PRODUCT DATASHEET

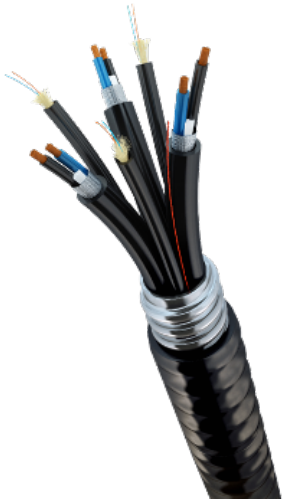
HB078-1-04S3-S6J

HYBRIFLEX™ Direct LTE, Cabling Solution for 3 RRU

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 3 shielded DC cables, 3 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

Technical features

STRUCTURE

Cable Type		3 RRU HYBRIFLEX™ Direct LTE
Size		7/8
Fire Performance		Halogene Free

DC POWER CABLE SPECIFICATIONS

Number of DC Pairs		3
Maximum DC-Resistance Power Cable	Ω/km (Ω/kft)	4.95 (1.51)
Cross Section of Power Cable	mm^2 (AWG)	4 (12)
Shielding		braid
DC Wire Jacket Material		Polyethylene, PE, Metalhydroxite Filling
DC Wire Jacket Thickness	mm (in)	0.5 (0.02)
DC Cable Single Bending Radius	mm (in)	100 (3.94)
DC Cable Diameter	mm (in)	9.9 (0.39)
DC Cable Jacket		UV stable black PE
DC Standards (Meets or Exceeds)		IEC 60231

All values nominal unless tolerances provided; information contained in the present datasheet is subject to confirmation at time of ordering

MECHANICAL SPECIFICATIONS

Cable Weight	kg/m (lb/ft)	0.76 (0.51)
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^2 (AWG)	16 (5)
Diameter Corrugated Armor	mm (in)	25.2 (0.99)

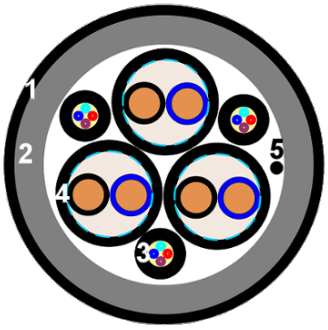
F/O CABLE SPECIFICATIONS

F/O Cable Type		Tight-Buffer, Singlemode
Number of F/O Pairs		6
Core/Clad	µm	9 /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)		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

All values nominal unless tolerances provided; information contained in the present datasheet is subject to confirmation at time of ordering



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

Product Detail

External Document Links
Handling Instruction.pdf
Ordering_code.pdf
Solution Overview_1.pdf
Solution Overview_3.pdf

Notes

All values nominal unless tolerances provided; information contained in the present datasheet is subject to confirmation at time of ordering