



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.

Feature / 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

Technical features

STRUCTURE

Cable Type	4 RRU HYBRIFLEX™ Standard LTE
Size	7/8
Fire Performance	Flame Retardant, LSZH

MECHANICAL SPECIFICATIONS

Outer Diameter Nominal	27.8mm (1.09in)
Cable Weight	0.75kg/m (0.5lb/ft)
Minimum Bending Radius	120mm (4.7in)
Minimum Bending Radius	250mm (9.8in)
Tensile Strength	700N (157lb)
Recommended / Maximum Clamp Spacing	0.8 / 1 (2.75 / 3.3)

DC POWER CABLE SPECIFICATIONS

Number of DC Pairs	4
Maximum DC-Resistance Power Cable	4.95ohm/1000 m (1.51ohm/1000 ft)
Cross Section of Power Cable	4 mm ² (12 AWG)
Shielding	provided by aluminium armor
DC Wire Jacket Material	Polyethylene, PE, Metalhydroxite Filling
DC Wire Jacket Thickness	0.5mm (0.02in)
DC Cable Single Bending Radius	100mm (3.94in)
DC Cable Diameter	9.9mm (0.39in)
DC Cable Jacket	UV stable black and blue PE
DC Standards (Meets or Exceeds)	IEC 60228

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HYBRIFLEX™ Standard LTE, Cabling Solution for 4 RRU

CABLE JACKET

UV-Protection Individual and External Jacket	Yes
Jacket Material	UV stable black PE

ARMOR SPECIFICATIONS

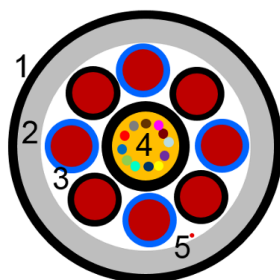
Armor Type	Corrugated Aluminum tube
Maximum DC-Resistance of Armor	1.21ohm/1000 m (0.37ohm/1000 ft)
Copper Equivalent Cross Section of Armor	16 (5)
Diameter Corrugated Armor	25.2mm (0.99in)

F/O CABLE SPECIFICATIONS

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

TESTING AND ENVIRONMENTAL

Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Operation Temperature	-40°C to 85°C (-40°F to 185°F)
Installation Temperature	-20°C to 50°C (-4°F to 122°F)
Jacket Specifications	IEC 60332-3-24, UL 1581.sec.1080
LSZH Specification	IEC 60754-1 / 2, IEC 61034-1/2



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

Product Detail