



Protecting  
Lives with  
**LAND  
MOBILE  
RADIO**  
Solutions





## RELIABLE AND RESILIENT SOLUTIONS TO KEEP FIRST RESPONDERS CONNECTED DURING EMERGENCIES

Land Mobile Radio (LMR) solutions play a vital role in ensuring first responders stay connected with each other, with command and dispatch centers, and with critical information systems during public safety emergencies. As a result, they're an integral part of every public safety strategy.

With the mission-critical role LMR solutions play in public safety communications, they must be fully available, uncompromisingly reliable, and highly resilient, no matter what type of natural or manmade disaster or event is unfolding. And they must support redundancy so LMR communications can be rerouted if primary connections are compromised.

### PUTTING OUR RF EXPERTISE TO WORK FOR PUBLIC SAFETY

At RFS, we've always believed we have a responsibility to develop solutions that help protect the public and its safety. Throughout the course of our long history, we've developed many solutions that help first responders and the public stay connected, even when they're in the most challenging locations and facing the most extreme hazards.

Our solutions for public safety communications include:

- RADIAFLEX® radiating cables that take mission-critical communications underground, into tunnels and throughout the largest venues
- ClearFill®Line plenum-rated coaxial cables, including our best-in-class red plenum UHF/VHF cables for in-building DAS (iDAS) and outdoor DAS (oDAS) emergency communications applications
- Antennas that are optimized for UHF, VHF and other frequencies below 1 GHz
- Passive couplers that uniformly distribute RF signals within emergency communications systems

Our most recent major contribution to the public safety ecosystem is RFS DragonSkin™, the first plenum cable certified to transmit RF signals after two hours at 1000 °C with no additional protection. This UL-2196-certified cable is key giving firefighters the confidence their LMR communications systems will continue to operate reliably while they're inside burning buildings. Now that protects lives.

At RFS, we have 120 years' experience taking our customers through the evolution of telecoms. From the advent of wireless technology, to the latest 5G and Public Safety innovations, we have a core understanding of how the industry landscape shifts and how to help our customers make the most of new developments, while minimizing the risk of their investments.



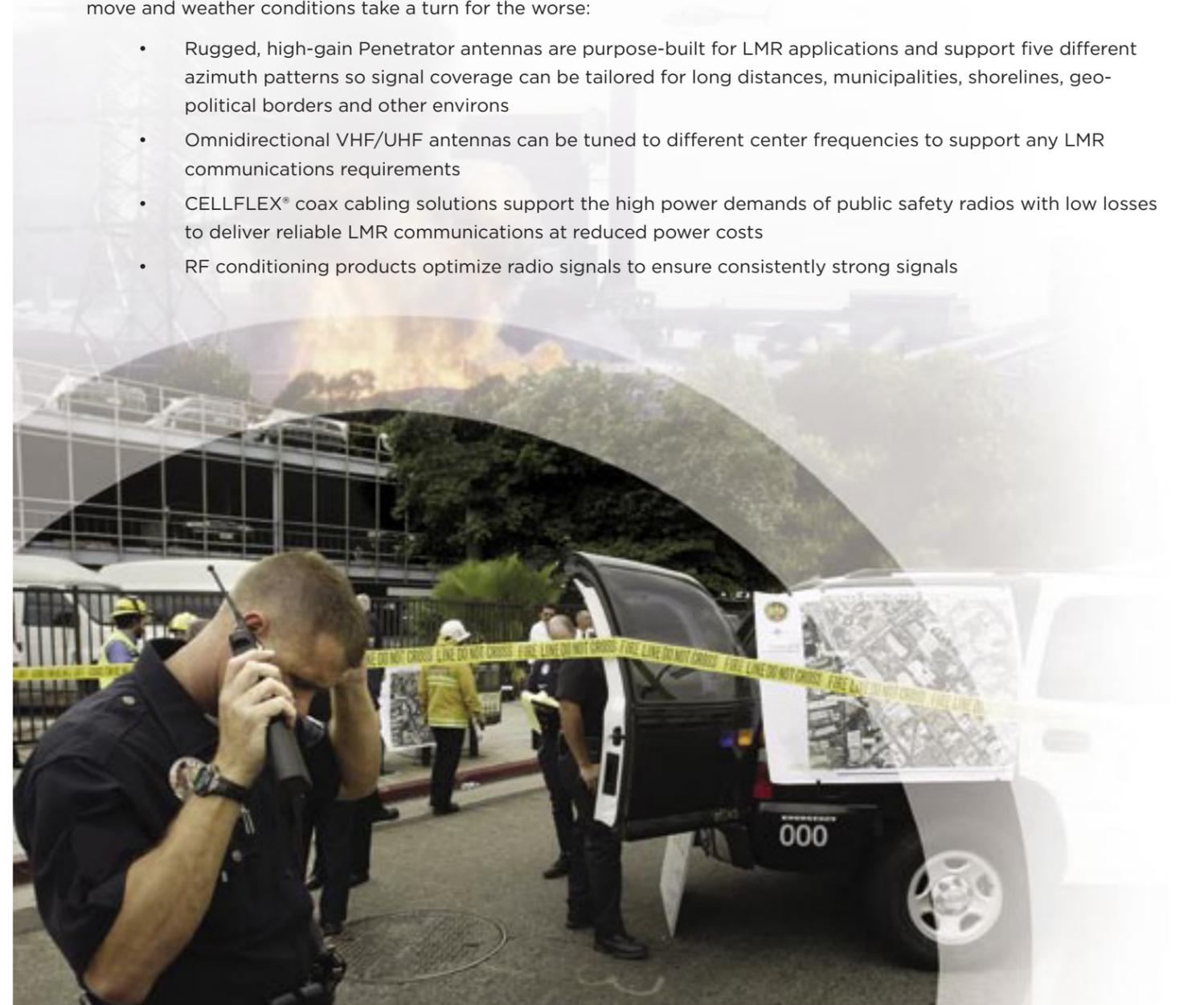
## DISCOVER THE IDEAL LMR SOLUTIONS FOR EVERY ENVIRONMENT

Our end-to-end LMR solutions let you take mission-critical public safety communications everywhere — across vast outdoor landscapes into buildings of all sizes and underground into tunnels and mines. Every solution component is optimized for durability and performance to deliver the highly reliable coverage needed for seamless LMR communications in any environment.

### OUTDOORS: MAINTAIN TARGETED RADIO COVERAGE AT ALL TIMES

Our outdoor LMR solutions ensure public safety communications never cut out, even when first responders are on the move and weather conditions take a turn for the worse:

- Rugged, high-gain Penetrator antennas are purpose-built for LMR applications and support five different azimuth patterns so signal coverage can be tailored for long distances, municipalities, shorelines, geo-political borders and other environs
- Omnidirectional VHF/UHF antennas can be tuned to different center frequencies to support any LMR communications requirements
- CELLFLEX® coax cabling solutions support the high power demands of public safety radios with low losses to deliver reliable LMR communications at reduced power costs
- RF conditioning products optimize radio signals to ensure consistently strong signals





# OUTDOOR LMR SOLUTIONS

## Coaxial Cables, Connectors and Tools

NOMINAL DIAMETER	CABLE TYPE	CONNECTORS	PREP TOOLS		
1/2 inch	SCF12-50J CELLFLEX® Superflexible Foam-Dielectric Coaxial Cable	43F-SCF12-D01	TRIM-SET-S12-D01 TRIM-SCF12-D01-A		
		43M-SCF12-D01			
		43MR-SCF12-D01			
		716F-SCF12-D01			
		716M-SCF12-D01			
		716MR-SCF12-D01			
		43F-SCF12-E01			
		43M-SCF12-E01			
		43MR-SCF12-E01			
		716F-SCF12-E01			
		716M-SCF12-E01			
		716MR-SCF12-E01			
		NF-SCF12-E01			
		NM-SCF12-E01			
		NMR-SCF12-E01			
		1/2 inch	LCF12-50J CELLFLEX® Low-Loss Foam-Dielectric Coaxial Cable	716M-SCF12-C03	TRIM-SET-S12-C02
				NM-SCF12-C03	
				716F-SCF12-C03	
				NF-SCF12-C03	
				716MR-SCF12-C03	
1/2 inch	LCF12-50J CELLFLEX® Low-Loss Foam-Dielectric Coaxial Cable  LCF12-50JL CELLFLEX® Lite Low-Loss Foam-Dielectric Coaxial Cable	43F-LCF12-D01	TRIM-SET-L12-D01 TRIM-LCF12-D01-A		
		43M-LCF12-D01			
		43MR-LCF12-D01			
		716F-LCF12-D01			
		716M-LCF12-D01			
		716MR-LCF12-D01			
		43F-LCF12-E01			
		43M-LCF12-E01			
		43MR-LCF12-E01			
		716F-LCF12-E01			
		716M-LCF12-E01			
		716MR-LCF12-E01			
		NF-LCF12-E01			
		NM-LCF12-E01			
		NMR-LCF12-E01			
		1/2 inch	LCF12-50JL CELLFLEX® Lite Low-Loss Foam-Dielectric Coaxial Cable	716M-LCF12-C03	TRIM-SET-L12-C02
				NM-LCF12-C03	
				716F-LCF12-C03	
				NF-LCF12-C03	
				716MR-LCF12-C03	



## Coaxial Cables, Connectors and Tools

NOMINAL DIAMETER	CABLE TYPE	CONNECTORS	PREP TOOLS		
7/8 inch	LCF78-50JA CELLFLEX® Low-Loss Foam-Dielectric Coaxial Cable  LCF78-50JL CELLFLEX® Lite Low-Loss Foam-Dielectric Coaxial Cable	43F-LCF78-D01	TRIM-SET-L78-D01 TRIM-LCF78-D01-A		
		43M-LCF78-D01			
		716F-LCF78-D01K			
		716M-LCF78-D01K			
		716MR-LCF78-D01			
		43F-LCF78-E01			
		43F-LCF78-E01K			
		43M-LCF78-E01			
		43M-LCF78-E01K			
		716F-LCF78-E01			
		716F-LCF78-E01K			
		716M-LCF78-E01			
		716M-LCF78-E01K			
		NF-LCF78-E01			
		NF-LCF78-E01K			
		7/8 inch	LCF78-50JL CELLFLEX® Lite Low-Loss Foam-Dielectric Coaxial Cable	NM-LCF78-E01	TRIM-SET-L78-C02
				NM-LCF78-E01K	
				716M-LCF78-C03	
				NM-LCF78-C03	
				716F-LCF78-C03	
NF-LCF78-C03					
1-1/4 inch	UCF114-50JA-AO CELLFLEX® Ultraflexible Foam-Dielectric Coaxial Cable  UCF114-50JL CELLFLEX® Lite Ultraflexible Foam-Dielectric Coaxial Cable	716F-LCF114-D01K	TRIM-SET-L114-D01 TRIM-LCF114-D01-A		
		716M-LCF114-D01K			
		43F-LCF114-E01			
		43F-LCF114-E01K			
		43M-LCF114-E01			
		43M-LCF114-E01K			
		716F-LCF114-E01			
		716F-LCF114-E01K			
		716M-LCF114-E01			
		716M-LCF114-E01K			
		NF-LCF114-E01			
		NF-LCF114-E01K			
		NM-LCF114-E01			
		NM-LCF114-E01K			

# OUTDOOR LMR SOLUTIONS

## Coaxial Cables, Connectors and Tools

NOMINAL DIAMETER	CABLE TYPE	CONNECTORS	PREP TOOLS
1-5/8 inch	<b>LCF158-50JA-AO</b> CELLFLEX® Low-Loss Foam-Dielectric Coaxial Cable  <b>LCF158-50JL</b> CELLFLEX® Lite Low-Loss Foam-Dielectric Coaxial Cable	716F-LCF158-D01K	TRIM-LCF158-D01-A
		716M-LCF158-D01K	
		43F-LCF158-E01	
		43F-LCF158-E01K	
		43M-LCF158-E01	
		43M-LCF158-E01K	
		716F-LCF158-E01	
		716F-LCF158-E01K	
		716M-LCF158-E01	
		716M-LCF158-E01K	
		NF-LCF158-E01	
		NF-LCF158-E01K	
		NM-LCF158-E01	
		NM-LCF158-E01K	

## Accessories: Weatherproofing

DESCRIPTION	TYPE	MODEL NUMBER
Kit consists of: 6 rolls of butyl mastic tape, 63 mm x 0.60 m (2-1/2" x 2') 1 roll black electrical tape, 50 mm x 6 m (2" x 20') 2 rolls black electrical tape, 19 mm x 20 m (3/4" x 66')	Butyl	<b>WPGF-1</b>
CELL-Tape Black 1x15ft	Self bonding silicone tape	<b>CTAPE-1</b>
Cold Shrink 12 (58) - 12 (78)	Cold Shrink	<b>COLD-020</b>
Cold Shrink 12 (58) - 158 (114)	Cold Shrink	<b>COLD-022</b>

## Accessories: Grounding Kits

CABLE SIZE	GROUND LEAD LENGTH, IN	LUG STYLE	MODEL NUMBER
1/2" cables	60	Field Install	<b>GKFORM60-12</b>
7/8" cables	60	Field Install	<b>GKFORM60-78</b>
	60	Field Install	<b>GKSPEED60-78S</b>
1-1/4" cables	60	Field Install	<b>GKFORM60-114</b>
1-5/8" cables	60	Field Install	<b>GKFORM60-158</b>

## RF Conditioning

MODEL NUMBER	PRODUCT TYPE	FREQUENCY, MHZ	CONNECTOR
<b>633-A-2</b>	Mobile Duplexer	440-470 5 MHz Spacing	BNC
<b>633-A-2N</b>	Mobile Duplexer	440-470 5 MHz Spacing	N
<b>633-A-7</b>	Mobile Duplexer	406-470	BNC
<b>633-6A-5</b>	Mobile Duplexer	406-450	BNC
<b>636-6A-2-2</b>	Mobile Duplexer	155-162	BNC
<b>636-6A-2-3</b>	Mobile Duplexer	155-162	BNC
<b>636-6A-2-4</b>	Mobile Duplexer	155-162	BNC
<b>636-6A-3-2</b>	Mobile Duplexer	162-174	BNC
<b>941-PB4-2N-3</b>	Preselector	440-474	N

## Optical Fiber Cable

MODEL NUMBER	SINGLE-MODE FIBER	FIBER TERMINATION	JACKET
<b>FR-N-1SM-01-xx</b>	1 Pair	DLC (both ends)	Flame Retardant, Indoor/Outdoor, PVC, Black UL 1666
<b>FR-N-2SM-01-xx</b>	2 Pairs		
<b>FR-N-3SM-01-xx</b>	3 Pairs		
<b>FR-N-4SM-01-xx</b>	4 Pairs		
<b>FR-N-6SM-01-xx</b>	6 Pairs		

## SPOTLIGHT: POWER AND FIBER SOLUTIONS

Rely on field-proven quality and reliability



HYBRIFLEX riser and jumper cables include any combination of power wires, optical fiber and other cable types in a single lightweight and crush-resistant cable. These extensively field-proven cable solutions reduce installation time, complexity and cost.

More than 65 million feet of HYBRIFLEX cables have been deployed worldwide in outdoor deployments. Using HYBRIFLEX can significantly reduce installation time compared to installing individual power, fiber optic and other cable types.

To ensure easy installation and long life in the field, HYBRIFLEX cables feature:

- Best-in-class bending radius
- Robust, corrugated aluminum or copper-wrapped armor
- Strong core retention force
- Proven corrosion resistance
- Learn more in our [NEW SELECTION GUIDE](#)



# OUTDOOR LMR SOLUTIONS



## Omnidirectional Antennas

MODEL NUMBER	FREQUENCY, MHZ	GAIN, DBI	CONNECTOR TYPE
BA1010-7	133-151	2.1	NF
BA1312-4	218-225	5.1	NF
BA1012-0	118-174	2.1	NF
BA1312-0	118-174	5.1	NF
BA1010-5	120-132	2.1	NF
BA1012-1	144-162	2.1	NF
BA1010-1	146-164	2.1	NF
BA1312-1	149-156	5.1	NF
BA1012-2	154-174	2.1	NF
BA1010-2	154-174	2.1	NF
BA1312-2	156-163	5.1	NF
BA1312-3	163-171	5.1	NF
BA1012-4	218-225	2.1	NF
BA6312-5	380-400	5.1	NF
BA6110-3	380-440	2.1	NF
BA6110-1	400-470	2.1	NF
BA6012-0	406-512	2.1	NF
BA6312-0	406-512	5.1	NF
BA6312-6	410-430	5.1	NF
BA6312-1	449-467	5.1	NF
BA6312-2	449-467	5.1	NF
BA6012-1	449-471	2.1	NF
BA6110-2	450-512	2.1	NF
BA6012-2	468-492	2.1	NF

## Omnidirectional Penetrator Antennas

MODEL NUMBER	FREQUENCY, MHZ	GAIN, DBI	BEAMWIDTH
BMR6-O-B1	806-869	8.1	360
BMR6-H-B1	806-869	11.5	dual
BMR6-D-B1	806-869	12.4	120
BMR8-B-B1	806-869	14.1	140
BMR8-A-B1	806-869	12.4	220
BMR8-O-B1	806-869	10.1	360
BMR8-H-B1	806-869	13.5	Dual
BMR8-D-B1	806-869	14.4	120
BMR10-O-B1	806-869	12.1	360
BMR10-H-B1	806-869	15.5	Dual
BMR10-D-B1	806-869	16.4	120
BMR10-B-B1	806-869	16.1	140
BMR10-A-B1	806-869	14.4	220
BMR12-O-B1	806-869	14.1	360
BMR12-H-B1	806-869	17.5	Dual
BMR12-D-B1	806-869	18.4	120
BMR12-B-B1	806-869	18.1	140
BMR12-A-B1	806-869	16.4	220
BPS10-A-B1	746-806	14.4	220
BPS10-B-B1	746-806	16.1	140
BPS10-D-B1	746-806	16.4	120
BPS10-H-B1	746-806	15.5	Dual
BPS10-O-B1	746-806	12.1	360
BPS10S-O-B1	746-806	12.1	360

### SPOTLIGHT: PENETRATOR PUBLIC SAFETY ANTENNAS

Unique Side-Fed Dipole Design



Penetrator public safety antennas are available in lengths up to 20 feet to provide focused RF coverage across even the most expansive areas. They also feature a larger diameter than typical cellular antennas to ensure they never bend in high winds. Their extremely robust construction eliminates the potential for tip deflection, which can alter signal direction during storms, when the ability to communicate over the public safety network is at its most critical.

With very high null fill in all five radiation patterns, Penetrator antennas deliver strong and consistent signal coverage at all angles. And multiple center feed points maintain consistent radiation patterns across wide frequency ranges, even when the antenna is tilted downwards to focus coverage on a municipality.





## DISCOVER THE IDEAL LMR SOLUTIONS FOR EVERY ENVIRONMENT

In a LMR installation, there is only one opportunity to “get it right”. Radio Frequency Systems offers the RF experience and know-how to ensure success. Our end-to-end LMR wireless solutions and know-how streamline the deployment of advanced wireless communications for essential and emergency services to ensure success.

### INDOORS: DISTRIBUTE RADIO COVERAGE EVENLY THROUGHOUT BUILDINGS

Our indoor LMR solutions let you fine-tune and protect in-building coverage to ensure first responders always have access to consistent and reliable radio communications without interfering with the macro network communications occurring just outside the building:

- Best-in-class ClearFill®Line and DragonSkin™ plenum-rated cables protect communications throughout the air-handling space in buildings
- CELLFLEX coax cables in low-loss and superflexible versions bring performance and ease-of-installation to any in-building deployment
- RADIAFLEX® radiating cables extend public safety communications to basements, parking garages and other challenging areas in buildings
- Compact and lightweight indoor antennas deliver high performance and low visual impact
- Combiners and couplers distribute RF signals in the most efficient and effective way possible
- Diplexers and triplexers combine and separate signals in different wireless bands
- Power splitters evenly split input signals with minimal reflections or loss
- Loads terminate all types of open RF ports

### MAXIMUM PROTECTION FROM FIRE

In addition to our industry-leading ClearFillLine and DragonSkin plenum-rated cables, we offer CELLFLEX coax cables and RADIAFLEX radiating cables with a specialized halogen-free, non-corrosive jacket. The flame- and fire-retardant jacket meets major international standards for low-smoke emission and fire resistance to help keep first responders connected in burning buildings.



## SAFETY IS KEY

## WE TAKE EVERY STEP POSSIBLE TO REDUCE INTERFERENCE

Passive intermodulation (PIM) interference is a major problem in every wireless system, but it’s a particularly challenging and critical issue in LMR systems.

The high power levels typically needed to support LMR communications can increase PIM interference. At the same time, LMR communications must be extremely reliable, which means LMR systems are particularly intolerant to interference.

To ensure LMR systems can deliver public safety communications in an efficient and reliable way, every system component must be fully optimized and tested to minimize PIM and sustain maximum throughput.

### PAINSTAKING PROCESSES TO MINIMIZE PIM

RFS knows how important low PIM interference is in LMR systems. And we understand how to control PIM during all phases of product development, manufacturing, delivery and deployment. Our experts ensure our LMR solutions always provide excellent PIM ratings by:

- Carefully selecting materials with no ferromagnetic components or even residual fragments of ferromagnetic elements
- Meticulously cleaning our manufacturing facilities to eliminate PIM-causing contaminants
- Ensuring there are no poor solder or welding joints, loose connections or dissimilar metal junctions, no oxidization between metal surfaces or too many contact points
- Running comprehensive static and dynamic PIM tests to ensure only PIM-free products are shipped to our customers
- Following rigorous best practices in site design, installation and maintenance to keep PIM levels as low as possible

### RELIABLE PERFORMANCE THAT WON'T FADE

No one can afford to be surprised when high PIM levels mean LMR systems don't perform as expected or as specified. Our exhaustive efforts to identify and minimize PIM sources are another example of how we go above and beyond the efforts of other vendors to ensure reliable LMR system operation and stable PIM performance that won't fade, even under adverse conditions, for many years.



# INDOOR LMR SOLUTIONS

## Plenum-Rated Cables

MODEL NUMBER	FREQUENCY	DESCRIPTION
ICA12-50JPLR	Up to 6 GHz	1/2" ClearFill®Line Copper Plenum-Rated Air-Dielectric Coaxial Cable for In-Building Applications, Red Jacket
ICA12-50JPLLR-ARMR	Up to 6 GHz	Armored 1/2" ClearFill®Line Aluminum Plenum-Rated Air-Dielectric Coaxial Cable for In-Building Applications
ICA12-50JPLLR	Up to 6 GHz	1/2" ClearFill®Line Aluminum Plenum-Rated Air-Dielectric Coaxial Cable for In-Building Applications, Red Jacket

## CELLFLEX Flame-Retardant Cables

SIZE	CABLE	CHARACTERISTIC	FIRE CLASS
1/2"	SCF12-50 JFN	Superflexible	B2ca s1a d0 a1
1/2"	LCF12-50 JFN	Low Loss	B2ca s1 d0 a1
7/8"	LCF78-50 JFNA	Low Loss	B2ca s1a d0 a1
1-1/4"	LCFS114-50 JFNA	Low Loss	B2ca s1b d0 a1 / B2ca s1b d2 a1
1-5/8"	LCF158-50 JFNA	Low Loss	Cca s1a d0 a1 / Cca s1a d2 a1

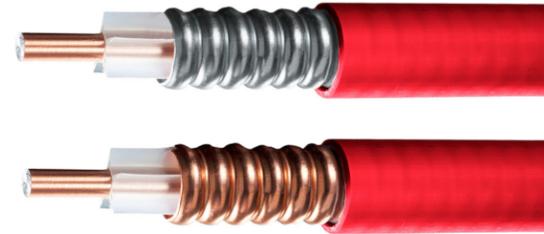
## Plenum-Rated Jumper Cables

SIZE	MODEL NUMBER	CHARACTERISTIC	CONNECTOR A	CONNECTOR B	LENGTH, M (FT)
1/2"	43M43MI12P-03OFFP	Blue, PVC	4.3-10 Male	4.3-10 Male	0.91 (3)
1/2"	43M7MI12P-03OFFP	Blue, PVC	4.3-10 Male	7-16 Male	0.91 (3)
1/2"	43MNM12P-03OFFP	Blue, PVC	4.3-10 Male	N Type Male	0.91 (3)
1/2"	7M7MI12P-03OFFP	Blue, PVC	7-16 Male	7-16 Male	0.91 (3)
1/2"	7MNM12P-03OFFP	Blue, PVC	7-16 Male	N Type Male	0.91 (3)
1/2"	NMNM12P-03OFFP	Blue, PVC	N Type Male	N Type Male	0.91 (3)

RFS offers models with white jackets, 1/4" diameter cable, of varying lengths in m (ft) increments.

## RADIAFLEX Radiating Cables

CABLE	JACKET OPTIONS		
	JFNA	JFLA	CPR
RADIAFLEX RLK types 1/2"	C s1a d1 a1	Cca s1a d0 a1	B2ca s1a d0 a1
RADIAFLEX RLK, RLF, RAY types 7/8"	Dca s1b d2 a1	Dca s1b d2 a1	B2ca s1a d0 a1
RADIAFLEX RLK, RLF, RAY types 1-1/4"	Dca s1 d2 a1	Dca s1 d2 a1	B2ca s1b d0 a1
RADIAFLEX RLK, RLF, RAY types 1-5/8"	Dca s2 d2 a1	Cca s1b d1 a1	B2ca s1a d0 a1



## DAS Components

MODEL NUMBER	FREQUENCY, MHZ	DESCRIPTION	INTERFACE
PDS2E-130/470	130 - 470 MHZ	4 Way Power Splitter	N Female
PDS3E-130/470	130 - 470 MHZ	5 Way Power Splitter	N Female
PDS4E-130/470	130 - 470 MHZ	6 Way Power Splitter	N Female
CDS6E-130/470	130 - 470 MHZ	Directional Coupler	N Female
CDS10E-130/470	130 - 470 MHZ	Directional Coupler	N Female
CDS15E-130/470	130 - 470 MHZ	Directional Coupler	N Female
CDS20E-130/470	130 - 470 MHZ	Directional Coupler	N Female
CDS30E-130/470	130 - 470 MHZ	Directional Coupler	N Female
CDS-80/2700	80-2700 MHZ	Directional Coupler	N Female

## Services 360 - From Concept to Construction

Because we design and manufacture end-to-end RF solutions, we know exactly which environments solution components can and cannot withstand, the best techniques to install them and how to optimize their performance over the long term. No matter how complex the project, we provide a single point of contact and long-range visibility into every phase of the deployment process and the ecosystem of network experts involved.

RFS goes well beyond other services companies to deliver the end-to-end RF solutions, expertise and oversight needed for smooth, efficient deployments in wireless, broadcast and defense networks in any location. Learn how our turnkey indoor communications solutions extended safety-critical wireless coverage to every area on 30 oil and gas platforms in Brazil. [Read the full story on our WEBSITE](#)



## DRAGONSKIN™ UL2196 CERTIFIED COAX CABLE

Keep Communications Alive to Save Lives

RFS DragonSkin is the ultimate fire-resistant coax cable. It is the first and only RF communications cable that's been proven to successfully deliver RF signals after a minimum 2-hour burn time and sudden exposure to water without a metal conduit, extensive wrapping or a fire-resistant enclosure.

DragonSkin is UL 2196-certified and meets NFPA 72 Survivability standards. And it installs like a regular cable to lower total cost of ownership:

- 0.54-inch diameter
- 8-inch bending radius
- Lightweight
- Learn more at [www.dragonskincable.com](http://www.dragonskincable.com)





## DISCOVER THE IDEAL LMR SOLUTIONS FOR EVERY ENVIRONMENT

RFS is the global leader in communications solutions for tunnels. Our in-tunnel solutions have been delivering high quality, uninterrupted communications in some of the world's most high-profile and challenging tunnels for more than four decades.

### UNDERGROUND: TAKE PUBLIC SAFETY RADIO COVERAGE INTO TUNNELS OF ALL TYPES AND SIZES

Our LMR solutions for underground environments are ideal for public safety communications in road and rail tunnels, metro lines and stations, and mines.

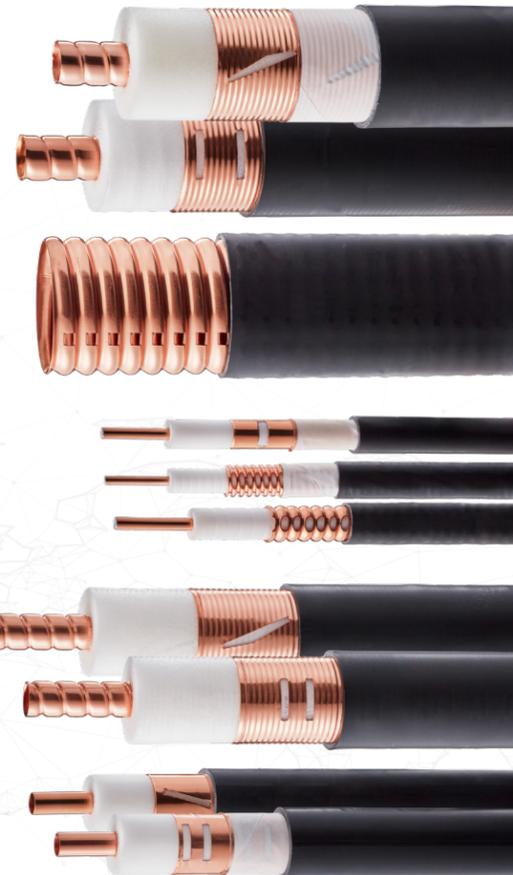
RADIAFLEX radiating cables for mission-critical radio communications underground are available in several families to meet any LMR application requirements:

- Support frequencies from 75 MHz to 960 MHz
- Choose cable diameters from 1/2-inch to 1 5/8-inch
- Select cable versions that are optimized for low coupling loss, small bending radii and heavy-duty applications such as mining

### THE WORLD'S LEADING RADIATING CABLE SOLUTION

RADIAFLEX radiating cables deliver highly reliable wireless communications in some of the world's most iconic buildings and tunnels, and in 41% of the world's metros. Here are just a few of the many high-profile RADIAFLEX deployments globally:

- New York Metro
- Boston Metro
- Grand Paris Express rapid transit line
- Montreal metro
- Hong Kong metro
- Los Angeles metro
- Saint Petersburg metro
- Toronto metro
- Singapore metro
- New York East Side Access rail route
- London Crossrail railway network
- Eurotunnel
- Atlanta metro
- Fréjus Road Tunnel
- São Paulo metro



## UNDERGROUND LMR SOLUTIONS

### RADIAFLEX Radiating Cables

MODEL SERIES	SIZE	OPERATING FREQ, MHZ	SLOT DESIGN	FREQUENCY SELECTION, MHZ
<b>MISSION CRITICAL RADIO APPLICATION</b>				
RLK158-50	1-5/8"	980 Maximum	Groups of vertical slots at short intervals	600, 900
RLK114-50	1-1/4"			
RLK78-50	7/8"			
RLK12-50	1/2"			
RLKW114-50	1-1/4"	1950 Maximum		600, 900, 1800/1900
RLKW78-50	7/8"			
RLKW12-50	1/2"			
<b>GSM-R APPLICATIONS</b>				
RAY158-50	1-5/8"	1000 Maximum	Groups of slope slots at short intervals	600, 900
RAY114-50	1-1/4"			
RAY78-50	7/8"			
<b>DIVERSE APPLICATIONS</b>				
RCF12-50	1/2"	6000 Maximum	Milled (Two-Row)	600, 900, 1800/1900, 2200, 2400, 2500, 2700, 6000
RCF78-50	7/8"	3800 Maximum		600, 900, 1800/1900, 2200, 2400, 2500, 2700
RLFU158	1-5/8"	2400 Maximum	Slot groups in large intervals of approx. 22 m	Contact RFS for information
RLFU114	1-1/4"			
RLFU78	7/8"			

### SPOTLIGHT: MSHA-APPROVED CABLES

RFS Cables Designed for Mining Applications

To help increase safety in mines, we offer a variety of CELLFLEX coax cables and RADIAFLEX radiating cables that meet US Mine Safety and Health Administration (MSHA) requirements for mine safety.

Our MSHA-approved cables support broadband communications from 30 MHz to 6 GHz so you can take one-way and two-way FM, VHF, UHF, cellular, PCS, Wi-Fi, WiMAX, 3G and 4G communications throughout mines, vehicles and buildings. With their broadband frequency support, a single cable can simultaneously support multiple communications systems.

Our rugged RCF-series RADIAFLEX radiating cables are particularly well suited to mining applications. They feature low coupling loss and no stopbands to improve underground signal radiation and increase the distance between amplification points for lower total system costs.

All of our MSHA-approved, low-loss foam dielectric communications cables combine flexibility, high strength and excellent electrical performance and feature a flame-retardant jacket. They're built for easy handling and easy preparation for connector attachment with high resistance to connector pull-off. [Learn More](#)





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