PRODUCT DATASHEET

HB012-1-04U1-M2J

HYBRIFLEX™ Standard, Cabling Solution for 1 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 2 DC cables, 1 F/O distribution cables and a rip cord to adjust the breakout part of the cable.



HYBRIFLEX Series

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

Technical features

STRUCTURE

Cable Type		Single RRU HYBRIFLEX™ Standard
Size		1/2
Fire Performance		Halogene Free

DC POWER CABLE SPECIFICATIONS

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

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)	0.23 (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^2 (AWG)	8 (8)
Diameter Corrugated Armor	mm (in)	13.8 (0.54)

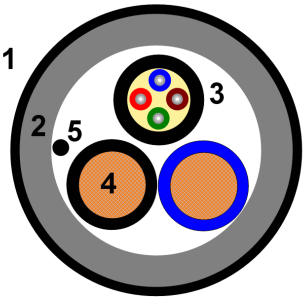
F/O CABLE SPECIFICATIONS

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

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

Product Detail

External Document Links
Handling Instruction.pdf
Ordering_code.pdf
Solution Overview_2.pdf

Notes

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