

FR-N-2SSM-01-60FS

HYBRIFLEX® RRH Optical Fiber Cable, 2 Single Strand, Ruggedized Bend-Insensitive Single-Mode Fiber, LC to Elongated LC Clip, 60 ft

PRODUCT DESCRIPTION

RFS' HYBRIFLEX Remote Radio Head (RRH) hybrid feeder cabling solution combines any combination of optical fiber and/or DC power for RRHs in a single lightweight armored or unarmored cable, making it the world's most innovative solution for RRH deployments. Hybrid, Fiber Optic and DC riser trunk and jumper cables are available in a large variety of fiber counts, DC counts and cross sections. Both pre-connectorized and on-site options are available.

FEATURES / BENEFITS

- Ruggedized, bend-insensitive fiber design with outstanding bending characteristics
- Lightweight solution and compact design Decreases tower loading
- Robust cabling Eliminates need for expensive cable trays and ducts
- Installation of tight bundled fiber optic cable pair directly to the RRH Reduces CAPEX and wind load by eliminating need for interconnection
- Outdoor, black jacket Ensures long-lasting cable protection
- 100% Factory tested Online test results available



TECHNICAL FEATURES

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Cable Type		HYBRIFLEX®
Fire Performance		Flame Retardant
Length	m (ft)	18.3 (60)
MECHANICAL SPECIFICATIONS		
Outer Diameter Nominal	mm (in)	5.5 (0.217)
Cable Weight	kg/m (lb/ft)	0.033 (0.022)
Minimum Bending Radius, Single Bend	mm (in)	66 (2.6)
Minimum Bending Radius, Multiple Bends	mm (in)	83 (3.3)
Recommended / Maximum Clamp Spacing	m (ft)	1 / 1.2 (3.25 / 4)
F/O CABLE SPECIFICATIONS		

NI	umbar of F/O Strands	2
INU	ımber of F/O Strands	Z



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7/O Cable Type		G657-A2 Single Mode, Bend Tolerant
Core/Clad	μm	9/125
Secondary Protection Nominal	μm (in)	900 (0.035)
7/O Standards (Meets or Exceeds)		UL Listed Type OFNR (UL1666), RoHS Compliant
Optical Loss	dB/Km	0.5 @ 1310 nm 0.5 @ 1550 nm
O Break-out Length (Top)	mm (in)	279 (11)
O Break-out Length (Bottom)	mm (in)	228 (9)
Cable Sealing Method		Semi-rigid flame-retardant polyolefin, with hot melt adhesive
iber Termination End 1		LC Connector
Fiber Termination End 2		LC Connector with Elongated Clip
CABLE JACKET		
JV-Protection Individual and external Jacket		Yes
acket Material		Flame Retardant, Indoor/Outdoor, PVC, Black
ESTING AND ENVIRONMENTAL		
Storage Temperature	°C (°F)	-40 to 70 (-40 to 158)
Operation Temperature	°C (°F)	-40 to 65 (-40 to 149)
nstallation Temperature	°C (°F)	-20 to 65 (-4 to 149)
acket Specifications		UL 1666
11"**2.6 [279.4**.05" MM]		9 ^{±20} [229mm]
		TYP. 2 PLACES



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ADDITIONAL ASSEMBLIES - 1 PAIR SM FIBER

Length, ft	Model Number
10	FR-N-1SM-01-10FS
20	FR-N-1SM-01-20FS
30	FR-N-1SM-01-30FS
40	FR-N-1SM-01-40FS
50	FR-N-1SM-01-50FS
60	FR-N-1SM-01-60FS
79	FR-N-1SM-01-70FS
80	FR-N-1SM-01-80FS
90	FR-N-1SM-01-90FS
100	FR-N-1SM-01-100FS

ADDITIONAL ASSEMBLIES - 2 PAIR SM FIBER

Length, ft	Model Number
10	FR-N-2SM-01-10FS
20	FR-N-2SM-01-20FS
30	FR-N-2SM-01-30FS
40	FR-N-2SM-01-40FS
50	FR-N-2SM-01-50FS
60	FR-N-2SM-01-60FS
70	FR-N-2SM-01-70FS
80	FR-N-2SM-01-80FS
90	FR-N-2SM-01-90FS
100	FR-N-2SM-01-100FS



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ADDITIONAL ASSEMBLIES - 1 STRAND SM FIBER

Length, ft Model Number 10 FR-N-1SSM-01-10FS 15 FR-N-1SSM-01-15FS 20 FR-N-1SSM-01-20FS 30 FR-N-1SSM-01-30FS 40 FR-N-1SSM-01-40FS 50 FR-N-1SSM-01-50FS 60 FR-N-1SSM-01-60FS 70 FR-N-1SSM-01-70FS 80 FR-N-1SSM-01-80FS 90 FR-N-1SSM-01-90FS 100 FR-N-1SSM-01-100FS 120 FR-N-1SSM-01-130FS 130 FR-N-1SSM-01-150FS 150 FR-N-1SSM-01-160FS 160 FR-N-1SSM-01-170FS	ADDITIONAL ASSEMBLIES - I STRAIND SWITTER				
15 FR-N-1SSM-01-15FS 20 FR-N-1SSM-01-20FS 30 FR-N-1SSM-01-30FS 40 FR-N-1SSM-01-40FS 50 FR-N-1SSM-01-50FS 60 FR-N-1SSM-01-60FS 70 FR-N-1SSM-01-70FS 80 FR-N-1SSM-01-80FS 90 FR-N-1SSM-01-90FS 100 FR-N-1SSM-01-100FS 120 FR-N-1SSM-01-130FS 130 FR-N-1SSM-01-150FS 150 FR-N-1SSM-01-160FS	Length, ft	Model Number			
20 FR-N-1SSM-01-20FS 30 FR-N-1SSM-01-30FS 40 FR-N-1SSM-01-40FS 50 FR-N-1SSM-01-50FS 60 FR-N-1SSM-01-60FS 70 FR-N-1SSM-01-70FS 80 FR-N-1SSM-01-70FS 90 FR-N-1SSM-01-90FS 100 FR-N-1SSM-01-100FS 120 FR-N-1SSM-01-120FS 130 FR-N-1SSM-01-130FS 150 FR-N-1SSM-01-150FS 160 FR-N-1SSM-01-160FS	10	FR-N-1SSM-01-10FS			
30 FR-N-1SSM-01-30FS 40 FR-N-1SSM-01-40FS 50 FR-N-1SSM-01-50FS 60 FR-N-1SSM-01-60FS 70 FR-N-1SSM-01-70FS 80 FR-N-1SSM-01-70FS 90 FR-N-1SSM-01-80FS 100 FR-N-1SSM-01-100FS 120 FR-N-1SSM-01-120FS 130 FR-N-1SSM-01-130FS 150 FR-N-1SSM-01-150FS 160 FR-N-1SSM-01-160FS	15	FR-N-1SSM-01-15FS			
40 FR-N-1SSM-01-40FS 50 FR-N-1SSM-01-50FS 60 FR-N-1SSM-01-50FS 70 FR-N-1SSM-01-70FS 80 FR-N-1SSM-01-80FS 90 FR-N-1SSM-01-90FS 100 FR-N-1SSM-01-100FS 120 FR-N-1SSM-01-120FS 130 FR-N-1SSM-01-130FS 150 FR-N-1SSM-01-150FS 160 FR-N-1SSM-01-160FS	20	FR-N-1SSM-01-20FS			
50 FR-N-1SSM-01-50FS 60 FR-N-1SSM-01-60FS 70 FR-N-1SSM-01-70FS 80 FR-N-1SSM-01-80FS 90 FR-N-1SSM-01-90FS 100 FR-N-1SSM-01-100FS 120 FR-N-1SSM-01-120FS 130 FR-N-1SSM-01-130FS 150 FR-N-1SSM-01-150FS 160 FR-N-1SSM-01-160FS	30	FR-N-1SSM-01-30FS			
60 FR-N-1SSM-01-60FS 70 FR-N-1SSM-01-70FS 80 FR-N-1SSM-01-80FS 90 FR-N-1SSM-01-90FS 100 FR-N-1SSM-01-100FS 120 FR-N-1SSM-01-120FS 130 FR-N-1SSM-01-130FS 150 FR-N-1SSM-01-150FS 160 FR-N-1SSM-01-160FS	40	FR-N-1SSM-01-40FS			
70 FR-N-1SSM-01-70FS 80 FR-N-1SSM-01-80FS 90 FR-N-1SSM-01-90FS 100 FR-N-1SSM-01-100FS 120 FR-N-1SSM-01-120FS 130 FR-N-1SSM-01-130FS 150 FR-N-1SSM-01-150FS 160 FR-N-1SSM-01-160FS	50	FR-N-1SSM-01-50FS			
80 FR-N-1SSM-01-80FS 90 FR-N-1SSM-01-90FS 100 FR-N-1SSM-01-100FS 120 FR-N-1SSM-01-120FS 130 FR-N-1SSM-01-130FS 150 FR-N-1SSM-01-150FS 160 FR-N-1SSM-01-160FS	60	FR-N-1SSM-01-60FS			
90 FR-N-1SSM-01-90FS 100 FR-N-1SSM-01-100FS 120 FR-N-1SSM-01-120FS 130 FR-N-1SSM-01-130FS 150 FR-N-1SSM-01-150FS 160 FR-N-1SSM-01-160FS	70	FR-N-1SSM-01-70FS			
100 FR-N-1SSM-01-100FS 120 FR-N-1SSM-01-120FS 130 FR-N-1SSM-01-130FS 150 FR-N-1SSM-01-150FS 160 FR-N-1SSM-01-160FS	80	FR-N-1SSM-01-80FS			
120 FR-N-1SSM-01-120FS 130 FR-N-1SSM-01-130FS 150 FR-N-1SSM-01-150FS 160 FR-N-1SSM-01-160FS	90	FR-N-1SSM-01-90FS			
130 FR-N-1SSM-01-130FS 150 FR-N-1SSM-01-150FS 160 FR-N-1SSM-01-160FS	100	FR-N-1SSM-01-100FS			
150 FR-N-1SSM-01-150FS 160 FR-N-1SSM-01-160FS	120	FR-N-1SSM-01-120FS			
160 FR-N-1SSM-01-160FS	130	FR-N-1SSM-01-130FS			
	150	FR-N-1SSM-01-150FS			
170 FR-N-1SSM-01-170FS	160	FR-N-1SSM-01-160FS			
	170	FR-N-1SSM-01-170FS			

ADDITIONAL ASSEMBLIES - 2 STRAND SM FIBER

Length, ft	Model Number
10	FR-N-2SSM-01-10FS
15	FR-N-2SSM-01-15FS
20	FR-N-2SSM-01-20FS
30	FR-N-2SSM-01-30FS
40	FR-N-2SSM-01-40FS
50	FR-N-2SSM-01-50FS
60	FR-N-2SSM-01-60FS
70	FR-N-2SSM-01-70FS
80	FR-N-2SSM-01-80FS
90	FR-N-2SSM-01-90FS
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PRE-PACKED HYBRIFLEX KITS FOR EASY INTEGRATION INTO RAYCAP JUNCTION BOXES

RFS Technologies now offers Kitting options for most hybrid risers and jumpers that include both the cable assembly and the Raycap inserts. For reference, kits have a "K" as the third digit in the model number. HB158 does not require an additional gland/insert for proper installation and sealing into the Distribution Boxes.

Kit Model Prefix	Assembly Prefix	Assembly Qty	Raycap Insert Kit	Insert Kit Contents	Raycap Insert Kit Qty
HBK114	HB114		RFS Technologies- TRUNK-KIT	(2) 190 0620, Insert, M75, 1H, 40mm	
HBK058	HBF058	1	RFS Technologies- JUMP-KIT	(1) 190 0621, Insert, M75, 3H, 22mm, Split w/ plugs	4
HBK012	HBF012		RFS Technologies- JUMP-KIT-2	(1) 190 0903, Insert, M75, 2H, 15mm, Split w/ plugs	
FRK-N	FR-N		RFS Technologies- FIBER-KIT	(1) 190 0657, Insert, M75, 6H, 6.1mm, Split w/ plugs	