

**HB078-1-10U4-S8J**

HYBRIFLEX™ Standard LTE, Cabling Solution for 4 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 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 | Halogene Free                 |

**MECHANICAL SPECIFICATIONS**

|                                     |                      |
|-------------------------------------|----------------------|
| Outer Diameter Nominal              | 27.8mm (1.09in)      |
| Cable Weight                        | 1.2kg/m (0.81lb/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&nbsp;DC-Resistance<br>Power Cable | 1.91ohm/1000 m (0.57ohm/1000 ft)         |
| Cross Section of Power Cable              | 10 mm <sup>2</sup> (7 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            | 145mm (5.7in)                            |
| DC Cable Diameter                         | 14.5mm (0.57in)                          |
| DC Cable Jacket                           | UV stable black and blue PE              |
| DC Standards (Meets or Exceeds)           | IEC 60228                                |

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**CABLE JACKET**

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

**ARMOR SPECIFICATIONS**

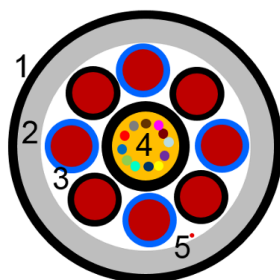
|                                          |                                  |
|------------------------------------------|----------------------------------|
| Armor Type                               | Corrugated Aluminum tube         |
| Maximum DC-Resistance of Armor           | 1.21ohm/1000 m (0.37ohm/1000 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    | not applicable                 |
| LSZH Specification       | not applicable                 |



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

*Product Detail*