RADIO FREQUENCY SYSTEMS
T h e   C l e a r   C h o i c e ®

RFS

HYBRIFLEX® RRH Hybrid Cable Solution 12 x 24, 6AWG, Low-Inductance, 1-5/8", Single-Mode Fiber, DLC Connectors Top and Bottom, 180 ft

UL LISTED

HYBRIFLEX Series

DC Wire Insulator

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)	54.86 (180)

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)

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	mm² (AWG)	13.3 (6)
DC Wire Jacket Material		PVC/Nylon
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
Alarm Wire		8 (4 twisted pairs), 0.8 mm2 (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 null
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 (70)
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

RADIO FREQUENCY SYSTEMS
The Clear Choice®

HYBRIFLEX® RRH Hybrid Cable Solution 12 x 24, 6AWG, Low-Inductance, 1-5/8", Single-Mode Fiber, DLC Connectors Top and Bottom, 180 ft

External Document Links	Notes

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All information contained in the present datasheet is subject to confirmation at time of ordering   Page 3 of 3