HYBRIFLEX® Jumper Cables for 5G Radio Deployments

Hybrid and fiber-only jumpers **simplify installations** in any location, using any power source

Deploying large numbers of 5G radios close to end users is key to mobile operators' strategies as they evolve to 5G. With RFS HYBRIFLEX jumper cables for 5G radios, mobile operators have the flexibility to install this critical 5G equipment on towers, rooftops, light poles, and other locations, and to take advantage of DC or AC power sources.

Hybrid fiber and power jumpers for macro site installations

RFS HYBRIFLEX jumpers for macro sites feature corrugated aluminum armor and are ideal to efficiently bring DC power and optical fiber to:

- **The newest generation of Samsung 5G radios.** These jumpers provide 6 AWG power wires and up to 3 single-strand, single-mode optical fibers. They're available in 15, 30 and 40-foot lengths with additional lengths available on request.
- **Samsung small cell 5G mmWave radios.** These jumpers provide 8 AWG power wires and up to 2 pairs or 2 strands of single-mode optical fibers. They're available in lengths up to 100 feet in 10-foot increments with additional lengths available on request.

Fiber-only jumpers for locations with AC power

RFS HYBRIFLEX fiber-only jumpers are ruggedized for outdoor environments, and are ideal to efficiently bring single-mode optical fiber to **Samsung small cell 5G mmWave radios** on rooftops, light poles and other locations where AC power is already available.

The fiber-only jumpers are available in lengths up to 100 feet in 10-foot increments with additional lengths available on request.

Leveraging field-proven strength and reliability

Like all HYBRIFLEX cables, these jumpers are engineered to hold internal fiber and power lines in place with maximum force without damaging the core components and are fully tested to ensure long-term performance and durability in the field.

Complete test results for the UL-listed jumpers are available on our test performance data tool.

Mobile operators have the flexibility to deploy Samsung 5G radios everywhere they need them

Exclusive Features and Benefits
RFS is your single source for 5G evolution

- **Hybrid and fiber-only configurations**
  Simplifies Samsung 5G radio deployments in any location

- **Available in a wide variety of lengths**
  Supports any installation scenario

- **100% electrically tested with test results available online**
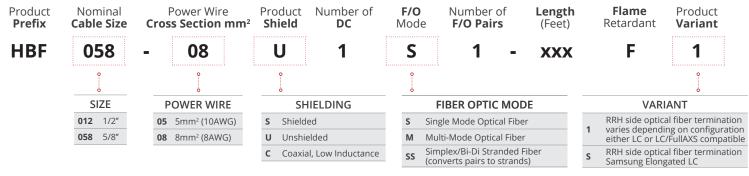 *Ensures jumpers meet performance specifications and requirements*

- **UL-Listed**
  Meets the most stringent industry standards for maximum safety and product quality

- **Weather- and corrosion-resistant construction**
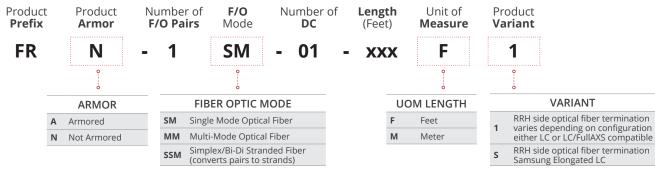 *Extends jumper lifespan in any conditions*

Hybrid and Fiber Only Cable Assemblies (typical for Samsung applications)

Model Number*	Product Configuration	Connector Interface
FR-N-1SM-01-xxFS	Fiber Jumper, Riser, Ruggedized, 1 Pair SM Fiber	Bottom Optical Fiber Termination: LC

Top Optical Fiber Termination: Elongated LC |
FR-N-2SM-01-xxFS	Fiber Jumper, Riser, Ruggedized, 2 Pair SM Fiber	
FR-N-1SSM-01-xxFS	Fiber Jumper, Riser, Ruggedized, 1 Strand SM Fiber	
FR-N-2SSM-01-xxFS	Fiber Jumper, Riser, Ruggedized, 2 Strand SM Fiber	
HBF058-08U1S1-xxFS	HYBRIFLEX Hybrid Jumper,1 Pair 8AWG DC, 1 Pair SM Fiber UL	
HBF058-08U1S2-xxFS	HYBRIFLEX Hybrid Jumper, 1 Pair 8AWG DC, 2 Pair SM Fiber UL	
HBF058-08U1SS-xxFS	HYBRIFLEX Hybrid Jumper,1 Pair 8AWG DC, 1 Strand SM Fiber UL	
HBF058-08U1SS2-xxFS	HYBRIFLEX Hybrid Jumper,1 Pair 8AWG DC, 2 Strand SM Fiber UL	
HBF058-13U1SS-xxFS	HYBRIFLEX Hybrid Jumper,1 Pair 6AWG DC, 1 Strand SM Fiber UL	
HBF058-13U1SS2-xxFS	HYBRIFLEX Hybrid Jumper,1 Pair 6AWG DC, 2 Strand SM Fiber UL	
HBF058-13U1SS3-xxFS	HYBRIFLEX Hybrid Jumper,1 Pair 6AWG DC, 3 Strand SM Fiber UL	

Hybrid Assembly Model Structure

Product Prefix	Nominal Cable Size	Power Wire Cross Section mm²	Product Shield	Number of DC	F/O Mode	Number of F/O Pairs	Length (Feet)	Flame Retardant	Product Variant
HBF	058	- 08	U	1	S	1	- xxx	F	1

SIZE	
012	1/2"
058	5/8"

POWER WIRE	
05	5mm² (10AWG)
08	8mm² (8AWG)

SHIELDING	
S	Shielded
U	Unshielded
C	Coaxial, Low Inductance

FIBER OPTIC MODE	
S	Single Mode Optical Fiber
M	Multi-Mode Optical Fiber
SS	Simplex/Bi-Di Stranded Fiber (converts pairs to strands)

VARIANT	
1	RRH side optical fiber termination varies depending on configuration either LC or LC/FullAXS compatible
S	RRH side optical fiber termination Samsung Elongated LC

Fiber Assembly Model Structure

Product Prefix	Product Armor	Number of F/O Pairs	F/O Mode	Number of DC	Length (Feet)	Unit of Measure	Product Variant
FR	N	- 1	SM	- 01	- xxx	F	1

ARMOR	
A	Armored
N	Not Armored

FIBER OPTIC MODE	
SM	Single Mode Optical Fiber
MM	Multi-Mode Optical Fiber
SSM	Simplex/Bi-Di Stranded Fiber (converts pairs to strands)

UOM LENGTH	
F	Feet
M	Meter

VARIANT	
1	RRH side optical fiber termination varies depending on configuration either LC or LC/FullAXS compatible
S	RRH side optical fiber termination Samsung Elongated LC

*The X's in the model number denote jumper lengths. For example, HBF058-08U1S1-10FS is a 10ft long jumper. Please visit our eCatalog for available lengths.