



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 4 unshielded DC cables, 8 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\\_4.pdf](#)
- [Solution Overview\\_5.pdf](#)

**Notes**

**Technical features**

**STRUCTURE**

<b>Cable Type</b>		4 RRU HYBRIFLEX™ Standard LTE
<b>Size</b>		7/8
<b>Fire Performance</b>		Halogene Free

**DC POWER CABLE SPECIFICATIONS**

<b>Number of DC Pairs</b>		4
<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 aluminium armor
<b>DC Wire Jacket Material</b>		Polyethylene, PE, Metalhydroxite Filling
<b>DC Wire Jacket Thickness</b>	mm (in)	0.5 (0.02)
<b>DC Cable Single Bending Radius</b>	mm (in)	100 (3.94)
<b>DC Cable Diameter</b>	mm (in)	9.9 (0.39)
<b>DC Cable Jacket</b>		UV stable black and blue PE
<b>DC Standards (Meets or Exceeds)</b>		IEC 60228



**MECHANICAL SPECIFICATIONS**

Cable Weight	kg/m (lb/ft)	0.75 (0.5)
Minimum Bending Radius, (Operating)	mm (in)	120 (4.7)
Minimum Bending Radius, (Installation)	mm (in)	250 (9.8)
Tensile Strength	N (lb)	700 (157)
Recommended / Maximum Clamp Spacing	m (ft)	0.8 / 1 (2.75 / 3.3)

**CABLE JACKET**

UV-Protection Individual and External Jacket		Yes
Jacket Material		UV stable black PE
Outer Diameter Nominal	mm (in)	27.8 (1.09)

**ARMOR SPECIFICATIONS**

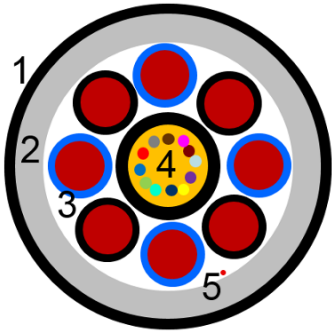
Armor Type		Corrugated Aluminum tube
Maximum DC-Resistance of Armor	Ω/km (Ω/kft)	1.21 (0.37)
Copper Equivalent Cross Section of Armor	mm <sup>2</sup> (AWG)	16 (5)
Diameter Corrugated Armor	mm (in)	25.2 (0.99)

**F/O CABLE SPECIFICATIONS**

F/O Cable Type		Tight-Buffer, Single mode
Number of F/O Pairs		8
Core/Clad	μm	9 /125
Secondary Protection Nominal	μm (in)	900 (0.035)
Single Bending Radius	mm (in)	69 (2.71)
Cable Diameter mm (in)		6.9 (0.27)
F/O Cable Jacket		UV stable black PE
F/O Standards (Meets or Exceeds)		ITU G 657.A2

**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) Aluminum Armor
- 3) Power Wire
- 4) F/O Cable
- 5) Rip Cord

Product Detail