



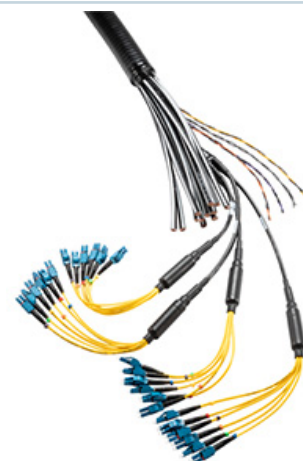
HB158-U12S24-610-LI

HYBRIFLEX® RRH Hybrid Cable Solution 12 x 24, 6AWG, Low-Inductance, 1-5/8", Single-Mode Fiber, DLC Connectors Top and Bottom, 610 ft

RFS' HYBRIFLEX Remote Radio Head (RRH) hybrid feeder cabling solution combines optical fiber and DC power for RRHs in a single lightweight aluminum corrugated cable, making it the world's most innovative solution for RRH deployments. It combines bend-insensitive single-mode fiber (24 pairs of DLC connectors), 12 pairs of low-inductance 6AWG DC wires, and 4 pairs of wires used to carry alarm signals. The package also includes a special RFS-designed DC insulating boot, used to properly protect and insulate the DC wires after stripping the jacket, avoiding possible short-circuits while wiring it to the distribution boxes. Standard RFS CELLFLEX® accessories can be used with HYBRIFLEX cable.

FEATURES / BENEFITS

- DC Wire Insulator (Patented) – Used at the DC wire connection in distribution boxes, prevents potential short circuits
- Aluminum corrugated armor with outstanding bending characteristics – Minimizes installation time and enables mechanical protection and shielding
- Standard RFS CELLFLEX accessories can be used for HYBRIFLEX cable. Saves installation costs and time
- Outer conductor grounding – Eliminates typical grounding requirements and saves on installation costs
- Lightweight solution and compact design – Decreases tower loading
- Robust cabling – Eliminates need for expensive cable trays and ducts
- Optical fiber and power cables housed in single corrugated cable – Saves CAPEX by standardizing RRH cable installation and reducing installation requirements
- Outdoor, flame-retardant jacket – Ensures long-lasting cable protection



Technical features

STRUCTURE

| | | |
|-------------------------|--------|---------------------------|
| Cable Type | | HYBRIFLEX® Low Inductance |
| Size | | 1-5/8 |
| Fire Performance | | Flame Retardant |
| Length | m (ft) | 185.93 (610) |

MECHANICAL SPECIFICATIONS

| | | |
|--|--------------|--------------------|
| Outer Diameter Nominal | mm (in) | 50.19 (1.976) |
| Cable Weight | kg/m (lb/ft) | 4.76 (3.2) |
| Minimum Bending Radius, Single Bend | mm (in) | 254 (10) |
| Minimum Bending Radius, Multi Bends | mm (in) | 508 (20) |
| Recommended / Maximum Clamp Spacing | m (ft) | 1 / 1.2 (3.25 / 4) |



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DC POWER CABLE SPECIFICATIONS

| | | |
|-----------------------------------|-----------------------|---|
| Number of DC Pairs | | 12 |
| Maximum DC-Resistance Power Cable | Ω/km (Ω/kft) | 1.4 (0.41) |
| Cross Section of Power Cable | mm ² (AWG) | 13.3 (6) |
| DC Wire Jacket Material | | PVC/Nylon |
| DC Cable Single Bending Radius | mm (in) | 137 (5.4) |
| DC Cable Diameter | mm (in) | 9.3 (0.365) |
| DC Cable Jacket | | PVC/Nylon |
| DC Standards (Meets or Exceeds) | | For use in Type RHC per UL 2882,PVC/Nylon,RoHS/REACH Compliant (Cable Rating) |
| Break-out length | mm(in) | 812.8 +/-0 (32 +/-0) |
| Alarm Wire | | 8 (4 twisted pairs), 0.8 mm ² (8), 18 AWG |

CABLE JACKET

| | | |
|--|--|-----|
| UV-Protection Individual and External Jacket | | Yes |
|--|--|-----|

ARMOR SPECIFICATIONS

| | | |
|--------------------------------|--------------|---------------------|
| Armor Type | | Corrugated Aluminum |
| Maximum DC-Resistance of Armor | Ω/km (Ω/kft) | 0.59 (0.18) |
| Diameter Corrugated Armor | mm (in) | 46.5 (1.83) |

F/O CABLE SPECIFICATIONS

| | | |
|----------------------------------|---------|--|
| F/O Cable Type | | Single Mode, Bend Tolerant |
| Number of F/O Pairs | | 24 |
| Core/Clad | μm | 9 /125 |
| Secondary Protection Nominal | μm (in) | 900 (0.035) |
| Single Bending Radius | mm (in) | 137 (5.4) |
| F/O Standards (Meets or Exceeds) | | UL Listed Type OFNR (UL1666), F/O Cable Rating ICEA Indoor/Outdoor |
| Optical Loss | dB/Km | 0.5 @ 1310 nm 0.5 @ 1550 nm |
| Fiber Termination End 1 | | LC Connectors, 0.4 dB Loss |
| Fiber Termination End 2 | | LC Connectors, 0.4 dB Loss |
| FO Break-out length | mm(in) | 1777 +/-0 (70 +/-0) |
| Cable sealing method | | Semi-rigid flame-retardant polyolefin, with hot melt adhesive |

TESTING AND ENVIRONMENTAL

| | | |
|---|---------|---|
| Storage Temperature | °C (°F) | -40 to 70 (-40 to 158) |
| Operation Temperature | °C (°F) | -40 to 65 (-40 to 149) |
| Installation Temperature | °C (°F) | -20 to 65 (-4 to 149) |
| Jacket Specifications | | UL2882 Type RHC, UL listed |
| Alarm Wire Standards (Meets or Exceeds) | | UL Standard 1063, 1581 VW-1, MTW Oil and Gasoline RES1 SUNRES (Cable meets UL requirements), RoHS/REACH Compliant |



PRODUCT DATASHEET

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DC Wire Insulator

[External Document Links](#)

[Installation Guidelines](#)

[Quick Ship 2.0 Program Information](#)

[Notes](#)