                       | Corrugated Aluminum tube |
| Maximum DC-Resistance of Armor           | Ω/km (Ω/kft)          | 2.78 (0.85)              |
| Copper Equivalent Cross Section of Armor | mm <sup>2</sup> (AWG) | 8 (8)                    |
| Diameter Corrugated Armor                | mm (in)               | 13.8 (0.54)              |

**F/O CABLE SPECIFICATIONS**

|                                  |         |                         |
|----------------------------------|---------|-------------------------|
| F/O Cable Type                   |         | Tight Buffer, Multimode |
| Number of F/O Pairs              |         | 2                       |
| Core/Clad                        | μm      | 50 /125                 |
| Secondary Protection Nominal     | μm (in) | 900 (0.035)             |
| Single Bending Radius            | mm (in) | 50 (1.97)               |
| Cable Diameter mm (in)           |         | 4.8 (0.19)              |
| F/O Cable Jacket                 |         | UV stable black PE      |
| F/O Standards (Meets or Exceeds) |         | IEC 60793-2-10          |

**TESTING AND ENVIRONMENTAL**

|                          |         |                         |
|--------------------------|---------|-------------------------|
| Storage Temperature      | °C (°F) | -40 to 85 (-40 to 185 ) |
| Operation Temperature    | °C (°F) | -40 to 85 (-40 to 185 ) |
| Installation Temperature | °C (°F) | -20 to 50 (-4 to 122 )  |
| Jacket Specifications    |         | not applicable          |
| LSZH Specification       |         | not applicable          |



- 1) External Jacket
- 2) Aluminium Armor
- 3) F/O Cable
- 4) Power Cable
- 5) Rip Cord

Product Detail