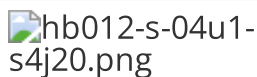


**HB012-S-04U1-S4J20**

HYBRIFLEX™ Standard LTE, 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 wires, 2 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

**Technical Features****STRUCTURE**

|                    |                                    |
|--------------------|------------------------------------|
| Cable Type         | Single RRU HYBRIFLEX™ Standard LTE |
| Size               | 1/2                                |
| Fire Performance   | Halogene Free                      |
| Number of DC Pairs | 1                                  |
| Jacket Material    | UV stable black PE                 |

**MECHANICAL SPECIFICATIONS**

|                                     |                       |
|-------------------------------------|-----------------------|
| Outer Diameter Nominal              | 15.8mm (0.62in)       |
| Cable Weight                        | 0.23kg/m (0.155lb/ft) |
| Minimum Bending Radius              | 70mm (2.7in)          |
| Minimum Bending Radius              | 125mm (5in)           |
| Tensile Strength                    | 150N (33.7lb)         |
| Recommended / Maximum Clamp Spacing | 0.6 / 1 (2 / 3.25)    |
| Jacket Material                     | UV stable black PE    |

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**DC POWER CABLE SPECIFICATIONS**

|                                           |                            |
|-------------------------------------------|----------------------------|
| Maximum&nbsp;DC-Resistance<br>Power Cable | 4.95Ω/km (1.51Ω/kft)       |
| Cross Section of Power Cable              | 4 mm <sup>2</sup> (12 AWG) |
| Shielding                                 | provided by the Al armor   |
| DC Wire Jacket Material                   | Polyethylene, PE           |
| DC Wire Jacket Thickness                  | 0.5mm (0.02in)             |
| DC Cable Single Bending Radius            | 25mm (0.98in)              |
| DC Cable Diameter                         | 5mm (0.19in)               |
| DC Cable Jacket                           | UV stable black PE         |
| DC Standards (Meets or Exceeds)           | IEC 60228                  |

**ARMOR SPECIFICATIONS**

|                                             |                          |
|---------------------------------------------|--------------------------|
| Armor Type                                  | Corrugated Aluminum tube |
| Maximum DC-Resistance of<br>Armor           | 2.78Ω/km (0.85Ω/kft)     |
| Copper Equivalent Cross Section<br>of Armor | 8 (8)                    |
| Diameter Corrugated Armor                   | 13.8mm (0.54in)          |

**F/O CABLE SPECIFICATIONS**

|                                  |                          |
|----------------------------------|--------------------------|
| F/O Cable Type                   | Tight-Buffer, Singlemode |
| Number of F/O Pairs              | 4                        |
| Core/Clad                        | 9 /125                   |
| Secondary Protection Nominal     | 900μm (0.035in)          |
| Single Bending Radius            | 50mm (1.97in)            |
| Cable Diameter mm (in)           | 4.8mm (0.19in)           |
| 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                 |