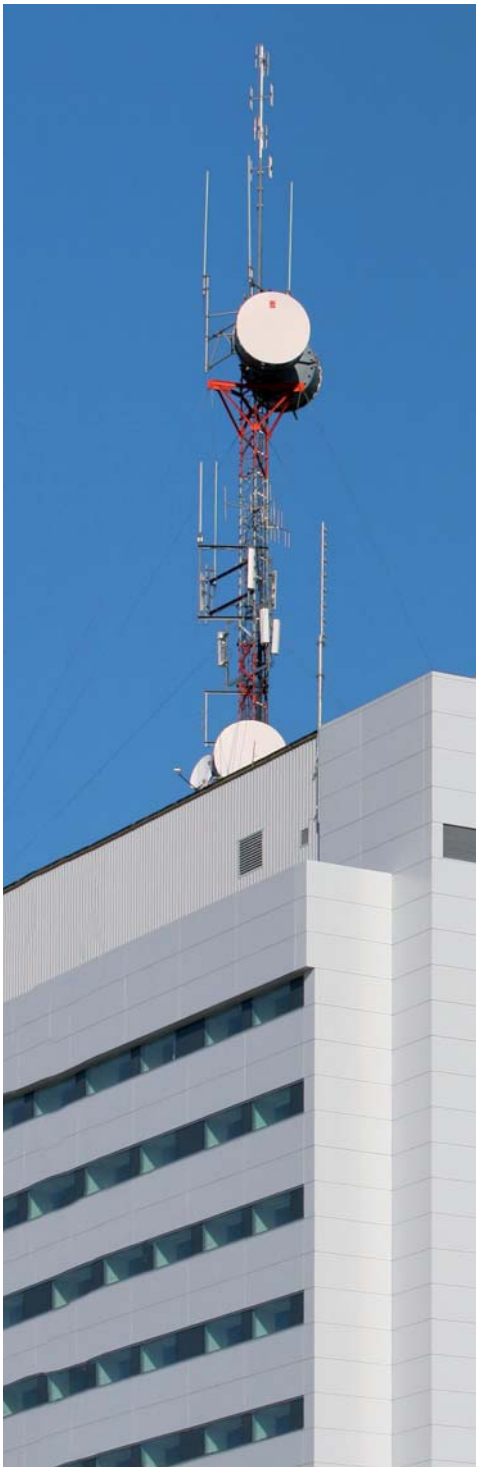
RFS Microwave Antennas

A Comprehensive **Selection Guide**

Edition 2



RADIO FREQUENCY SYSTEMS

The Clear Choice®

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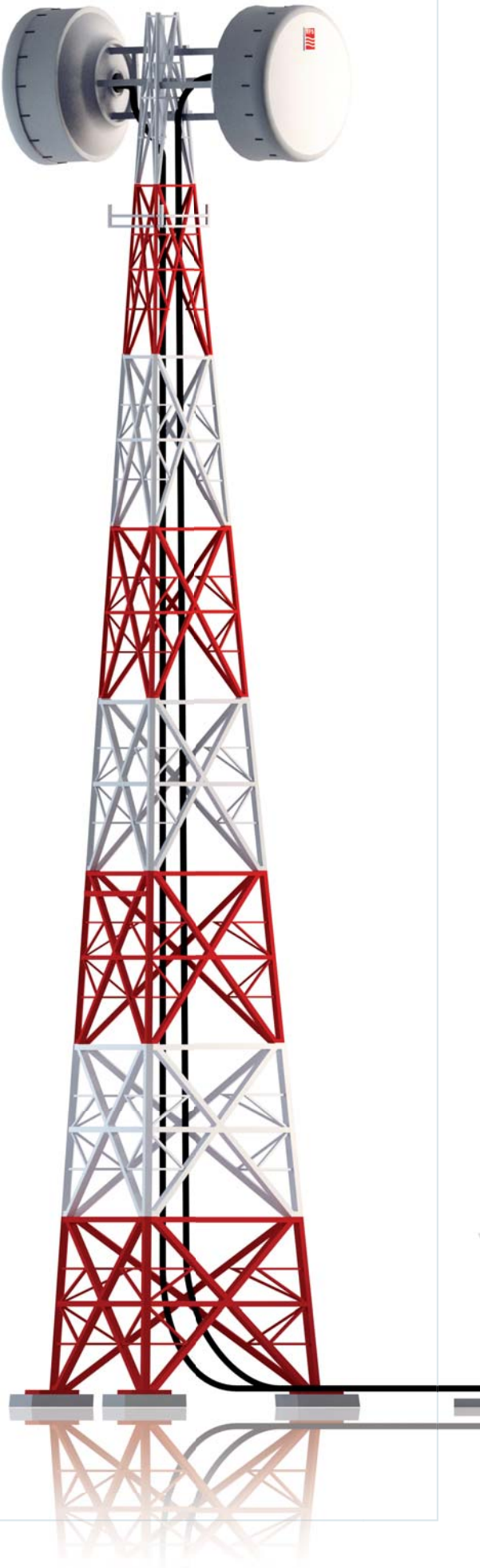


RFS offers a complete portfolio of microwave antennas to meet all of your needs

RFS offers four types of microwave antennas, each one designed for a specific application in your network. Together, our complete portfolio of microwave antennas takes your network from rooftops in dense urban areas, through suburbs and across long stretches of land to the harshest mountaintop and seaside environments.

Whether you are a telecom operator, a telecom manufacturer, a government agency, an enterprise or a strategic industry, RFS offers microwave antennas that support your applications and deliver dependable performance at low total cost of ownership (TCO):

- Stringent design and quality testing procedures ensure that every RFS microwave antenna meets or exceeds electrical, mechanical and environmental performance standards with no compromises and no surprises.
- Simplified installation and deployment procedures, low maintenance and long-term reliability keep post-purchase costs to a minimum. Compact packaging keeps transportation costs low.
- Modular designs let you "pay as you grow", evolving antennas and adding capacity as needed without the cost of replacing the antenna.

We also offer a full range of options and accessories for each antenna type to support your end-to-end radio link network (RLN). With manufacturing facilities and teams around the world, RFS is ready to serve customers in any location.

RFS offers four types of microwave antennas to meet all of your needs

- **CompactLine and CompactLine Easy:** Compact antennas optimized for integrated applications.
- **TrunkLine:** Large antennas for long distances and high-capacity applications.
- **PrimeLine:** Dual-polarized antennas delivering ultra-high performance and the highest cross-polarization discrimination (XPD).
- **Harsh Areas Line:** Robust antennas that can withstand the harshest environmental conditions.

Size ft (m)	**1** (0.3)		**2** (0.6)		**3** (0.9)		**4** (1.2)		**6** (1.8)		**8** (2.4)		**10** (3.0)		**12** (3.7)		**15** (4.6)	
Polarizations	single	dual	single	dual	single	dual	single	dual	single	dual	single	dual	single	dual	single	dual	single	dual
Antennas (Prefix)	**CompactLine** (SB & SBX)										**TrunkLine Class 3** (UA & UDA)							
	SB1	**SBX1**	**SB2**[1]	**SBX2**[1]	**SB3**[1]	**SBX3**[1]	**SB4**	**SBX4**	**SB6**	**SBX6**	**UA8**	**UDA8**	**UA10**	**UDA10**	**UA12**	**UDA12**	**UA15**	**UDA15**
			CompactLine EASY (SC & SCX)						**TrunkLine Class 2** (DA & DAX)									
			SC2	**SCX2**	**SC3**	**SCX3**			**DA6**	**DAX6**	**DA8**	**DAX8**	**DA10**	**DAX10**	**DA12**	**DAX12**	**DA15**	**DAX15**
									Trunkline FCC A (PAD[2] & PADX[2])									
									PAD6	**PADX6**	**PAD8**	**PADX8**	**PAD10**	**PADX10**				
			PrimeLine (UXA)															
			-	**UXA2**	-	-	-	**UXA4**	-	**UXA6**	-	**UXA8**	-	**UXA10**	-	**UXA12**	-	**UXA15**
			Harsh Areas Line (SU & SUX, DA & DAX)															
			SU2	**SUX2**	-	-	**SU4**	**SUX4**	**SU6**	**SUX6**	**DA8**	**DAX8**	**DA10**	**DAX10**	**DA12**	**DAX12**		

Additional antenna variants and customized antenna versions are also available. They include:

- Non-parabolic antennas, such as lens antennas that are available in some frequencies
- Antennas that support higher wind speeds
- Antennas that are not part of the RFS Harsh Areas Line but are custom-treated with our harsh environment protective coatings
- Antennas that are manufactured in our US facility and optimized for North American standards
- Antennas with different colors, flanges and mounting options such as those required for 219 mm pipe

Please contact your RFS representative to discuss your specific requirements and identify the RFS antenna that best fits your needs.

[1] Progressively phased out and replaced by new generation [2] Available in North America only

RFS CompactLine (SB) & CompactLine EASY (SC)

Compact antennas optimized for integrated applications

Designed for: **Dense urban areas, metropolitan and suburban locations, aggregation points**

Installed on: **Rooftop poles or towers**

Featuring:

- Support for integrated radios to **reduce costs**, installation complexity and time
- Tested and validated **ultra-high** (ETSI EN 302 217 Class 3, FCC Class A) **electrical performance**
- Low-profile design to **reduce transportation requirements, wind load and antenna weight**
- Simplified mounting design to **accelerate installation**
- Hardcover radomes
- Support for **winds up to 252 km/h** (155 mph)
  Note: Antennas 1.2 m (4 ft) and larger support wind speeds up to 200 km/h (125 mph) by default but can be enhanced to support winds up to 252 km/h (155 mph)
- Supports for **winds up to 320 km/h** (198 mph) on the new SB1/SBX1 antennas
  Note: SB1/SBX1 revision C has been introduced in July 2013
- An **optional sway bar** for antennas 0.9 m (3 ft) and larger for added assurance in case mistakes are made during installation

Available in:

- Frequencies ranging **from 5.925 GHz to 52.6 GHz** with support for three wideband frequency ranges (5.925-7.125, 7.125-8.5 and 10-11.7) to reduce antenna requirements and simplify logistics
- Sizes ranging **from 0.3 m (1 ft) to 1.8 m (6 ft)**
- **Single- and dual-polarized** models with the ability to upgrade from single to dual polarization and change frequencies in the field[1] **CompactLine EASY models**, which are **extra light and easy** to transport, deploy and upgrade

[1] Please contact your RFS representative to verify which RFS CompactLine antenna models support these upgrades in the field.

Integrated radios, compact design minimize TCO

Antenna models

Frequency Range (GHz)	Sizes (m)	Sizes (ft)	Model Name (Single Polarized)	Model Name (Dual Polarized)	
5.925-7.125	0.9	3	SC3-W60[1,2]	SCX3-W60[1,2]	
	1.2	4	SB4-W60[1]	SBX4-W60[1]	
	1.8	6	SB6-W60[1]	SBX6-W60[1]	
7.125-8.5	0.6	2	SC2-W71[1]	SCX2-W71[1]	
	0.9	3	SC3-W71[1]	SCX3-W71[1]	
	1.2	4	SB4-W71[1]	SBX4-W71[1]	
	1.8	6	SB6-W71[1]	SBX6-W71[1]	
10-11.7	0.6	2	SC2-W100[1]	SCX2-W100[1]	
	0.9	3	SC3-W100[1]	SCX3-W100[1]	
	1.2	4	SB4-W100[1]	SBX4-W100[1]	
	1.8	6	SB6-W100[1]	SBX6-W100[1]	
12.7-13.25	0.3	1	SB1-127	SBX1-127	**This table summarizes the main RFS CompactLine (SB) and CompactLine EASY (SC) antenna models.**
	0.6	2	SC2-127	SCX2-127	
	0.9	3	SC3-127	SCX3-127	**Additional antenna variants and customized versions are also available.**
	1.2	4	SB4-127	SBX4-127	
	1.8	6	SB6-127	SBX6-127	For example, variants that support specific vendor's radios are available.
14.2-15.35	0.3	1	SB1-142	SBX1-142	
	0.6	2	SC2-142	SCX2-142	
	0.9	3	SC3-142	SCX3-142	
	1.2	4	SB4-142	SBX4-142	
	1.8	6	SB6-142	SBX6-142	
17.7-19.7	0.3	1	SB1-190	SBX1-190	
	0.6	2	SC2-190	SCX2-190	
	0.9	3	SC3-190	SCX3-190	
	1.2	4	SB4-190	SBX4-190	
	1.8	6	SB6-190	SBX6-190	
21.2-23.6	0.3	1	SB1-220	SBX1-220	
	0.6	2	SC2-220	SCX2-220	
	0.9	3	SC3-220	SCX3-220	
	1.2	4	SB4-220	SBX4-220	
	1.8	6	SB6-220	SBX6-220	
24.25-26.5	0.3	1	SB1-250	SBX1-250	
	0.6	2	SC2-250	SCX2-250	
	0.9	3	SC3-250	SCX3-250	
	1.2	4	SB4-250	SBX4-250	
27.5-29.5	0.3	1	SB1-280	SBX1-280	
	0.6	2	SC2-280	SCX2-280	
31-33.4	0.3	1	SB1-320	SBX1-320	
	0.6	2	SC2-320	SCX2-320	**To confirm proper ordering models, please contact your RFS representative.**
37-40	0.3	1	SB1-380	SBX1-380	
	0.6	2	SC2-380	SCX2-380	
40.5-43.5	0.3	1	SB1-420	SBX1-420	
	0.6	2	SC2-420	SCX2-420	
51.2-52.6	0.3	1	SB1-520	NA	

[1] Wideband model

[2] Planned for 1Q14

Performance specifications

Note: The specifications for the **SB1/SBX1** *(revision C) and* **SC2/SCX2** *(revision B) reflect the new generation introduced in July 2013. Visit our on-line e-catalog dataXpress for the latest and most complete data specifications:* **www.rfsworld.com/dataXpress**

Frequency (GHz)	Polarization	Model Number	Diameter m (ft)	Gain (dBi) Low	Gain (dBi) Mid	Gain (dBi) High	3 dB-BW (deg)	VSWR/R L (dB)	X-Pol (dB)	IPI (dB)	F/B (dB)	ETSI RPE class	US FCC 101 Cat	Fine Adjust. Az	Fine Adjust. Elev	Windspeed km/h (mph) Operational	Windspeed km/h (mph) Survival	Net weight kg	Net weight (lb)
5.925 to 7.125	Single	SC3-W60[3]	0.9 (3)	32.0	33.2	33.9	3.00	1.38 (16.0)	30		60	3	B2	±15	±15	180 (112)	252 (155)	21	(47)
		SB4-W60	1.2 (4)	34.5	34.8	35.5	2.8	1.30 (17.7)	30		61	3	B2	±5	±15	200 (125)	200 (125)	35	(77)
		SB6-W60	1.8 (6)	38.0	38.8	39.4	1.7	1.30 (17.7)	30		65	3	A	±5	±5	200 (125)	200 (125)	90	(198)
	Dual	SCX3-W60[3]	0.9 (3)	32.0	33.2	33.9	3.00	1.38 (16.0)	30	35	60	3	B2	±15	±15	180 (112)	252 (155)	21	(47)
		SBX4-W60	1.2 (4)	34.5	34.8	35.5	2.8	1.30 (17.7)	30	35	61	3	B2	±5	±15	200 (125)	200 (125)	35	(77)
		SBX6-W60	1.8 (6)	38.0	38.8	39.4	1.7	1.30 (17.7)	30	35	65	3	A	±5	±5	200 (125)	200 (125)	90	(198)
7.125 to 8.5	Single	SC2-W71	0.6 (2)	30.5	31.3	31.9	4.3	1.38 (16.0)	30		57	3		±15	±20	180 (112)	252 (155)	9	(20)
		SC3-W71	0.9 (3)	34.7	35.6	35.8	2.6	1.38 (16.0)	30		62	3		±15	±15	180 (112)	252 (155)	18	(40)
		SB4-W71	1.2 (4)	36.2	36.9	37.6	2.3	1.30 (17.7)	30		63	3		±5	±15	200 (125)	200 (125)	35	(77)
		SB6-W71	1.8 (6)	40.1	40.6	41.1	1.5	1.30 (17.7)	30		67	3		±5	±5	200 (125)	200 (125)	90	(198)
	Dual	SCX2-W71	0.6 (2)	30.5	31.3	31.9	4.3	1.38 (16.0)	30	35	57	3		±15	±20	180 (112)	252 (155)	9	(20)
		SCX3-W71	0.9 (3)	34.7	35.6	35.8	2.6	1.38 (16.0)	30	35	62	3		±15	±15	180 (112)	252 (155)	18	(40)
		SBX4-W71	1.2 (4)	36.2	36.9	37.6	2.3	1.30 (17.7)	30	35	63	3		±5	±15	200 (125)	200 (125)	35	(77)
		SBX6-W71	1.8 (6)	40.1	40.6	41.1	1.5	1.30 (17.7)	30	35	67	3		±5	±5	200 (125)	200 (125)	90	(198)
10 to 11.7	Single	SC2-W100	0.6 (2)	33.8	34.5	35.2	3.2	1.38 (16.0)	30		61	3	A/B[1]	±15	±20	180 (112)	252 (155)	9	(20)
		SC3-W100	0.9 (3)	37.6	38.3	39.1	2.0	1.38 (16.0)	30		64	3	A	±15	±15	180 (112)	252 (155)	18	(40)
		SB4-W100	1.2 (4)	39.4	39.9	40.3	1.5	1.30 (17.7)	30		66	3	A	±5	±15	200 (125)	200 (125)	35	(77)
		SB6-W100	1.8 (6)	42.7	43.4	43.9	1.0	1.30 (17.7)	30		70	3	A	±5	±5	200 (125)	200 (125)	90	(198)
	Dual	SCX2-W100	0.6 (2)	33.8	34.5	35.2	3.2	1.38 (16.0)	30	35	61	3	A/B[1]	±15	±20	180 (112)	252 (155)	9	(20)
		SCX3-W100	0.9 (3)	37.6	38.3	39.1	2.0	1.38 (16.0)	30	35	64	3	A	±15	±15	180 (112)	252 (155)	18	(40)
		SBX4-W100	1.2 (4)	39.4	39.9	40.3	1.5	1.30 (17.7)	30	35	66	3	A	±5	±15	200 (125)	200 (125)	35	(77)
		SBX6-W100	1.8 (6)	42.7	43.4	43.9	1.0	1.30 (17.7)	30	35	70	3	A	±5	±5	200 (125)	200 (125)	90	(198)
12.7 to 13.25	Single	SB1-127	0.3 (1)	31.2	31.5	31.8	4.5	1.38 (16.0)	30		57	3		±15	±20	252 (155)	320 (198)	6	(13)
		SC2-127	0.6 (2)	35.8	36.0	36.2	2.7	1.38 (16.0)	30		62	3		±15	±20	180 (112)	252 (155)	9	(20)
		SC3-127	0.9 (3)	39.9	40.0	40.1	1.6	1.38 (16.0)	30		66	3	A	±15	±15	180 (112)	252 (155)	18	(40)
		SB4-127	1.2 (4)	41.7	41.9	42.1	1.3	1.30 (17.7)	30		68	3	A	±5	±15	200 (125)	200 (125)	35	(77)
		SB6-127	1.8 (6)	45.1	45.4	45.7	0.9	1.30 (17.7)	30		72	3	A	±5	±5	200 (125)	200 (125)	90	(198)
	Dual	SBX1-127	0.3 (1)	31.2	31.5	31.8	4.5	1.38 (16.0)	30	35	57	3		±15	±20	252 (155)	320 (198)	6	(13)
		SCX2-127	0.6 (2)	35.8	36.0	36.2	2.7	1.38 (16.0)	30	35	62	3		±15	±20	180 (112)	252 (155)	9	(20)
		SCX3-127	0.9 (3)	39.9	40.0	40.1	1.6	1.38 (16.0)	30	35	66	3	A	±15	±15	180 (112)	252 (155)	18	(40)
		SBX4-127	1.2 (4)	41.7	41.9	42.1	1.3	1.30 (17.7)	30	35	68	3	A	±5	±15	200 (125)	200 (125)	35	(77)
		SBX6-127	1.8 (6)	45.1	45.4	45.7	0.9	1.30 (17.7)	30	35	72	3	A	±5	±5	200 (125)	200 (125)	90	(198)
14.2 to 15.35	Single	SB1-142	0.3 (1)	32.0	32.1	32.2	4.2	1.30 (17.7)	30		55	2		±15	±20	252 (155)	320 (198)	6	(13)
		SC2-142	0.6 (2)	36.7	37.1	37.3	2.3	1.38 (16.0)	30		65	3		±15	±20	180 (112)	252 (155)	9	(20)
		SC3-142	0.9 (3)	40.6	41.0	41.3	1.5	1.38 (16.0)	30		69	3		±15	±15	180 (112)	252 (155)	18	(40)
		SB4-142	1.2 (4)	42.7	42.9	43.1	1.1	1.30 (17.7)	30		72	3		±5	±15	200 (125)	200 (125)	35	(77)
		SB6-142	1.8 (6)	45.9	46.2	46.5	0.8	1.30 (17.7)	30		74	3		±5	±5	200 (125)	200 (125)	90	(198)
	Dual	SBX1-142	0.3 (1)	32.0	32.1	32.2	4.2	1.30 (17.7)	30	35	55	2		±15	±20	252 (155)	320 (198)	6	(13)
		SCX2-142	0.6 (2)	36.7	37.1	37.3	2.3	1.38 (16.0)	30	35	65	3		±15	±20	180 (112)	252 (155)	9	(20)
		SCX3-142	0.9 (3)	40.6	41.0	41.3	1.5	1.38 (16.0)	30	35	69	3		±15	±15	180 (112)	252 (155)	18	(40)
		SBX4-142	1.2 (4)	42.7	42.9	43.1	1.1	1.30 (17.7)	30	35	72	3		±5	±15	200 (125)	200 (125)	35	(77)
		SBX6-142	1.8 (6)	45.9	46.2	46.5	0.8	1.30 (17.7)	30	35	74	3		±5	±5	200 (125)	200 (125)	90	(198)
17.7 to 19.7	Single	SB1-190	0.3 (1)	33.8	34.2	35.2	3.4	1.30 (17.7)	30		56	2	B2	±15	±20	252 (155)	320 (198)	6	(13)
		SC2-190	0.6 (2)	38.5	39.0	39.5	1.8	1.38 (16.0)	30		68	3	A	±15	±20	180 (112)	252 (155)	9	(20)
		SC3-190	0.9 (3)	42.8	43.3	43.8	1.1	1.38 (16.0)	30		71	3	A	±15	±15	164 (102)	252 (155)	18	(40)
		SB4-190	1.2 (4)	44.2	44.7	45.2	1.0	1.30 (17.7)	30		72	3	A	±5	±15	200 (125)	200 (125)	35	(77)
		SB6-190	1.8 (6)	47.6	48.2	48.8	0.7	1.30 (17.7)	30		76	3	A	±5	±5	200 (125)	200 (125)	90	(198)
	Dual	SBX1-190	0.3 (1)	33.8	34.2	35.2	3.4	1.30 (17.7)	30	35	56	2	B2	±15	±20	252 (155)	320 (198)	6	(13)
		SCX2-190	0.6 (2)	38.5	39.0	39.5	1.8	1.38 (16.0)	30	35	68	3	A	±15	±20	180 (112)	252 (155)	9	(20)
		SCX3-190	0.9 (3)	42.8	43.3	43.8	1.1	1.38 (16.0)	30	35	71	3	A	±15	±15	164 (102)	252 (155)	18	(40)
		SBX4-190	1.2 (4)	44.2	44.7	45.2	1.0	1.30 (17.7)	30	35	72	3	A	±5	±15	200 (125)	200 (125)	35	(77)
		SBX6-190	1.8 (6)	47.6	48.2	48.8	0.7	1.30 (17.7)	30	35	76	3	A	±5	±5	200 (125)	200 (125)	90	(198)
21.2 to 23.6	Single	SB1-220	0.3 (1)	35.5	35.8	36.2	2.7	1.30 (17.7)	30		61	3	A	±15	±20	252 (155)	320 (198)	6	(13)
		SC2-220	0.6 (2)	40.5	41.0	41.5	1.5	1.29 (18.0)	30		66	3	A	±15	±20	180 (112)	252 (155)	9	(20)
		SC3-220	0.9 (3)	44.1	44.8	45.0	1.0	1.29 (18.0)	30		71	3	A	±15	±15	140 (87)	252 (155)	18	(40)
		SB4-220	1.2 (4)	45.5	46.1	46.6	0.8	1.30 (17.7)	30		74	3	A	±5	±15	200 (125)	200 (125)	35	(77)
		SB6-220	1.8 (6)	49.3	50.0	50.5	0.5	1.30 (17.7)	30		75	3	A	±5	±5	200 (125)	200 (125)	90	(198)
	Dual	SBX1-220	0.3 (1)	35.5	35.8	36.2	2.7	1.30 (17.7)	30	35	61	3	A	±15	±20	252 (155)	320 (198)	6	(13)
		SCX2-220	0.6 (2)	40.5	41.0	41.5	1.5	1.29 (18.0)	30	35	66	3	A	±15	±20	180 (112)	252 (155)	9	(20)
		SCX3-220	0.9 (3)	44.1	44.8	45.0	1.0	1.29 (18.0)	30	35	71	3	A	±15	±15	140 (87)	252 (155)	18	(40)
		SBX4-220	1.2 (4)	45.5	46.1	46.6	0.8	1.30 (17.7)	30	35	74	3	A	±5	±15	200 (125)	200 (125)	35	(77)
		SBX6-220	1.8 (6)	49.3	50.0	50.5	0.5	1.30 (17.7)	30	35	75	3	A	±5	±5	200 (125)	200 (125)	90	(198)
24.25 to 26.5	Single	SB1-250	0.3 (1)	36.3	36.6	37.0	2.4	1.30 (17.7)	30		62	3		±15	±20	252 (155)	320 (198)	6	(13)
		SC2-250	0.6 (2)	41.7	42.3	42.5	1.4	1.29 (18.0)	30		68	3	A	±15	±20	180 (112)	252 (155)	9	(20)
		SC3-250	0.9 (3)	45.6	46.1	46.5	0.8	1.29 (18.0)	30		73	3	A	±15	±15	140 (87)	252 (155)	18	(40)
		SB4-250	1.2 (4)	46.8	47.2	47.6	0.7	1.30 (17.7)	30		73	3	A	±5	±15	200 (125)	200 (125)	35	(77)
	Dual	SBX1-250	0.3 (1)	36.3	36.6	37.0	2.4	1.30 (17.7)	30	35	62	3		±15	±20	252 (155)	320 (198)	6	(13)
		SCX2-250	0.6 (2)	41.7	42.3	42.5	1.4	1.29 (18.0)	30	35	68	3	A	±15	±20	180 (112)	252 (155)	9	(20)
		SCX3-250	0.9 (3)	45.6	46.1	46.5	0.8	1.29 (18.0)	30	35	73	3	A	±15	±15	140 (87)	252 (155)	18	(40)
		SBX4-250	1.2 (4)	46.8	47.2	47.6	0.7	1.30 (17.7)	30	35	73	3	A	±5	±15	200 (125)	200 (125)	35	(77)

Performance specifications

Frequency (GHz)	Polarization	Model Number	Diameter m (ft)	Gain (dBi) Low	Gain (dBi) Mid	Gain (dBi) High	3 dB-BW (deg)	VSWR/R L (dB)	X-Pol (dB)	IPI (dB)	F/B (dB)	ETSI RPE class	US FCC 101 Cat	Fine Adjust. Az	Fine Adjust. Elev	Windspeed km/h (mph) Operational	Windspeed km/h (mph) Survival	Net weight kg	Net weight (lb)
27.5 to 29.5	Single	SB1-280	0.3 (1)	37.7	37.9	38.5	2.2	1.30 (17.7)	30		63	3		±15	±20	252 (155)	320 (198)	6	(13)
		SC2-280	0.6 (2)	42.7	43.0	43.4	1.2	1.29 (18.0)	30		70	3		±15	±20	180 (112)	252 (155)	9	(20)
	Dual	SBX1-280	0.3 (1)	37.7	37.9	38.5	2.2	1.30 (17.7)	30	35	63	3		±15	±20	252 (155)	320 (198)	6	(13)
		SCX2-280	0.6 (2)	42.7	43.0	43.4	1.2	1.29 (18.0)	30	35	70	3		±15	±20	180 (112)	252 (155)	9	(20)
31 to 33.4	Single	SB1-320	0.3 (1)	39.2	39.5	39.7	2.1	1.30 (17.7)	30		63	3b		±15	±20	252 (155)	320 (198)	6	(13)
		SC2-320	0.6 (2)	43.8	44.2	44.4	1.0	1.29 (18.0)	30		70	3b		±15	±20	164 (102)	252 (155)	9	(20)
	Dual	SBX1-320	0.3 (1)	39.2	39.5	39.7	2.1	1.30 (17.7)	30	35	63	3b		±15	±20	252 (155)	320 (198)	6	(13)
		SCX2-320	0.6 (2)	43.8	44.2	44.4	1.0	1.29 (18.0)	30	35	70	3b		±15	±20	164 (102)	252 (155)	9	(20)
37 to 40	Single	SB1-380	0.3 (1)	40.0	40.3	40.5	1.6	1.30 (17.7)	30		65	3b	A	±15	±20	252 (155)	320 (198)	6	(13)
		SC2-380	0.6 (2)	44.8	45.4	45.8	0.8	1.29 (18.0)	30		70	3b	A	±15	±20	140 (87)	252 (155)	9	(20)
	Dual	SBX1-380	0.3 (1)	40.0	40.3	40.5	1.6	1.30 (17.7)	30	35	65	3b	A	±15	±20	252 (155)	320 (198)	6	(13)
		SCX2-380	0.6 (2)	44.8	45.4	45.8	0.8	1.29 (18.0)	30	35	70	3b	A	±15	±20	140 (87)	252 (155)	9	(20)
40.5 to 43.5	Single	SB1-420	0.3 (1)	40.8	41.3	41.6	1.4	1.30 (17.7)	30		60	3b		±15	±20	252 (155)	320 (198)	6	(13)
		SC2-420	0.6 (2)	45.5	45.8	46.1	0.7	1.29 (18.0)	30		65	3b		±15	±20	140 (87)	252 (155)	9	(20)
	Dual	SBX1-420[3]	0.3 (1)	40.8	41.3	41.6	1.4	1.30 (17.7)	30	30	60	3b		±15	±20	252 (155)	320 (198)	6	(13)
		SCX2-420[3]	0.6 (2)	45.5	45.8	46.1	0.7	1.29 (18.0)	30	30	65	3b		±15	±20	140 (87)	252 (155)	9	(20)
51.2 to 52.6	Single	SB1-520	0.3 (1)	41.7	41.8	41.9	1.2	1.30 (17.7)	30		62	3a / 2[2]		±23	±30	140 (87	252 (155)	6	(13)

[1] A in 10.55-10.68 GHz, B in 10.7-11.7 GHz

[2] 3a in Vertical polar, 2 in Vertical and Horizontal polar

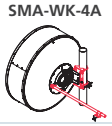
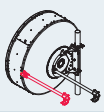
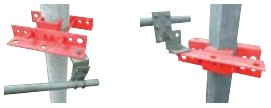
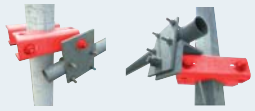
[3] Planned for 1Q14

The windspeed performance specifications of 4 and 6 feet in this table apply to antennas categorized under "Configuration 1" in the associated wind speed and sway bar selection guide. All "Configuration 1" antennas with a survival wind speed of 200 km/h are also available in models that offer higher survival wind speed performance ("Configuration 2").

Wind speed and sway bar selection guide

A wind kit, perimeter sway bar and sway bar connecting kit are available to complement your RFS CompactLine and CompactLine EASY antennas:

- A wind kit increases antenna survival wind speed support from 200 km/h (125 mph) to 252 km/h (155 mph). Wind kits give customers the flexibility to upgrade survival wind speed support levels in the field during installation if wind conditions are more severe than anticipated. Note that:
  - The wind kit is available for 1.2 m (4 ft) antennas
  - 0.3 m (1 ft) have a survival wind speed of 320 km/h (198 mph)
  - 0.6 m (2 ft) and 0.9 m (3 ft) antennas have a survival wind speed of 252 km/h (155 mph)
  - 1.8 m (6 ft) antennas are available in either in 200 km/h (125 mph) or 252 km/h (155 mph) versions and cannot be upgraded in the field
- An optional perimeter sway bar provides added assurance on antennas that are 0.9 m (3 ft) and larger in case mistakes are made during installation.
- A universal sway bar tower connecting kit allows sway bars to be attached to pipes or L-structures without drilling a hole in the pipe or structure.

Sizes (ft)	1	2	3	4		6	
Model (Prefix)	SB/SBX	SC/SCX	SC/SCX	SB/SBX		SB/SBX	
Wind Speed (km/h)	320	252	252	**Configuration 1**	**Configuration 2**	**Configuration 1**	**Configuration 2**
				200	252*	200	252*
Sway Bar Qty	0	0	0	1	1	1	1
252 km/h Windkit	-	-	-	**SMA-WK-4A** 	-	Not Available**	
Additional Perimeter Sway Bar	Not Available	Not Available	**SMA-SK-3** 	**SMA-SK-4** 		**SMA-SK-6** 	
Sway Bar Tower Fixation Kit	-	-	**SMA-SKO-UNIVERSAL** 			**SMA-SKO-UNIVERSAL-L** 	

* Order as a unique model number. For example: SB6-127AB is the standard 200 km/h (125 mph) version; SB6-127AB2 is the 252 km/h (155 mph) version. See page 20 for details.

** It is not possible to upgrade in field a SB6/SBX6 antenna from 200km/h to 252km/h.

RFS TrunkLine Class 3 (UA & UDA), Class 2 (DA & DAX) & FCC A (PAD & PADX)

For long distances and high-capacity applications

Designed for: **Microwave backbone networks, long distances, high-capacity links**

Installed on: **Towers**

Featuring[1]:

- Field-proven **reliability** and **long life**
- A choice between tested and validated ultra-high (ETSI EN 302 217 Class 3 and FCC Class A) electrical performance or high (ETSI Class 2 and FCC Class B) performance
- Support for winds up to 200 km/h (125 mph) with high-wind versions that support winds up to 252 km/h (155 mph) and an optional sway bar for added assurance in case mistakes are made during installation
- A single-piece or a split-reflector configuration[2] and compact packaging to reduce transportation costs
- A full line of waveguides, options and accessories

Available in:

- Frequencies ranging from 3.6 GHz to 15.35 GHz with support for two wideband frequency ranges (5.725-6.875 and 7.125-8.5) to reduce antenna requirements and simplify logistics
- Sizes ranging from 1.2 m (4 ft) to 4.6 m (15 ft)
- Single- and dual-polarized models with the ability to upgrade from single to dual polarization and change frequencies in the field in most cases[3]

North America-only antennas (PAD and PADX models) feature:

- Improved performance that meets Federal Communications Commission (FCC) category A standards without a shroud
- Good radiation performance, particularly in the back end
- An efficient feed design and a deep-dish reflector to improve front-to-back ratio
- Support for an ultra-wideband frequency range (5.725-7.125) and two wideband frequency ranges (5.725-6.875 and 5.925-6.875)
- Antenna sizes ranging from 1.8 m (6 ft) to 3 m (10 ft)
- Single- and dual-polarized models with the ability to upgrade from single to dual polarization and change frequencies in the field in most cases[3]

RFS TrunkLine antennas go the distance

RFS TrunkLine antennas are proven around the world:

- **In Russia, a microwave backbone network based on RFS TrunkLine antennas provides cellular coverage along the main road and train arteries between Moscow and St. Petersburg**
- **In Arizona, USA, RFS TrunkLine antennas, waveguides and accessories provide the lifeline for the state's highway patrol, Emergency Medical Services (EMS) providers and other public safety services operating across long distances.**

[1] These features and model ranges apply to RFS TrunkLine DA, DAX, UA and UDA antenna models. Features and models for RFS TrunkLine PAD and PADX antennas are described separately.

[2] The split-reflector configuration is available on antennas 2.4 m (8 ft) and larger. Single-piece is the default configuration for antennas 2.4 m (8 ft) and 3 m (10 ft). Split-reflector is the default configuration for antennas 3.7 m (12 ft) and 4.6 m (15 ft)

[3] Please contact your RFS representative to verify which RFS TrunkLine antenna models support these upgrades in the field.

Antenna models

Frequency Range (GHz)	Sizes (m)	Sizes (ft)	Model Name (Single Polarized High performance)	Model Name (Single Polarized Ultra-High performance)	Model Name (Dual Polarized High performance)	Model Name (Dual Polarized Ultra-High performance)
3.6-4.2	1.8	6	DA6-36	-	DAX6-36	-
	2.4	8	DA8-36	-	DAX8-36	-
	3	10	DA10-36	-	DAX10-36	-
	3.7	12	DA12-36	-	DAX12-36	-
	4.6	15	DA15-36	-	DAX15-36	-
4.4-5	1.2	4	DA4-44	-	DAX4-44	
	1.8	6	DA6-44	-	DAX6-44	-
	2.4	8	DA8-44	-	DAX8-44	-
	3	10	DA10-44	-	DAX10-44	-
	3.7	12	DA12-44	-	DAX12-44	-
	4.6	15	DA15-44	-	DAX15-44	-
5.725-6.875	1.8	6	PAD6-W57[1, 2, 3]	-	-	-
	2.4	8	DA8-W57[1, 2] PAD8-W57[1, 2, 3]	- -	- PADX8-W57[1, 2, 3]	- -
	3	10	DA10-W57[1, 2] PAD10-W57[1, 2, 3]	- -	- PADX10-W57[1, 2, 3]	- -
5.725-7.125	1.8	6	-	-	PADX6-U57[2, 3]	-
	2.4	8	-	-	PADX8-U57[2, 3]	-
	3	10	-	-	PADX10-U57[2, 3]	-
5.925-6.425	1.8	6	PAD6-59[2, 3]	UA6-59	-	-
	2.4	8	DA8-59 PAD8-59[2, 3]	UA8-59 -	DAX8-59 -	- -
	3	10	DA10-59 PAD10-59[2, 3]	UA10-59 -	DAX10-59 -	- -
	3.7	12	DA12-59	UA12-59	DAX12-59	-
	4.6	15	DA15-59	-	DAX15-59	-
5.925-6.875	1.8	6	PADX6-W59	-	-	-
	2.4	8	-	-	PADX8-W59[1, 2, 3]	-
	3	10	-	-	PADX10-W59[1, 2, 3]	-
6.425-7.125	1.8	6	PAD6-65[2, 3]	UA6-65	-	-
	2.4	8	DA8-65 PAD8-65[2, 3]	UA8-65 -	DAX8-65 -	- -
	3	10	DA10-65 PAD10-65[2, 3]	UA10-65 -	DAX10-65 -	- -
	3.7	12	DA12-65	UA12-65	DAX12-65	-
	4.6	15	DA15-65	-	DAX15-65	-
7.125-8.5	2.4	8	DA8-W71[1]	UA8-W71[1]	DAX8-W71[1]	UDA8-W71[1]
	3	10	DA10-W71[1]	UA10-W71[1]	DAX10-W71[1]	UDA10-W71[1]
	3.7	12	DA12-W71[1]	UA12-W71[1]	DAX12-W71[1]	UDA12-W71[1]
	4.6	15	DA15-W71[1]	UA15-W71[1]	DAX15-W71[1]	UDA15-W71[1]
10.3-10.7	2.4	8	DA8-103	-	DAX8-103	-
	3	10	DA10-103	-	DAX10-103	-
	3.7	12	DA12-103	-	DAX12-103	-
10.7-11.7	1.8	6	PAD6-107[2, 3]	-	PADX6-107[2, 3]	-
	2.4	8	DA8-107 PAD8-107[2, 3]	- -	DAX8-107 PADX8-107[2, 3]	- -
	3	10	DA10-107 -	- -	DAX10-107 PADX10-107[2, 3]	- -
	3.7	12	DA12-107	-	DAX12-107	-
12.7-13.25	2.4	8	DA8-127	UA8-127	DAX8-127	-
	3	10	DA10-127	UA10-127	DAX10-127	-
14.2-15.35	2.4	8	DA8-142	UA8-142	DAX8-142	-

This table summarizes the main RFS TrunkLine antenna models.

Additional antenna variants and customized versions are also available.

To confirm proper ordering models, please contact your RFS representative.

[1] Wideband model

[2] Available only in North America

[3] PAD and PADX antenna models offer improved performance

Performance specifications UA & UDA, DA & DAX

Visit our on-line e-catalog dataXpress for the latest and most complete data specifications: **www.rfsworld.com/dataXpress**

Frequency (GHz)	Polarization	Model Number	Diameter	Gain (dBi)			3 dB-BW	VSWR/R L	X-Pol	IPI	F/B	ETSI RPE class	US FCC 101 Cat	Fine Adjust.		Windspeed km/h (mph)		Net weight	
			m (ft)	Low	Mid	High	(deg)	(dB)	(dB)	(dB)	(dB)			Az	Elev	Operational	Survival	kg	(lb)
3.6 to 4.2	Single	DA6-36	1.8 (6)	33.7	34.4	35	3.0	1.08 (28.3)	30		56	2		±5	±5	190 (118)	200 (125)	95	(209)
		DA8-36	2.4 (8)	36.5	37.2	37.8	2.3	1.06 (30.7)	30		60	2		±5	±5	190 (118)	200 (125)	180	(396)
		DA10-36	3 (10)	38.4	39.1	39.7	1.8	1.06 (30.7)	30		62	2		±5	±5	190 (118)	200 (125)	290	(638)
		DA12-36	3.7 (12)	40.0	40.7	41.3	1.5	1.06 (30.7)	30		63	2	B	±5	±5	190 (118)	200 (125)	420	(924)
		DA15-36	4.6 (15)	42.0	42.7	43.3	1.1	1.06 (30.7)	30		65	2	A	±5	±5	190 (118)	200 (125)	750	(1650)
	Dual	DAX6-36	1.8 (6)	33.7	34.4	35	3.0	1.08 (28.3)	30	35	56	2		±5	±5	190 (118)	200 (125)	95	(209)
		DAX8-36	2.4 (8)	36.5	37.2	37.8	2.3	1.06 (30.7)	30	35	60	2		±5	±5	190 (118)	200 (125)	180	(396)
		DAX10-36	3 (10)	38.4	39.1	39.7	1.8	1.06 (30.7)	30	35	62	2		±5	±5	190 (118)	200 (125)	290	(638)
		DAX12-36	3.7 (12)	40.0	40.7	41.3	1.5	1.06 (30.7)	30	35	63	2	B	±5	±5	190 (118)	200 (125)	420	(924)
		DAX15-36	4.6 (15)	42.0	42.7	43.3	1.1	1.06 (30.7)	30	35	65	2	A	±5	±5	190 (118)	200 (125)	750	(1650)
4.4 to 5	Single	DA4-44	1.2 (4)	32	32.5	33	3.7	1.10 (26.4)	28		52	2		±5	±5	190 (118)	200 (125)	45	(99)
		DA6-44	1.8 (6)	35.9	36.5	37	2.4	1.06 (30.7)	30		62	2		±5	±5	190 (118)	200 (125)	95	(209)
		DA8-44	2.4 (8)	38.5	39.1	39.6	1.8	1.06 (30.7)	30		65	2		±5	±5	190 (118)	200 (125)	180	(396)
		DA10-44	3 (10)	40.4	41	41.5	1.5	1.06 (30.7)	30		67	2		±5	±5	190 (118)	200 (125)	290	(638)
		DA12-44	3.7 (12)	42	42.6	43.1	1.2	1.06 (30.7)	30		68	2		±5	±5	190 (118)	200 (125)	420	(924)
		DA15-44	4.6 (15)	43.7	44.3	44.8	0.9	1.06 (30.7)	30		68	2		±5	±5	190 (118)	200 (125)	750	(1650)
	Dual	DAX4-44	1.2 (4)	32	32.5	33	3.7	1.15 (23.1)	30	35	54	2		±5	±5	190 (118)	200 (125)	45	(99)
		DAX6-44	1.8 (6)	35.6	36.2	36.7	2.4	1.06 (30.7)	30	35	60	2		±5	±5	190 (118)	200 (125)	95	(209)
		DAX8-44	2.4 (8)	38.2	38.8	39.6	1.8	1.06 (30.7)	30	35	64	2		±5	±5	190 (118)	200 (125)	180	(396)
		DAX10-44	3 (10)	40.1	40.7	41.2	1.5	1.06 (30.7)	30	35	66	2		±5	±5	190 (118)	200 (125)	290	(638)
		DAX12-44	3.7 (12)	41.7	42.3	42.8	1.2	1.06 (30.7)	30	35	67	2		±5	±5	190 (118)	200 (125)	420	(924)
		DAX15-44	4.6 (15)	43.7	44.3	44.8	0.9	1.06 (30.7)	30	35	67	2		±5	±5	190 (118)	200 (125)	750	(1650)
5.725 to 6.875	Single	DA8-W57	2.4 (8)	40.7	41.5	42.3	1.4	1.15 (23.1)	30		68	2	A	±5	±5	190 (118)	200 (125)	180	(396)
		DA10-W57	3 (10)	42.6	43.5	44.2	1.1	1.15 (23.1)	30		70	2	A	±5	±5	190 (118)	200 (125)	290	(638)
	Dual	-	-	-	-	-	-	- -	-	-	-	-	-	-	-	- -	- -	-	-
5.925 to 6.425	Single	UA6-59	1.8 (6)	38.5	39	39.3	1.9	1.06 (30.7)	30		64	3	A	±5	±5	190 (118)	200 (125)	95	(209)
		DA8-59	2.4 (8)	41.2	41.6	42	1.5	1.06 (30.7)	30		66	2	A	±5	±5	190 (118)	200 (125)	180	(396)
		UA8-59	2.4 (8)	41.2	41.6	42	1.5	1.06 (30.7)	30		70	3	A	±5	±5	190 (118)	200 (125)	180	(396)
		DA10-59	3 (10)	43	43.4	43.7	1.2	1.06 (30.7)	30		69	2	A	±5	±5	190 (118)	200 (125)	290	(638)
		UA10-59	3 (10)	43	43.4	43.7	1.2	1.06 (30.7)	30		72	3	A	±5	±5	190 (118)	200 (125)	290	(638)
		DA12-59	3.7 (12)	44.8	45.1	45.4	0.9	1.06 (30.7)	30		70	2	A	±5	±5	190 (118)	200 (125)	420	(924)
		UA12-59	3.7 (12)	44.8	45.1	45.4	0.9	1.06 (30.7)	30		74	3	A	±5	±5	190 (118)	200 (125)	420	(924)
		DA15-59	4.6 (15)	46.3	46.6	47	0.8	1.06 (30.7)	30		71	2	A	±5	±5	190 (118)	200 (125)	750	(1650)
	Dual	DAX8-59	2.4 (8)	40.9	41.3	41.7	1.5	1.06 (30.7)	30	35	66	2	A	±5	±5	190 (118)	200 (125)	180	(396)
		DAX10-59	3 (10)	42.9	43.2	43.5	1.2	1.06 (30.7)	30	35	69	2	A	±5	±5	190 (118)	200 (125)	290	(638)
		DAX12-59	3.7 (12)	44.6	44.8	45.2	0.9	1.06 (30.7)	30	35	71	2	A	±5	±5	190 (118)	200 (125)	420	(924)
		DAX15-59	4.6 (15)	46.3	46.6	47	0.8	1.06 (30.7)	30	35	71	2	A	±5	±5	190 (118)	200 (125)	750	(1650)
6.425 to 7.125	Single	UA6-65	1.8 (6)	39.4	39.8	40.2	1.7	1.06 (30.7)	30		67	3	A	±5	±5	190 (118)	200 (125)	95	(209)
		DA8-65	2.4 (8)	41.9	42.3	42.8	1.3	1.06 (30.7)	30		66	2	A	±5	±5	190 (118)	200 (125)	180	(396)
		UA8-65	2.4 (8)	41.9	42.3	42.8	1.3	1.06 (30.7)	30		70	3	A	±5	±5	190 (118)	200 (125)	180	(396)
		DA10-65	3 (10)	43.7	44.1	44.6	1.0	1.06 (30.7)	30		69	2	A	±5	±5	190 (118)	200 (125)	290	(638)
		UA10-65	3 (10)	43.7	44.1	44.6	1.0	1.06 (30.7)	30		72	3	A	±5	±5	190 (118)	200 (125)	290	(638)
		DA12-65	3.7 (12)	45.3	45.8	46.2	0.8	1.06 (30.7)	30		70	2	A	±5	±5	190 (118)	200 (125)	420	(924)
		UA12-65	3.7 (12)	45.3	45.8	46.2	0.8	1.06 (30.7)	30		74	3	A	±5	±5	190 (118)	200 (125)	420	(924)
		DA15-65	4.6 (15)	47	47.5	47.9	0.7	1.06 (30.7)	30		71	2	A	±5	±5	190 (118)	200 (125)	750	(1650)
	Dual	DAX8-65	2.4 (8)	41.8	42.2	42.7	1.3	1.06 (30.7)	30	35	68	2	A	±5	±5	190 (118)	200 (125)	180	(396)
		DAX10-65	3 (10)	43.5	43.9	44.4	1.0	1.06 (30.7)	30	35	70	2	A	±5	±5	190 (118)	200 (125)	290	(638)
		DAX12-65	3.7 (12)	45.1	45.6	46.0	0.8	1.06 (30.7)	30	35	71	2	A	±5	±5	190 (118)	200 (125)	420	(924)
		DAX15-65	4.6 (15)	47	47.5	47.9	0.7	1.06 (30.7)	30	35	71	2	A	±5	±5	190 (118)	200 (125)	750	(1650)
7.125 to 8.5	Single	DA8-W71	2.4 (8)	42.6	43.3	44.1	1.1	1.10 (26.4)	30		68	2		±5	±5	190 (118)	200 (125)	180	(396)
		UA8-W71	2.4 (8)	42.6	43.3	44.1	1.1	1.10 (26.4)	30		71	3		±5	±5	190 (118)	200 (125)	180	(396)
		DA10-W71	3 (10)	44.6	45.3	46.1	0.9	1.10 (26.4)	30		70	2		±5	±5	190 (118)	200 (125)	290	(638)
		UA10-W71	3 (10)	44.6	45.3	46.1	0.9	1.10 (26.4)	30		73	3		±5	±5	190 (118)	200 (125)	290	(638)
		DA12-W71	3.7 (12)	46.2	47	47.7	0.7	1.10 (26.4)	30		71	2		±5	±5	190 (118)	200 (125)	420	(924)
		UA12-W71	3.7 (12)	46.2	47	47.7	0.7	1.10 (26.4)	30		74	3		±5	±5	190 (118)	200 (125)	420	(924)
		DA15-W71	4.6 (15)	47.9	48.7	49.4	0.6	1.10 (26.4)	30		72	2		±5	±5	190 (118)	200 (125)	750	(1650)
	Dual	DAX8-W71	2.4 (8)	42.4	43.1	43.9	1.1	1.10 (26.4)	30	35	68	2		±5	±5	190 (118)	200 (125)	180	(396)
		UDA8-W71	2.4 (8)	42.4	43.1	43.9	1.1	1.10 (26.4)	30	35	71	3		±5	±5	190 (118)	200 (125)	180	(396)
		DAX10-W71	3 (10)	44.4	45.1	45.9	0.9	1.10 (26.4)	30	35	70	2		±5	±5	190 (118)	200 (125)	290	(638)
		UDA10-W71	3 (10)	44.4	45.1	45.9	0.9	1.10 (26.4)	30	35	73	3		±5	±5	190 (118)	200 (125)	290	(638)
		DAX12-W71	3.7 (12)	46.0	46.7	47.5	0.7	1.10 (26.4)	30	35	71	2		±5	±5	190 (118)	200 (125)	420	(924)
		UDA12-W71	3.7 (12)	46.0	46.7	47.5	0.7	1.10 (26.4)	30	35	74	3		±5	±5	190 (118)	200 (125)	420	(924)
		DAX15-W71	4.6 (15)	47.7	48.6	49.4	0.6	1.10 (26.4)	30	35	72	2		±5	±5	190 (118)	200 (125)	750	(1650)
		UDA15-W71	4.6 (15)	47.7	48.1	48.4	0.6	1.10 (26.4)	30	35	76	3		±5	±5	190 (118)	200 (125)	750	(1650)
10.3 to 10.7	Single	DA8-103	2.4 (8)	45.7	45.9	46	0.8	1.08 (28.3)	30		68	2	A	±5	±5	190 (118)	200 (125)	180	(396)
		DA10-103	3 (10)	47.6	47.8	47.9	0.7	1.08 (28.3)	30		70	2	A	±5	±5	190 (118)	200 (125)	290	(638)
		DA12-103	3.7 (12)	49	49.2	49.3	0.5	1.08 (28.3)	30		71	2	A	±5	±5	190 (118)	200 (125)	420	(924)
	Dual	DAX8-103	2.4 (8)	45.6	45.8	45.9	0.8	1.08 (28.3)	30	35	68	2	A	±5	±5	190 (118)	200 (125)	180	(396)
		DAX10-103	3 (10)	47.5	47.7	47.8	0.7	1.08 (28.3)	30	35	70	2	A	±5	±5	190 (118)	200 (125)	290	(638)
		DAX12-103	3.7 (12)	48.9	49.1	49.2	0.5	1.08 (28.3)	30	35	71	2	A	±5	±5	190 (118)	200 (125)	420	(924)

Frequency (GHz)	Polarization	Model Number	Diameter m (ft)	Gain (dBi) Low	Mid	High	3 dB-BW (deg)	VSWR/R L (dB)	X-Pol (dB)	IPI (dB)	F/B (dB)	ETSI RPE class	US FCC 101 Cat	Fine Adjust. Az	Elev	Windspeed km/h (mph) Operational	Survival	Net weight kg	(lb)
10.7 to 11.7	Single	DA8-107	2.4 (8)	46.1	46.4	46.9	0.8	1.06 (30.7)	30		71	2	A	±5	±5	190 (118)	200 (125)	180	(396)
		DA10-107	3 (10)	48	48.4	48.6	0.7	1.06 (30.7)	30		71	2	A	±5	±5	190 (118)	200 (125)	290	(638)
		DA12-107	3.7 (12)	49.4	49.8	50	0.5	1.06 (30.7)	30		71	2	A	±5	±5	190 (118)	200 (125)	420	(924)
	Dual	DAX8-107	2.4 (8)	45.9	46.2	46.7	0.8	1.06 (30.7)	30	35	69	2	A	±5	±5	190 (118)	200 (125)	180	(396)
		DAX10-107	3 (10)	47.8	48.2	48.4	0.7	1.06 (30.7)	30	35	70	2	A	±5	±5	190 (118)	200 (125)	290	(638)
		DAX12-107	3.7 (12)	49.2	49.6	49.9	0.5	1.06 (30.7)	30	35	72	2	A	±5	±5	190 (118)	200 (125)	420	(924)
12.7 to 13.25	Single	DA8-127	2.4 (8)	47.6	47.7	47.9	0.7	1.08 (28.3)	30		71	2	A	±5	±5	190 (118)	200 (125)	180	(396)
		UA8-127	2.4 (8)	47.6	47.7	47.9	0.7	1.08 (28.3)	30		74	3	A	±5	±5	190 (118)	200 (125)	180	(396)
		DA10-127	3 (10)	49.4	49.5	49.7	0.6	1.08 (28.3)	30		71	2	A	±5	±5	190 (118)	200 (125)	290	(638)
		UA10-127	3 (10)	49.4	49.5	49.7	0.6	1.08 (28.3)	30		76	3	A	±5	±5	190 (118)	200 (125)	290	(638)
	Dual	DAX8-127	2.4 (8)	47.4	47.5	47.7	0.7	1.08 (28.3)	30	35	70	2	A	±5	±5	190 (118)	200 (125)	180	(396)
		DAX10-127	3 (10)	49.2	49.3	49.5	0.6	1.08 (28.3)	30	35	71	2	A	±5	±5	190 (118)	200 (125)	290	(638)
14.2 to 15.35	Single	DA8-142	2.4 (8)	48.3	48.5	48.8	0.6	1.10 (26.4)	30		70	1		±5	±5	190 (118)	200 (125)	180	(396)
		UA8-142	2.4 (8)	48.3	48.5	48.8	0.6	1.10 (26.4)	30		73	3		±5	±5	190 (118)	200 (125)	180	(396)
	Dual	DAX8-142	2.4 (8)	48.3	48.5	48.8	0.6	1.10 (26.4)	30	35	69	1		±5	±5	190 (118)	200 (125)	180	(396)

Performance specifications PAD and PADX

5.725 to 6.875	Single	PAD6-W57	1.8 (6)	38.1	38.9	39.7	1.9	1.15 (23.1)	30		55		A	±5	±5	190 (118)	200 (125)	65	(141)
		PAD8-W57	2.4 (8)	40.6	41.4	42.2	1.4	1.15 (23.1)	30		57		A	±5	±5	190 (118)	200 (125)	130	(285)
		PAD10-W57	3 (10)	42.6	43.5	44.2	1.1	1.15 (23.1)	30		61		A	±5	±5	190 (118)	200 (125)	264	(585)
	Dual	PADX8-W57	2.4 (8)	40.4	41.2	42.0	1.4	1.10 (26.4)	30	35	57		A	±5	±5	190 (118)	200 (125)	130	(285)
		PADX10-W57	3 (10)	42.3	43.2	43.9	1.1	1.10 (26.4)	30	35	59		A	±5	±5	190 (118)	200 (125)	264	(585)
5.725 to 7.125	Single	-	- -	-	-	-	-	- -	-	-	-	-	-	-	-	- -	- -	-	-
	Dual	PADX6-U57	1.8 (6)	37.9	38.9	39.8	1.7	1.15[1] (23.1)[2]	30	35	55		A	±5	±5	190 (118)	200 (125)	65	(141)
		PADX8-U57	2.4 (8)	40.4	41.4	42.3	1.3	1.15[1] (23.1)	30	35	57		A	±5	±5	190 (118)	200 (125)	130	(285)
		PADX10-U57	3 (10)	42.3	43.2	44.2	1.1	1.15[1] (23.1)	30	35	59		A	±5	±5	190 (118)	200 (125)	264	(585)
5.925 to 6.425	Single	PAD6-59	1.8 (6)	38.4	38.7	39.1	1.8	1.06 (30.7)	30		55		A	±5	±5	190 (118)	200 (125)	84	(185)
		PAD8-59	2.4 (8)	40.9	41.3	41.6	1.4	1.06 (30.7)	30		57		A	±5	±5	190 (118)	200 (125)	130	(285)
		PAD10-59	3 (10)	42.8	43.2	43.5	1.2	1.06 (30.7)	30		61		A	±5	±5	190 (118)	200 (125)	264	(585)
	Dual	-	- -	-	-	-	-	- -	-	-	-	-	-	-	-	- -	- -	-	-
5.925 to 6.875	Single	-	- -	-	-	-	-	- -	-	-	-	-	-	-	-	- -	- -	-	-
	Dual	PADX6-W59	1.8 (6)	38.2	38.9	39.5	1.7	1.10 (26.4)	30	35	55		A	±5	±5	190 (118)	200 (125)	65	(141)
		PADX8-W59	2.4 (8)	40.7	41.4	42.0	1.3	1.10 (26.4)	30	35	57		A	±5	±5	190 (118)	200 (125)	130	(285)
		PADX10-W59	3 (10)	42.7	43.4	44.0	1.1	1.10 (26.4)	30	35	59		A	±5	±5	190 (118)	200 (125)	264	(585)
6.425 to 7.125	Single	PAD6-65	1.8 (6)	39.1	39.6	40	1.6	1.06 (30.7)	30		57		A	±5	±5	190 (118)	200 (125)	84	(185)
		PAD8-65	2.4 (8)	39.1	39.6	40	1.6	1.06 (30.7)	30		57		A	±5	±5	190 (118)	200 (125)	130	(285)
		PAD10-65	3 (10)	43.5	43.9	44.3	1.1	1.06 (30.7)	30		63		A	±5	±5	190 (118)	200 (125)	264	(585)
	Dual	-	-	-	-	-	-	- -	-	-	-	-	-	-	-	- -	- -	-	-
10.7 to 11.7	Single	PAD6-107	1.8 (6)	43.5	43.9	44.3	1	1.06 (30.7)	30		60		A	±5	±5	190 (118)	200 (125)	65	(141)
		PAD8-107	2.4 (8)	46	46.4	46.8	0.7	1.06 (30.7)	30		62		A	±5	±5	190 (118)	200 (125)	130	(285)
	Dual	PADX6-107	2.4 (8)	43.5	43.9	44.3	1	1.06 (30.7)	30	35	60		A	±5	±5	190 (118)	200 (125)	65	(141)
		PADX8-107	2.4 (8)	46	46.4	46.8	0.7	1.06 (30.7)	30	35	62		A	±5	±5	190 (118)	200 (125)	130	(285)
		PADX10-107	3 (10)	47.9	48.3	48.5	0.7	1.06 (30.7)	30	35	64		A	±5	±5	190 (118)	200 (125)	264	(585)

[1] 1.5 @ 5.725-5.85 GHz [2] 14 @ 5.725-5.85 GHz

The performance specifications in this table apply to antennas categorized under "Configuration 1" in the associated wind speed and sway bar selection guide. In most cases, "Configuration 1" antennas offer a survival wind speed of 200 km/h. However, most 200 km/h antennas (except 4.6 m (15 ft) models) are also available in models that offer higher survival wind speed performance.

Wind speed and sway bar selection guide

A wind speed, perimeter sway bar and sway bar connecting kit are available to complement your RFS TrunkLine antennas:

- A wind kit increases antenna survival wind speed support from 200 km/h (125 mph) to 252 km/h (155 mph). Wind kits give customers the flexibility to upgrade survival wind speed support levels in the field during installation if wind conditions are more severe than anticipated.
- An optional perimeter sway bar provides added assurance in case mistakes are made during installation.
- A universal sway bar tower connecting kit allows sway bars to be attached to pipes or L-structures without drilling a hole in the pipe or structure.

Sizes (ft)	6		8		10		12		15	
Model (Prefix)	DA/DAX/UA/UDA		DA/DAX/UA/UDA		DA/DAX/UA/UDA		DA/DAX/UA/UDA		DA/DAX/UA/UDA	
Wind Speed (km/h)	**Configuration 1**	**Configuration 2**	**Configuration 1**	**Configuration 2**	**Configuration 1**	**Configuration 2**	**Configuration 1**	**Configuration 2**	**Configuration 1**	**Configuration 2**
	200	252*	200	252*	200	252*	200	252*	200	Not Available
Sway Bar Qty	1	1	1	1	1	1	1	1	4	Not Available
252 km/h Windkit	**SMA-WK-6A** 	-	**SMA-WK-8** 	-	**SMA-WK-10** 	-	**SMA-WK-12** 	-	Not Available	
Additional Perimeter Sway Bar	**SMA-SK-60-2000A** 		**SMA-SK-60-3000A** 						Not Available	
Sway Bar Tower Fixation Kit	**SMA-SKO-UNIVERSAL-L** 									

* Order as a unique model number. For example: DAX8-65AD is the standard 200 km/h (125 mph) version; DAX8-65AD2 is the 252 km/h (155 mph) version. See page 20 for details.

RFS PrimeLine (UXA)

Dual-polarized antennas delivering ultra-high performance and the highest XPD

Designed for: **All applications that require the best RF performance, especially where interference could be an issue**

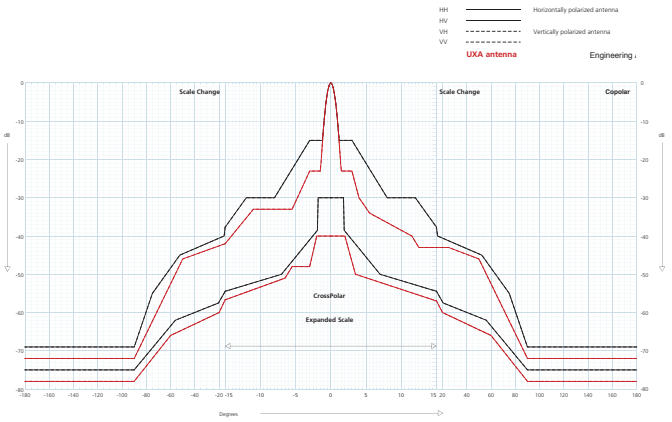
Installed on: **Rooftop poles or towers**

Featuring:

- Extremely high XPD for complete isolation between the radios in each polarization
- Tested and validated ultra-high (ETSI EN 302 217 Class 3 and FCC Class A) electrical performance
- Excellent radiation pattern envelope (RPE), particularly in the cross-polar area
- Support for winds up to 200 km/h (125 mph) with high-wind versions that support winds up to 252 km/h (155 mph) and an optional sway bar for added assurance in case mistakes are made during installation
- Ability to change frequencies in the field in most cases[1]

Available in:

- Frequencies ranging from 3.6 GHz to 23.6 GHz with support for two wideband frequency ranges (5.725-6.875 and 5.925-6.875) to reduce antenna requirements and simplify logistics
- Sizes ranging from 0.6 m (2 ft) to 4.6 m (15 ft)
- Configurations with single-piece or split reflectors; RFS recommends single-piece reflectors for optimal performance[2]



RFS PrimeLine antennas offer XPD that is typically higher than 40 dB, very low secondary lobe levels and excellent front-to-back ratios

[1] Please contact your RFS representative to verify which RFS PrimeLine antenna models support this upgrade in the field

[2] Split reflectors are available on request for 2.4 m to 3.7 m (8 ft to 12 ft) antennas.

Antenna models

Frequency Range (GHz)	Sizes (m)	Sizes (ft)	Model Name (Dual Polarized)
3.6-4.2	1.8	6	UXA6-36
	2.4	8	UXA8-36
	3	10	UXA10-36
	3.7	12	UXA12-36
	4.6	14	UXA15-36
4.4-5	1.8	6	UXA6-44
	2.4	8	UXA8-44
	3	10	UXA10-44
	3.7	12	UXA12-44
	4.6	14	UXA15-44
5.725-6.875	1.8	6	UXA6-W57[1, 2]
	2.4	8	UXA8-W57[1, 2]
	3	10	UXA10-W57[1, 2]
5.725-7.125	1.8	6	UXA6-U57[2]
	2.4	8	UXA8-U57[2]
	3.0	10	UXA10-U57[2]
5.925-6.425	1.2	4	UXA4-59
	1.8	6	UXA6-59
	2.4	8	UXA8-59
	3	10	UXA10-59
	3.7	12	UXA12-59
	4.6	15	UXA15-59
5.925-6.875	1.8	6	UXA6-W59[1, 2]
	2.4	8	UXA8-W59[1, 2]
	3	10	UXA10-W59[1, 2]
	3.7	12	UXA12-W59[1, 2]
6.425-7.125	1.2	4	UXA4-65
	1.8	6	UXA6-65
	2.4	8	UXA8-65
	3	10	UXA10-65
	3.7	12	UXA12-65
	4.6	15	UXA15-65
7.125-7.75	1.2	4	UXA4-71
	1.8	6	UXA6-71
	2.4	8	UXA8-71
	3	10	UXA10-71
	3.7	12	UXA12-71
	4.6	15	UXA15-71
7.725-8.5	1.2	4	UXA4-78
	1.8	6	UXA6-78
	2.4	8	UXA8-78
	3	10	UXA10-78
	3.7	12	UXA12-78
	4.6	15	UXA15-78
10.3-10.7	1.2	4	UXA4-103
	1.8	6	UXA6-103
	2.4	8	UXA8-103
	3	10	UXA10-103
	3.7	12	UXA12-103
10.5-10.7	1.2	4	UXA4-105
	1.8	6	UXA6-105
10.7-11.7	1.2	4	UXA4-107
	1.8	6	UXA6-107
	2.4	8	UXA8-107
	3	10	UXA10-107
	3.7	12	UXA12-107
12.7-13.25	1.2	4	UXA4-127
	1.8	6	UXA6-127
	2.4	8	UXA8-127
	3	10	UXA10-127
14.2-15.35	0.6	2	UXA2-142
	1.2	4	UXA4-142
	1.8	6	UXA6-142
	2.4	8	UXA8-142
17.7-19.7	0.6	2	UXA2-190
	1.2	4	UXA4-190
	1.8	6	UXA6-190
21.2-23.6	0.6	2	UXA2-220
	1.2	4	UXA4-220
	1.8	6	UXA6-220

This table summarizes the main RFS PrimeLine models.

Additional antenna variants and customized versions are also available.

For example, RFS PrimeLine antennas can be upgraded with our specialized epoxy paints and corrosion-resistant hardware so you can bring ultra-high performance and the highest XPD levels to the harshest environments. Antenna models that are designed to meet North American standards are also available.

To confirm proper ordering models, please contact your RFS representative.

[1] Wideband model
[2] Available only in North America

Performance specifications

Visit our on-line e-catalog dataXpress for the latest and most complete data specifications: **www.rfsworld.com/dataXpress**

Frequency (GHz)	Polarization	Model Number	Diameter m (ft)	Gain (dBi) Low	Gain (dBi) Mid	Gain (dBi) High	3 dB-BW (deg)	VSWR/R L (dB)	X-Pol (dB)	IPI (dB)	F/B (dB)	ETSI RPE class	US FCC 101 Cat	Fine Adjust. Az	Fine Adjust. Elev	Windspeed km/h (mph) Operational	Windspeed km/h (mph) Survival	Net weight kg (lb)
3.6 to 4.2	Dual	UXA6-36	1.8 (6)	33.5	34.2	34.8	3	1.10 (26.4)	35	40	60	3		±5	±5	190 (118)	200 (125)	95 (209)
		UXA8-36	2.4 (8)	36.5	37.2	37.8	2.3	1.08 (28.3)	40	45	66	3		±5	±5	190 (118)	200 (125)	180 (396)
		UXA10-36	3 (10)	38.4	39.1	39.7	1.8	1.06 (30.7)	40	45	67	3	B	±5	±5	190 (118)	200 (125)	290 (638)
		UXA12-36	3.7 (12)	40	40.7	41.3	1.5	1.06 (30.7)	40	45	70	3	A	±5	±5	190 (118)	200 (125)	420 (924)
		UXA15-36	4.6 (15)	42	42.7	43.3	1.1	1.06 (30.7)	38	45	72	3	A	±5	±5	190 (118)	200 (125)	750 (1650)
4.4 to 5	Dual	UXA6-44	1.8 (6)	35.6	36.2	36.7	2.4	1.10 (26.4)	35	40	64	3		±5	±5	190 (118)	200 (125)	95 (209)
		UXA8-44	2.4 (8)	38.2	38.8	39.6	1.8	1.06 (30.7)	40	45	66	3		±5	±5	190 (118)	200 (125)	180 (396)
		UXA10-44	3 (10)	40.1	40.7	41.2	1.5	1.06 (30.7)	40	45	68	3		±5	±5	190 (118)	200 (125)	290 (638)
		UXA12-44	3.7 (12)	41.7	42.3	42.8	1.2	1.06 (30.7)	40	45	69	3		±5	±5	190 (118)	200 (125)	420 (924)
		UXA15-44	4.6 (15)	43.7	44.3	44.8	0.9	1.06 (30.7)	38	45	71	3		±5	±5	190 (118)	200 (125)	750 (1650)
5.725 to 6.875	Dual	UXA6-W57	1.8 (6)	38.1	38.9	39.7	2	1.08[1] (28.3)[2]	40	45	69	3	A	±5	±5	190 (118)	200 (125)	95 (209)
		UXA8-W57	2.4 (8)	40.6	41.4	42.2	1.5	1.08[1] (28.3)[2]	40	45	77	3	A	±5	±5	190 (118)	200 (125)	180 (396)
		UXA10-W57	3 (10)	42.5	43.4	44.1	1.1	1.08[1] (28.3)[2]	40	45	79	3	A	±5	±5	190 (118)	200 (125)	290 (638)
5.725 to 7.125	Dual	UXA6-U57	1.8 (6)	38.1	39	40	1.7	1.12[1] (25)[2]	40	45	69	3	A	±5	±5	190 (118)	200 (125)	95 (209)
		UXA8-U57	2.4 (8)	40.6	41.6	42.6	1.3	1.12[1] (25)[2]	40	45	77	3	A	±5	±5	190 (118)	200 (125)	180 (396)
		UXA10-U57	3 (10)	42.5	43.4	44.4	1.1	1.12[1] (25)[2]	40	45	79	3	A	±5	±5	190 (118)	200 (125)	290 (638)
5.925 to 6.425	Dual	UXA4-59	1.2 (4)	34.1	34.5	34.8	2.8	1.10 (26.4)	38	42	60	3	B1	±5	±15	190 (118)	200 (125)	45 (99)
		UXA6-59	1.8 (6)	38.3	38.7	39	1.9	1.06 (30.7)	40	45	69	3	A	±5	±5	190 (118)	200 (125)	95 (209)
		UXA8-59	2.4 (8)	40.9	41.3	41.7	1.5	1.06 (30.7)	40	45	71	3	A	±5	±5	190 (118)	200 (125)	180 (396)
		UXA10-59	3.0 (10)	42.9	43.2	43.5	1.2	1.06 (30.7)	40	45	74	3	A	±5	±5	190 (118)	200 (125)	290 (638)
		UXA12-59	3.7 (12)	44.6	44.8	45.2	0.9	1.06 (30.7)	40	45	76	3	A	±5	±5	190 (118)	200 (125)	420 (924)
		UXA15-59	4.6 (15)	46.3	46.6	47	0.8	1.06 (30.7)	38	45	77	3	A	±5	±5	190 (118)	200 (125)	750 (1650)
5.925 to 6.875	Dual	UXA6-W59	1.8 (6)	38.4	39.1	39.7	1.9	1.08 (28.3)	40	45	75	3	A	±5	±5	190 (118)	200 (125)	95 (209)
		UXA8-W59	2.4 (8)	40.9	41.6	42.2	1.4	1.08 (28.3)	40	45	77	3	A	±5	±5	190 (118)	200 (125)	180 (396)
		UXA10-W59	3.0 (10)	42.9	43.5	44.1	1	1.08 (28.3)	40	45	73	3	A	±5	±5	190 (118)	200 (125)	290 (638)
		UXA12-W59	3.7 (12)	44.6	45.1	45.7	0.8	1.08 (28.3)	40	45	75	3	A	±5	±5	190 (118)	200 (125)	420 (924)
6.425 to 7.125	Dual	UXA4-65	1.2 (4)	34.8	35.3	35.7	2.5	1.10 (26.4)	38	42	61	3	B1	±5	±15	190 (118)	200 (125)	45 (99)
		UXA6-65	1.8 (6)	39.2	39.7	40.1	1.7	1.06 (30.7)	40	45	69	3	A	±5	±5	190 (118)	200 (125)	95 (209)
		UXA8-65	2.4 (8)	41.8	42.2	42.7	1.3	1.06 (30.7)	40	45	71	3	A	±5	±5	190 (118)	200 (125)	180 (396)
		UXA10-65	3 (10)	43.5	43.9	44.4	1	1.06 (30.7)	40	45	74	3	A	±5	±5	190 (118)	200 (125)	290 (638)
		UXA12-65	3.7 (12)	45.1	45.6	46	0.8	1.06 (30.7)	40	45	76	3	A	±5	±5	190 (118)	200 (125)	420 (924)
		UXA15-65	4.6 (15)	47	47.5	47.9	0.8	1.06 (30.7)	38	45	77	3	A	±5	±5	190 (118)	200 (125)	750 (1650)
7.125 to 7.75	Dual	UXA4-71	1.2 (4)	35.7	36.1	36.4	2.2	1.10 (26.4)	38	42	62	3		±5	±15	190 (118)	200 (125)	45 (99)
		UXA6-71	1.8 (6)	39.9	40.3	40.6	1.5	1.06 (30.7)	40	45	68	3		±5	±5	190 (118)	200 (125)	95 (209)
		UXA8-71	2.4 (8)	42.4	42.8	43.1	1.1	1.06 (30.7)	40	45	72	3		±5	±5	190 (118)	200 (125)	180 (396)
		UXA10-71	3 (10)	44.4	44.7	45.1	0.9	1.06 (30.7)	40	45	74	3		±5	±5	190 (118)	200 (125)	290 (638)
		UXA12-71	3.7 (12)	46	46.4	46.8	0.7	1.06 (30.7)	40	45	76	3		±5	±5	190 (118)	200 (125)	420 (924)
		UXA15-71	4.6 (15)	47.9	48.3	48.6	0. 6	1.06 (30.7)	38	45	77	3		±5	±5	190 (118)	200 (125)	750 (1650)
7.725 to 8.5	Dual	UXA4-78	1.2 (4)	36.8	37.2	37.6	2.1	1.08 (28.3)	38	42	62	3		±5	±15	190 (118)	200 (125)	45 (99)
		UXA6-78	1.8 (6)	40.6	41.1	41.4	1.5	1.06 (30.7)	40	45	70	3		±5	±5	190 (118)	200 (125)	95 (209)
		UXA8-78	2.4 (8)	43.1	43.6	43.9	1.1	1.06 (30.7)	40	45	73	3		±5	±5	190 (118)	200 (125)	180 (396)
		UXA10-78	3.0 (10)	45.1	45.5	45.9	0.9	1.06 (30.7)	40	45	76	3		±5	±5	190 (118)	200 (125)	290 (638)
		UXA12-78	3.7 (12)	46.7	47.1	47.5	0.7	1.06 (30.7)	40	45	77	3		±5	±5	190 (118)	200 (125)	420 (924)
		UXA15-78	4.6 (15)	48.6	49	49.4	0.6	1.06 (30.7)	38	45	78	3		±5	±5	190 (118)	200 (125)	750 (1650)
10.3 to 10.7	Dual	UXA4-103	1.2 (4)	39.5	39.7	39.8	1.7	1.10 (26.4)	40	45	69	3	A	±5	±15	190 (118)	200 (125)	40 (88)
		UXA6-103	1.8 (6)	43.1	43.3	43.4	1	1.08 (28.3)	40	45	73	3	A	±5	±5	190 (118)	200 (125)	95 (209)
		UXA8-103	2.4 (8)	45.6	45.8	45.9	0.8	1.08 (28.3)	40	45	76	3	A	±5	±5	190 (118)	200 (125)	180 (396)
		UXA10-103	3 (10)	47.5	47.7	47.8	0.7	1.08 (28.3)	40	45	78	3	A	±5	±5	190 (118)	200 (125)	290 (638)
		UXA12-103	3.7 (12)	48.9	49.1	49.2	0.5	1.08 (28.3)	40	45	78	3	A	±5	±5	190 (118)	200 (125)	420 (924)
10.5 to 10.7	Dual	UXA4-105	1.2 (4)	39.7	39.8	39.9	1.7	1.08 (28.3)	40	45	69	3	A	±5	±15	190 (118)	200 (125)	45 (99)
		UXA6-105	1.8 (6)	43.2	43.3	43.4	1.1	1.06 (30.7)	40	45	75	3	A	±5	±5	190 (118)	200 (125)	95 (209)
10.7 to 11.7	Dual	UXA4-107	1.2 (4)	40	40.4	40.8	1.5	1.08 (28.3)	40	45	70	3	A	±5	±15	190 (118)	200 (125)	40 (88)
		UXA6-107	1.8 (6)	43.5	43.8	44.3	1	1.06 (30.7)	40	45	73	3	A	±5	±5	190 (118)	200 (125)	95 (209)
		UXA8-107	2.4 (8)	45.9	46.2	46.7	0.8	1.06 (30.7)	40	45	75	3	A	±5	±5	190 (118)	200 (125)	180 (396)
		UXA10-107	3 (10)	47.8	48.2	48.4	0.7	1.06 (30.7)	40	45	77	3	A	±5	±5	190 (118)	200 (125)	290 (638)
		UXA12-107	3.7 (12)	49.2	49.6	49.9	0.5	1.06 (30.7)	40	45	78	3	A	±5	±5	190 (118)	200 (125)	420 (924)

Performance specifications

Frequency (GHz)	Polarization	Model Number	Diameter m (ft)	Gain (dBi) Low	Gain (dBi) Mid	Gain (dBi) High	3 dB-BW (deg)	VSWR/R L (dB)	X-Pol (dB)	IPI (dB)	F/B (dB)	ETSI RPE class	US FCC 101 Cat	Fine Adjust. Az	Fine Adjust. Elev	Windspeed km/h (mph) Operational	Windspeed km/h (mph) Survival	Net weight kg	Net weight (lb)
12.7 to 13.25	Dual	UXA4-127	1.2 (4)	41.3	41.4	41.6	1.7	1.10 (26.4)	40	45	67	3	A	±5	±15	190 (118)	200 (125)	45	(99)
		UXA6-127	1.8 (6)	45	45.1	45.3	0.9	1.10 (26.4)	40	45	73	3	A	±5	±5	190 (118)	200 (125)	95	(209)
		UXA8-127	2.4 (8)	47.4	47.5	47.7	0.7	1.10 (26.4)	40	45	75	3	A	±5	±5	190 (118)	200 (125)	180	(396)
		UXA10-127	3.0 (10)	49.2	49.3	49.5	0.6	1.10 (26.4)	40	45	76	3	A	±5	±5	190 (118)	200 (125)	290	(638)
14.2 to 15.35	Dual	UXA2-142	0.6 (2)	36.3	36.5	36.8	2.3	1.13 (24.3)	36	40	64	3		±23	±30	190 (118)	252 (155)	15	(33)
		UXA4-142	1.2 (4)	42.3	42.5	42.8	1.2	1.10 (26.4)	36	40	70	3		±5	±15	190 (118)	200 (125)	40	(88)
		UXA6-142	1.8 (6)	45.8	46	46.3	0.8	1.10 (26.4)	38	40	75	3		±5	±5	190 (118)	200 (125)	95	(209)
		UXA8-142	2.4 (8)	48.3	48.5	48.8	0.6	1.10 (26.4)	38	40	76	3		±5	±5	190 (118)	200 (125)	180	(396)
17.7 to 19.7	Dual	UXA2-190	0.6 (2)	37.8	38.3	38.7	1.9	1.13 (24.3)	36	40	66	3	A	±23	±30	190 (118)	252 (155)	15	(33)
		UXA4-190	1.2 (4)	44	44.5	44.9	0.9	1.13 (24.3)	36	40	72	3	A	±5	±15	190 (118)	200 (125)	40	(88)
		UXA6-190	1.8 (6)	47.5	48	48.4	0.7	1.13 (24.3)	36	40	76	3	A	±5	±5	190 (118)	200 (125)	95	(209)
21.2 to 23.6	Dual	UXA2-220	0.6 (2)	39.5	40	40.5	1.6	1.15 (23.1)	36	40	66	3	A	±23	±30	190 (118)	252 (155)	15	(33)
		UXA4-220	1.2 (4)	45.5	46	46.4	0.8	1.13 (24.3)	36	40	72	3	A	±5	±15	190 (118)	200 (125)	40	(88)
		UXA6-220	1.8 (6)	49	49.5	49.9	0.5	1.13 (24.3)	36	40	76	3	A	±5	±5	190 (118)	200 (125)	95	(209)

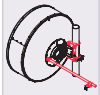
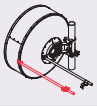
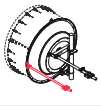
[1] 1.5 @ 5.725-5.85 GHz [2] 14 @ 5.725-5.85 GHz

The performance specifications in this table apply to antennas categorized under "Configuration 1" in the associated wind speed and sway bar selection guide. In most cases, "Configuration 1" antennas offer a survival wind speed of 200 km/h. However, most 200 km/h antennas (except 4.6 m (15 ft) models) are also available in models that offer higher survival wind speed performance.

Wind speed and sway bar selection guide

A wind kit, perimeter sway bar and sway bar connecting kit are available to complement your RFS PrimeLine antennas:

- A wind kit increases antenna survival wind speed support from 200 km/h (125 mph) to 252 km/h (155 mph). Wind kits give customers the flexibility to upgrade survival wind speed support levels in the field during installation if wind conditions are more severe than anticipated.
- An optional perimeter sway bar provides added assurance in case mistakes are made during installation
- A universal sway bar tower connecting kit allows sway bars to be attached to pipes or L-structures without drilling a hole in the pipe or structure.

Sizes (ft)	2	4		4		6		8		10		12	
Model (Prefix)	UXA	UXA (below 10GHz)		UXA		UXA		UXA		UXA		UXA	
Wind Speed (km/h)	252	Configuration 1	Configuration 2	Configuration 1	Configuration 2	Configuration 1	Configuration 2	Configuration 1	Configuration 2	Configuration 1	Configuration 2	Configuration 1	Configuration 2
		200	252*	200	252*	200	252*	200	252*	200	252*	200	252*
Sway Bar Qty	0	0	1	1	1	1	1	1	1	1	1	1	1
252 km/h Windkit	-	SMA-WK-4 	-	SMA-WK-4A 	-	SMA-WK-6A 	-	SMA-WK-8 	-	SMA-WK-10 	-	SMA-WK-12 	-
Additional Perimeter Sway Bar	Not Available	Not Available		SMA-SK-4 		SMA-SK-60-2000A 		SMA-SK-60-3000A 					
Sway Bar Tower Fixation Kit	-	SMA-SKO-UNIVERSAL 				SMA-SKO-UNIVERSAL-L 							

*Order as a unique model number. For example: UXA6-65BD is the standard 200 km/h (125 mph) version; UXA6-65BD2 is the 252 km/h (155 mph) version. See page 20 for details.

RFS Harsh Areas Line

Robust antennas for the harshest environmental conditions

Designed for: **Marine environments, off-shore locations, industrial and highly corrosive locations, volcanic areas, tropical climates, mountaintops with severe wind, ice and snow conditions**

Installed on: **Rooftop poles or towers**

Featuring:

- Reflectors and shrouds painted inside and outside with a two-component epoxy paint
- Feeds painted with a two-component epoxy paint
- Mounting hardware and attachment hardware in corrosion-resistant ISO 3506 A4 (SAE 316L) steel stabilized with molybdenum
- Steel mounting with an extended galvanic layer
- Additional silicon sealant applied to screws, connectors and couplings during installation
- Factory-installed equipment to support winds up to 252 km/h (155 mph)
- A single-piece reflector to ensure all antenna surfaces are treated and protected
- A flexible radome that is designed to avoid snow accumulation[1]

Available in:

- Frequencies ranging from 3.6 GHz to 26.5 GHz with support for a wideband frequency range (7.125-8.5) to reduce antenna requirements and simplify logistics
- Sizes ranging from 0.6 m (2 ft) to 3.7 m (12 ft)
- Single- and dual-polarized models with the ability to upgrade from single to dual polarization and change frequencies in the field[2]

[1] Provided on all RFS Harsh Areas Line antennas 1.2 m (4 ft) and larger.

[2] Please contact your RFS representative to verify which RFS Harsh Areas Line antenna models support these upgrades in the field.

RFS Harsh Areas Line antennas help Pioneer Cellular maintain communications after a severe ice storm in Oklahoma, United States

Despite the damage they sustained, the RFS microwave antenna systems that comprise approximately 98 percent of the 200-hop microwave backhaul network remained functional.

Antenna models

Frequency Range (GHz)	Sizes (m)	Sizes (ft)	Model Name (Single Polarized)	Model Name (Dual Polarized)
3.6-4.2	2.4	8	DA8-36**2H	DAX8-36**2H
	3	10	DA10-36**2H	DAX10-36**2H
	3.7	12	DA12-36**5H	DAX12-36**5H
4.4-5	2.4	8	DA8-44**2H	DAX8-44**2H
	3	10	DA10-44**2H	DAX10-44**2H
	3.7	12	DA12-44**5H	DAX12-44**5H
5.925-6.425	1.2	4	SU4-59**2H	SUX4-59**2H
	1.8	6	SU6-59**2H	SUX6-59**2H
	2.4	8	DA8-59**2H	DAX8-59**2H
	3	10	DA10-59**2H	DAX10-59**2H
	3.7	12	DA12-59**5H	DAX12-59**5H
6.425-7.125	1.2	4	SU4-65**2H	SUX4-65**2H
	1.8	6	SU6-65**2H	SUX6-65**2H
	2.4	8	DA8-65**2H	DAX8-65**2H
	3	10	DA10-65**2H	DAX10-65**2H
	3.7	12	DA12-65**5H	DAX12-65**5H
7.125-8.5	0.6	2	SU2-W71**2H[1]	-
	1.2	4	SU4-W71**2H[1]	SUX4-W71**2H[1]
	1.8	6	SU6-W71**2H[1]	SUX6-W71**2H[1]
	2.4	8	DA8-W71**2H[1]	DAX8-W71**2H[1]
	3	10	DA10-W71**2H[1]	DAX10-W71**2H[1]
	3.7	12	DA12-W71**5H [1]	DAX12-W71**5H[1]
10.3-10.7	0.6	2	SU2-103**2H	-
	1.2	4	SU4-103**2H	SUX4-103**2H
	1.8	6	SU6-103**2H	SUX6-103**2H
	2.4	8	DA8-103**2H	DAX8-103**2H
	3	10	DA10-103**2H	DAX10-103**2H
	3.7	12	DA12-103**5H	DAX12-103**5H
10.7-11.7	0.6	2	SU2-107**2H	-
	1.2	4	SU4-107**2H	SUX4-107**2H
	1.8	6	SU6-107**2H	SUX6-107**2H
	2.4	8	DA8-107**2H	DAX8-107**2H
	3	10	DA10-107**2H	DAX10-107**2H
	3.7	12	DA12-107**2H	DAX12-107**5H
12.7-13.25	0.6	2	SU2-127**2H	SUX2-127**2H
	1.2	4	SU4-127**2H	SUX4-127**2H
	1.8	6	SU6-127**2H	SUX6-127**2H
	2.4	8	DA8-127**2H	DAX8-127**2H
	3	10	DA10-127**2H	DAX10-127**2H
14.2-15.35	0.6	2	SU2-142**2H	SUX2-142**2H
	1.2	4	SU4-142**2H	SUX4-142**2H
	1.8	6	SU6-142**2H	SUX6-142**2H
	2.4	8	DA8-142**2H	DAX8-142**2H
17.7-19.7	0.6	2	SU2-190**2H	SUX2-190**2H
	1.2	4	SU4-190**2H	SUX4-190**2H
	1.8	6	SU6-190**2H	SUX6-190**2H
21.2-23.6	0.6	2	SU2-220**2H	SUX2-220**2H
	1.2	4	SU4-220**2H	SUX4-220**2H
	1.8	6	SU6-220**2H	SUX6-220**2H
24.25-26.5	0.6	2	SU2-250**2H	SUX2-250**2H
	1.2	4	SU4-250**2H	SUX4-250**2H

[1] Wideband model

This table summarizes the main RFS Harsh Areas Line antenna models.

Additional antenna variants and customized versions are also available. For example:

- RFS PrimeLine antenna models can be upgraded with our specialized epoxy paints and corrosion-resistant hardware so you can bring ultra-high performance and the highest XPD levels to the harshest environments.
- RFS can develop customized Harsh Areas Line antennas to meet requirements for specific projects or specific wind, humidity, ice, snow, volcanic ash or pollution challenges. An antenna ice shield is also available in North America.

**** : these 2 digits indicates the antenna revision index and the flange option – see the RFS naming structure in page 20 for more details.**

To confirm proper ordering models, please contact your RFS representative.

Performance specifications

Visit our on-line e-catalog dataXpress for the latest and most complete data specifications: **www.rfsworld.com/**

Frequency (GHz)	Polarization	Model Number	Diameter m (ft)	Gain (dBi) Low	Gain (dBi) Mid	Gain (dBi) High	3 dB-BW (deg)	VSWR/R L (dB)	X-Pol (dB)	IPI (dB)	F/B (dB)	ETSI RPE class	US FCC 101 Cat	Fine Adjust. Az	Fine Adjust. Elev	Windspeed km/h (mph) Operational	Windspeed km/h (mph) Survival	Net weight kg (lb)
3.6 to 4.2	Single	DA8-36**2H	2.4 (8)	36.5	37.2	37.8	2.3	1.06 (30.7)	30		60	2		±5	±5	190 (118)	252 (155)	190 (419)
		DA10-36**2H	3 (10)	38.4	39.1	39.7	1.8	1.06 (30.7)	30		62	2		±5	±5	190 (118)	252 (155)	320 (706)
		DA12-36**5H	3.7 (12)	40.0	40.7	41.3	1.5	1.06 (30.7)	30		63	2	B	±5	±5	190 (118)	252 (155)	470 (1037)
	Dual	DAX8-36**2H	2.4 (8)	36.5	37.2	37.8	2.3	1.08 (28.3)	30	35	60	2		±5	±5	190 (118)	252 (155)	190 (419)
		DAX10-36**2H	3 (10)	38.4	39.1	39.7	1.8	1.06 (30.7)	30	35	62	2		±5	±5	190 (118)	252 (155)	320 (706)
		DAX12-36**5H	3.7 (12)	40.0	40.7	41.3	1.5	1.06 (30.7)	30	35	63	2	B	±5	±5	190 (118)	252 (155)	470 (1037)
4.4 to 5	Single	DA8-44**2H	2.4 (8)	38.5	39.1	39.6	1.8	1.06 (30.7)	30		65	2		±5	±5	190 (118)	252 (155)	190 (419)
		DA10-44**2H	3 (10)	40.4	41	41.5	1.5	1.06 (30.7)	30		67	2		±5	±5	190 (118)	252 (155)	320 (706)
		DA12-44**5H	3.7 (12)	42	42,6	43.1	1.2	1.06 (30.7)	30		68	2		±5	±5	190 (118)	252 (155)	470 (1037)
	Dual	DAX8-44**2H	2.4 (8)	38.2	38.8	39.6	1.8	1.06 (30.7)	30	35	64	2		±5	±5	190 (118)	252 (155)	190 (419)
		DAX10-44**2H	3 (10)	40.1	40.7	41.2	1.5	1.06 (30.7)	30	35	66	2		±5	±5	190 (118)	252 (155)	320 (706)
		DAX12-44**5H	3.7 (12)	41.7	42.3	42.8	1.2	1.06 (30.7)	30	35	67	2		±5	±5	190 (118)	252 (155)	470 (1037)
5.925 to 6.425	Single	SU4-59***2H	1.2 (4)	34.9	35.3	35.6	2.8	1.15 (23.1)	30		62	3	B2	±5	±15	190 (118)	252 (155)	45 (99)
		SU6-59***2H	1.8 (6)	38.3	38.8	39.1	1.9	1.15 (23.1)	30		64	3	A	±5	±5	190 (118)	252 (155)	115 (254)
		DA8-59***2H	2.4 (8)	41.2	41.6	42	1.5	1.06 (30.7)	30		66	2	A	±5	±5	190 (118)	252 (155)	190 (419)
		DA10-59***2H	3 (10)	43	43.4	43.7	1.2	1.06 (30.7)	30		69	2	A	±5	±5	190 (118)	252 (155)	320 (706)
		DA12-59***5H	3.7 (12)	44.8	45.1	45.4	0.9	1.06 (30.7)	30		70	2	A	±5	±5	190 (118)	252 (155)	470 (1037)
	Dual	SUX4-59***2H	1.2 (4)	34.1	34.5	34.8	2.8	1.15 (23.1)	30	35	60	3	B2	±5	±15	190 (118)	252 (155)	45 (99)
		SUX6-59***2H	1.8 (6)	38.1	38.6	38.9	1.9	1.15 (23.1)	30	35	64	3	A	±5	±5	190 (118)	252 (155)	115 (254)
		DAX8-59***2H	2.4 (8)	40.9	41.3	41.7	1.5	1.06 (30.7)	30	35	67	2	A	±5	±5	190 (118)	252 (155)	190 (419)
		DAX10-59***2H	3 (10)	42.9	43.2	43.5	1.2	1.06 (30.7)	30	35	69	2	A	±5	±5	190 (118)	252 (155)	320 (706)
		DAX12-59***5H	3.7 (12)	44.6	44.8	45.2	0.9	1.06 (30.7)	30	35	71	2	A	±5	±5	190 (118)	252 (155)	470 (1037)
6.425 to 7.125	Single	SU4-65***2H	1.2 (4)	35.6	36	36.5	2.5	1.15 (23.1)	30		61	3	B2	±5	±15	190 (118)	252 (155)	45 (99)
		SU6-65***2H	1.8 (6)	39.2	39.7	40.1	1.7	1.15 (23.1)	30		65	3	A	±5	±5	190 (118)	252 (155)	115 (254)
		DA8-65***2H	2.4 (8)	41.9	42.3	42.8	1.3	1.06 (30.7)	30		66	2	A	±5	±5	190 (118)	252 (155)	190 (419)
		DA10-65***2H	3 (10)	43.7	44.1	44.6	1	1.06 (30.7)	30		69	2	A	±5	±5	190 (118)	252 (155)	320 (706)
		DA12-65***5H	3.7 (12)	45.3	45.8	46.2	0.8	1.06 (30.7)	30		70	2	A	±5	±5	190 (118)	252 (155)	470 (1037)
	Dual	SUX4-65***2H	1.2 (4)	34.8	35.3	35.7	2.5	1.15 (23.1)	30	35	61	3	B2	±5	±15	190 (118)	252 (155)	45 (99)
		SUX6-65***2H	1.8 (6)	39.0	39.5	39.9	1.7	1.15 (23.1)	30	35	65	3	A	±5	±5	190 (118)	252 (155)	115 (254)
		DAX8-65***2H	2.4 (8)	41.8	42.2	42.7	1.3	1.06 (30.7)	30	35	68	2	A	±5	±5	190 (118)	252 (155)	190 (419)
		DAX10-65***2H	3 (10)	43.5	43.9	44.4	1	1.06 (30.7)	30	35	70	2	A	±5	±5	190 (118)	252 (155)	320 (706)
		DAX12-65***5H	3.7 (12)	45.1	45.6	46.0	0.8	1.06 (30.7)	30	35	71	2	A	±5	±5	190 (118)	252 (155)	470 (1037)
7.125 to 8.5	Single	SU2-W71***2H	0.6 (2)	30.8	31.3	31.9	4.3	1.20 (20.8)	30		55	2		±23	±30	190 (118)	252 (155)	15 (33)
		SU4-W71***2H	1.2 (4)	36.2	36.9	37.6	2.2	1.15 (23.1)	30		63	3		±5	±15	190 (118)	252 (155)	45 (99)
		SU6-W71***2H	1.8 (6)	40	40.8	41.6	1.5	1.15 (23.1)	30		67	3		±5	±5	190 (118)	252 (155)	115 (254)
		DA8-W71***2H	2.4 (8)	42.6	43.3	44.1	1.1	1.10 (26.4)	30		68	2		±5	±5	190 (118)	252 (155)	190 (419)
		DA10-W71***2H	3 (10)	44.6	45.3	46.1	0.9	1.10 (26.4)	30		70	2		±5	±5	190 (118)	252 (155)	320 (706)
		DA12-W71***5H	3.7 (12)	46.2	47	47.7	0.7	1.10 (26.4)	30		71	2		±5	±5	190 (118)	252 (155)	470 (1037)
	Dual	SUX4-W71***2H	1.2 (4)	36.1	36.8	37.5	2.2	1.19 (21.2)	30	35	63	3		±5	±15	190 (118)	252 (155)	45 (99)
		SUX6-W71***2H	1.8 (6)	39.8	40.6	41.4	1.5	1.19 (21.2)	30	35	67	3		±5	±5	190 (118)	252 (155)	115 (254)
		DAX8-W71***2H	2.4 (8)	42.4	43.1	43.9	1.1	1.10 (26.4)	30	35	68	2		±5	±5	190 (118)	252 (155)	190 (419)
		DAX10-W71***2H	3 (10)	44.4	45.1	45.9	0.9	1.10 (26.4)	30	35	70	2		±5	±5	190 (118)	252 (155)	320 (706)
		DAX12-W71***5H	3.7 (12)	46.0	46.7	47.5	0.7	1.10 (26.4)	30	35	71	2		±5	±5	190 (118)	252 (155)	470 (1037)
10.3 to 10.7	Single	SU2-103***2H	0.6 (2)	33.4	33.6	33.8	3.2	1.20 (20.8)	30		59	3		±23	±30	190 (118)	252 (155)	15 (33)
		SU4-103***2H	1.2 (4)	39.6	39.8	39.9	1.6	1.15 (23.1)	32		65	3	A	±5	±15	190 (118)	252 (155)	45 (99)
		SU6-103***2H	1.8 (6)	43.2	43.4	43.5	1	1.15 (23.1)	32		70	3	A	±5	±5	190 (118)	252 (155)	115 (254)
		DA8-103***2H	2.4 (8)	45.7	45.9	46	0.8	1.08 (28.3)	30		68	2	A	±5	±5	190 (118)	252 (155)	190 (419)
		DA10-103***2H	3 (10)	47.6	47.8	47.9	0.7	1.08 (28.3)	30		70	2	A	±5	±5	190 (118)	252 (155)	320 (706)
		DA12-103***5H	3.7 (12)	49	49.2	49.3	0.5	1.08 (28.3)	30		71	2	A	±5	±5	190 (118)	252 (155)	470 (1037)
	Dual	SUX4-103***2H	1.2 (4)	39.5	39.7	39.8	1.6	1.20 (20.8)	32	35	65	3	A	±5	±15	190 (118)	252 (155)	45 (99)
		SUX6-103***2H	1.8 (6)	43.1	43.3	43.4	1	1.20 (20.8)	32	35	70	3	A	±5	±5	190 (118)	252 (155)	115 (254)
		DAX8-103***2H	2.4 (8)	45.6	45.8	45.9	0.8	1.08 (28.3)	30	35	68	2	A	±5	±5	190 (118)	252 (155)	190 (419)
		DAX10-103***2H	3 (10)	47.5	47.7	47.8	0.7	1.08 (28.3)	30	35	70	2	A	±5	±5	190 (118)	252 (155)	320 (706)
		DAX12-103***5H	3.7 (12)	48.9	49.1	49.2	0.5	1.08 (28.3)	30	35	71	2	A	±5	±5	190 (118)	252 (155)	470 (1037)
10.7 to 11.7	Single	SU2-107***2H	0.6 (2)	33.8	34.2	34.6	3.1	1.20 (20.8)	30		60	2		±23	±30	190 (118)	252 (155)	15 (33)
		SU4-107***2H	1.2 (4)	40.1	40.5	40.9	1.5	1.15 (23.1)	32		66	3	A	±5	±15	190 (118)	252 (155)	45 (99)
		SU6-107***2H	1.8 (6)	43.7	44	44.5	1	1.15 (23.1)	32		70	3	A	±5	±5	190 (118)	252 (155)	115 (254)
		DA8-107***2H	2.4 (8)	46.1	46.4	46.9	0.8	1.06 (30.7)	30		71	2	A	±5	±5	190 (118)	252 (155)	190 (419)
		DA10-107***2H	3 (10)	48	48.4	48.6	0.7	1.06 (30.7)	30		71	2	A	±5	±5	190 (118)	252 (155)	320 (706)
		DA12-107***5H	3.7 (12)	49.4	49.8	50	0.5	1.06 (30.7)	30		71	2	A	±5	±5	190 (118)	252 (155)	470 (1037)
	Dual	SUX4-107***2H	1.2 (4)	40.0	40.4	40.8	1.5	1.20 (20.8)	32	35	66	3	A	±5	±15	190 (118)	252 (155)	45 (99)
		SUX6-107***2H	1.8 (6)	43.6	43.9	44.4	1	1.20 (20.8)	32	35	70	3	A	±5	±5	190 (118)	252 (155)	115 (254)
		DAX8-107***2H	2.4 (8)	45.9	46.2	46.7	0.8	1.06 (30.7)	30	35	69	2	A	±5	±5	190 (118)	252 (155)	190 (419)
		DAX10-107***2H	3 (10)	47.8	48.2	48.4	0.7	1.06 (30.7)	30	35	70	2	A	±5	±5	190 (118)	252 (155)	320 (706)
		DAX12-107***5H	3.7 (12)	49.2	49.6	49.9	0.5	1.06 (30.7)	30	35	72	2	A	±5	±5	190 (118)	252 (155)	470 (1037)

Performance specifications

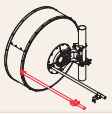
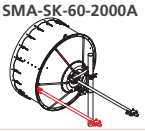
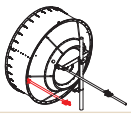
Frequency (GHz)	Polarization	Model Number	Diameter m (ft)	Gain (dBi) Low	Gain (dBi) Mid	Gain (dBi) High	3 dB-BW (deg)	VSWR/R L (dB)	X-Pol (dB)	IPI (dB)	F/B (dB)	ETSI RPE class	US FCC 101 Cat	Fine Adjust. Az	Fine Adjust. Elev	Windspeed km/h (mph) Operational	Windspeed km/h (mph) Survival	Net weight kg (lb)
12.7 to 13.25	Single	SU2-127***2H	0.6 (2)	35.2	35.4	35.6	2.7	1.20 (20.8)	32		62	3		±23	±30	190 (118)	252 (155)	15 (33)
		SU4-127***2H	1.2 (4)	41.3	41.5	41.7	1.4	1.20 (20.8)	32		67	3	B	±5	±15	190 (118)	252 (155)	45 (99)
		SU6-127***2H	1.8 (6)	44.9	45.1	45.3	0.9	1.20 (20.8)	32		72	3	A	±5	±5	190 (118)	252 (155)	115 (254)
		DA8-127***2H	2.4 (8)	47.6	47.7	47.9	0.7	1.08 (28.3)	30		71	2	A	±5	±5	190 (118)	252 (155)	190 419
		DA10-127***2H	3 (10)	49.4	49.5	49.7	0.6	1.08 (28.3)	30		71	2	A	±5	±5	190 (118)	252 (155)	320 706
	Dual	SUX2-127***2H	0.6 (2)	35.1	35.3	35.5	2.7	1.25 19.1	32	35	65	3		±23	±30	190 (118)	252 (155)	15 (33)
		SUX4-127***2H	1.2 (4)	41.3	41.5	41.7	1.4	1.25 19.1	32	35	67	3	B	±5	±15	190 (118)	252 (155)	45 (99)
		SUX6-127***2H	1.8 (6)	44.8	45.0	45.2	0.9	1.25 19.1	32	35	72	3	A	±5	±5	190 (118)	252 (155)	115 (254)
		DAX8-127***2H	2.4 (8)	47.4	47.5	47.7	0.7	1.10 26.4	30	35	70	2	A	±5	±5	190 (118)	252 (155)	190 (419)
		DAX10-127***2H	3 (10)	49.2	49.3	49.5	0.6	1.10 26.4	30	35	71	2	A	±5	±5	190 (118)	252 (155)	320 (706)
14.2 to 15.35	Single	SU2-142***2H	0.6 (2)	36.2	36.5	36.8	2.3	1.20 (20.8)	32		62	2		±23	±30	190 (118)	252 (155)	15 (33)
		SU4-142***2H	1.2 (4)	42.2	42.5	42.8	1.2	1.20 (20.8)	32		70	2		±5	±15	190 (118)	252 (155)	45 (99)
		SU6-142***2H	1.8 (6)	45.7	46	46.3	0.8	1.20 (20.8)	32		73	2		±5	±5	190 (118)	252 (155)	115 (254)
		DA8-142***2H	2.4 (8)	48.3	48.5	48.8	0.6	1.10 (26.4)	30		70	1		±5	±5	190 (118)	252 (155)	190 (419)
	Dual	SUX2-142***2H	0.6 (2)	36.2	36.5	36.8	2.3	1.20 (20.8)	32	35	62	2		±23	±30	190 (118)	252 (155)	15 (33)
		SUX4-142***2H	1.2 (4)	42.1	42.4	42.7	1.2	1.20 (20.8)	32	35	70	2		±5	±15	190 (118)	252 (155)	45 (99)
		SUX6-142***2H	1.8 (6)	45.6	45.9	46.2	0.8	1.20 (20.8)	32	35	74	2		±5	±5	190 (118)	252 (155)	115 (254)
		DAX8-142***2H	2.4 (8)	48.3	48.5	48.8	0.6	1.10 (26.4)	30	35	69	1		±5	±5	190 (118)	252 (155)	190 (419)
17.7 to 19.7	Single	SU2-190***2H	0.6 (2)	41.6	42.1	42.6	1.3	1.20 (20.8)	32		63	2	A	±23	±30	190 (118)	252 (155)	15 (33)
		SU4-190***2H	1.2 (4)	44.1	44.6	45.1	0.9	1.20 (20.8)	32		71	2	A	±5	±15	190 (118)	252 (155)	45 (99)
		SU6-190***2H	1.8 (6)	47.5	48	48.5	0.7	1.20 (20.8)	32		75	2	A	±5	±5	190 (118)	252 (155)	115 (254)
	Dual	SUX2-190***2H	0.6 (2)	41.6	42.1	42.6	1.3	1.20 (20.8)	32	35	63	2	A	±23	±30	190 (118)	252 (155)	15 (33)
		SUX4-190***2H	1.2 (4)	44.0	44.5	45.0	0.9	1.20 (20.8)	32	35	67	2	A	±5	±15	190 (118)	252 (155)	45 (99)
		SUX6-190***2H	1.8 (6)	47.4	47.9	48.4	0.7	1.20 (20.8)	32	35	76	2	A	±5	±5	190 (118)	252 (155)	115 (254)
21.2 to 23.6	Single	SU2-220***2H	0.6 (2)	39.5	40	40.5	1.6	1.25 (19.1)	32		66	2	A	±23	±30	190 (118)	252 (155)	15 (33)
		SU4-220***2H	1.2 (4)	45.6	46.1	46.6	0.8	1.20 (20.8)	32		72	3	A	±5	±15	190 (118)	252 (155)	45 (99)
		SU6-220***2H	1.8 (6)	49	49.5	50	0.5	1.20 (20.8)	32		75	2	A	±5	±5	190 (118)	252 (155)	115 (254)
	Dual	SUX2-220***2H	0.6 (2)	39.5	40	40.5	1.6	1.25 (19.1)	32	35	66	2	A	±23	±30	190 (118)	252 (155)	15 (33)
		SUX4-220***2H	1.2 (4)	45.6	46.1	46.6	0.8	1.20 (20.8)	32	35	72	3	A	±5	±15	190 (118)	252 (155)	45 (99)
		SUX6-220***2H	1.8 (6)	49	49.5	50	0.5	1.20 (20.8)	32	35	75	2	A	±5	±5	190 (118)	252 (155)	115 (254)
24.25 to 26.5	Single	SU2-250***2H	0.6 (2)	40.5	40.8	41.3	1.4	1.25 (19.1)	32		67	2	B	±23	±30	190 (118)	252 (155)	15 (33)
		SU4-250***2H	1.2 (4)	46.8	47.2	47.6	0.7	1.20 (20.8)	32		73	3	A	±5	±15	190 (118)	252 (155)	45 (99)
	Dual	SUX2-250***2H	0.6 (2)	40.5	40.8	41.3	1.4	1.25 (19.1)	32	35	67	2	B	±23	±30	190 (118)	252 (155)	15 (33)
		SUX4-250***2H	1.2 (4)	46.7	47.1	47.5	0.7	1.25 (19.1)	32	35	73	3	A	±5	±15	190 (118)	252 (155)	45 (99)

** : these 2 digits indicate the antenna revision index and the flange option – see the RFS naming structure on page 20 for more details.

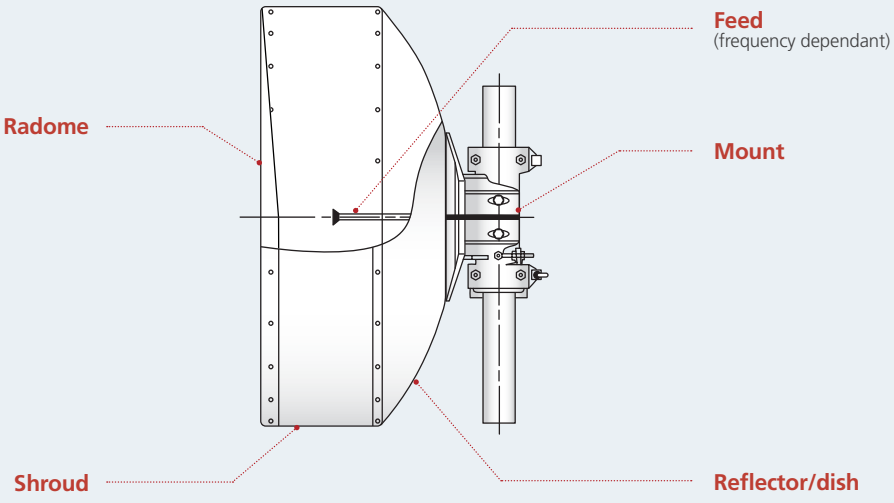
Wind speed and sway bar selection guide

A perimeter sway bar and sway bar connecting kit are available to complement your RFS Harsh Areas Line antennas:

- An optional perimeter sway bar provides added assurance in case mistakes are made during installation
- A universal sway bar tower connecting kit allows sway bars to be attached to pipes or L-structures without drilling a hold in the pipe or structure.

Sizes (ft)	2	4	4	6	8	10	12
Model (Prefix)	SU/SUX	SUX (below 10 GHz)	SU/SUX	SU/SUX	DA/DAX	DA/DAX	DA/DAX
Wind Speed (km/h)	252	252	252	252	252	252	252
Sway Bar Qty	0	1	1	1	1	1	1
Additional Perimeter Sway Bar	Not Available	Not Available	**SMA-SK-4** 	**SMA-SK-60-2000A** 	**SMA-SK-60-3000A** 		
Sway Bar Tower Fixation Kit	-	**SMA-SKO-UNIVERSAL** 		**SMA-SKO-UNIVERSAL-L** 			

Glossary



Gain

The ratio of the radiation intensity in the main beam axis to the radiation intensity that would be obtained if the power accepted by the antenna were radiated isotropically. Value measured in dBi. The values are stated for the three frequencies at mid-band as well as for the bottom and top of the frequency band. The tolerance for antenna gain is ± 0.5 dB.

Half power beam width (3 dB-BW)

The angle, relative to the main beam axis, between the two directions at which the co-polar pattern is 3 dB below the value on the main beam axis.

Voltage standing wave ratio (VSWR) or return loss

The voltage standing wave ratio, or return loss, characterizes the level of energy reflected by impedance mismatching along an electrical transmission line. Expressed in dB, the return loss is a logarithmic measure of the reflection coefficient. It represents the ratio of the transmitted power to the reflected power.

The stated values are guaranteed across the frequency band of operation.

Radiation pattern envelope (RPE)

The envelope represents the worst values of measurements taken on the pattern test range at the three frequencies that are mid-band, bottom and top of band, in copolar and cross-polar conditions, horizontal and vertical polarized, over the full 360° of azimuth.

Since the envelope is drawn over the highest peaks of all measurements, actual interference radiation in an operational system will generally be smaller than calculated from the RPE. Tolerance on given values is 3 dB in an angular region of ±100° and 2 dB from 100° to 180°.

Front-to-back ratio (F/B)

The highest level of radiation relative to the main beam in an angular zone of 180° ± 40° for all antennas. Tolerance on stated values is 2 dB.

Cross polarization discrimination (XPD)

The difference in dB between the co-polarized main beam gain and the orthogonal signal measured within an angular zone of azimuth that is twice the maximum half power beam width of the frequency band.

Inter-port isolation (IPI)

The ratio in dB of the power level applied to one input port of a dual-polarized antenna to the power level received in the other input port on the same antenna.

Operational wind speed

The antenna axis deflection is less than one-third of the half power beam width at the highest frequency supported. The drop in signal is only approximately 1 dB; the radio link will therefore continue to operate.

Survival wind speed

The antenna sub-system will survive the specified survival wind speed without any permanent deformation or changes of shape, although realignment might be needed. An additional load of a 25 mm (1 in) radial ice layer is taken into account.

Mechanical, environmental and electrical testing

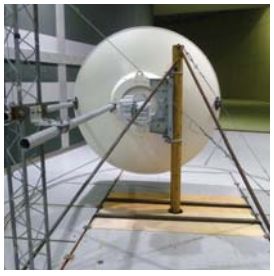
All RFS microwave antennas undergo extensive mechanical, environmental and radio-electrical tests during development to ensure they meet or exceed specifications.

Mechanical tests include:

Shock and vibration tests

Mechanical and static wind load tests

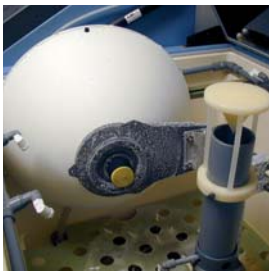
Wind tunnel tests



Packing tests

Environmental tests include:

Corrosion tests



Temperature tests

Humidity tests

Rain tests

Radio-electrical tests include[1]:

Far field radiation measurement (co-polar and cross-polar) tests

Test range for small antennas

Test range for large antennas

Return loss / VSWR measurement tests

[1] All radio-electrical tests are performed on all antenna sizes (up to or 4.6 m or 15 ft) and frequencies (up to 80 GHz).

Understanding RFS model names

All RFS model names are based on a naming structure that tells you*:

The **antenna family** to which they belong

The **antenna diameter**

The **antenna frequency range**

The **antenna mechanical options**

The **antenna color**

UA — ANTENNA FAMILY

SB	Single polarized CompactLine®
SBX	Dual polarized CompactLine®
SC	Single polarized CompactLine Easy
SCX	Dual polarized CompactLine Easy
DA	Single polarized High Performance
DAX	Dual polarized High Performance
UA	Single polarized Ultra High Performance
UDA	Dual polarized Ultra High Performance
PAD[3]	Single polarized improved performance
PADX[3]	Dual polarized improved performance
UXA	Dual polarized Ultra High performance with High Cross Polarization Discrimination
SU	Single polarized SlimLine® Ultra High Performance
SUX	Dual polarized SlimLine® Ultra High Performance
LA	Single polarized Lens antenna
SPF	Single polarized Slimline® Standard performance Non pressurized

8 — DIAMETER

05[2]	0.5 ft (0.15m)
1	1 ft (0.3 m)
2	2 ft (0.6 m)
3	3 ft (0.9 m)
4	4 ft (1.2 m)
6	6 ft (1.8 m)
8	8 ft (2.4 m)
10	10 ft (3 m)
12	12 ft (3.7 m)
15	15 ft (4.6 m)

W71 — FREQUENCY RANGE GHz

23	2.3-2.5
34	3.4-3.9
36	3.6-4.2
44	4.4-5
52	5.25-5.85
W57	5.725-6.875
U57	5.725-7.125
59	5.925-6.425
W59	5.925-6.875
W60	5.925-7.125
65	6.425-7.125
71	7.125-7.75
W71	7.125-8.5
78	7.725-8.5
W100	10-11.7
101	10.1-10.7
100	10-10.7
103	10.3-10.7
105	10.5-10.7
107	10.7-11.7
127	12.7-13.25
142	14.2-15.35
190	17.7-19.7
220	21.2-23.6
250	24.25-26.5
280	27.5-29.5
320	31-33.4
380	37-40
420	40.2-43.5
520	51.4-52.6
W800	71-86

A — ANTENNA REVISION

A	1st revision
B	2nd revision
C	3rd revision

C — FLANGE OPTIONS

B	PBR flange
C	CPR flange
D	PDR flange
J	N-male connector with Jumper
N	N-female connector
U	UG-flange
V	UDR-flange
W	UBR-flange
X	PBR 260-flange in 250 band/ Flange R84 on frequency 71
Z	Choke-flange

1[1] — MECHANICAL OPTIONS

1	Survival Wind speed 200 km/h, standard reflector condition • From 1 ft to 10 ft: reflector is non-split • 12 ft: reflector is split (except UXA type which is non split) • 15 ft: reflector is split (including UXA) *This digit is omitted in the model name when no other specific option is needed.*
2	Survival Wind speed 250 km/h, standard reflector condition
4	Survival Wind speed 200 km/h, non standard reflector condition • From 8 ft to 10 ft: reflector is split • 12 ft: reflector is non split (except UXA type which is split)
5	Survival Wind speed 250 km/h, non standard reflector condition
7	Survival Wind speed 200 km/h, standard reflector and extra sway bar at the rim
8	Survival Wind speed 250 km/h, standard reflector and extra sway bar at the rim
B	Installation on pipe diameter 219 mm
Q	Survival wind speed 250km/h and installation on pipe diameter 219mm
R	Class 1 antenna (200 km/h +25mm ice or 180 km/h +55 mm ice) applicable on specific antenna
S	Class 2 antenna (250 km/h +25mm ice or 225 km/h +55 mm ice) applicable on specific antenna
T	Survival Wind speed 200 km/h, standard reflector and 2 extra sway bars at the rim applicable on specific antenna
U	Survival Wind speed 250 km/h, standard reflector and 2 extra sway bars at the rim applicable on specific antenna

S[1] — ENVIRONMENT OPTIONS

S	Standard Environment Corresponds to the most common configurations. *This digit is therefore omitted in the model name when no other specific option is needed.*
H	Harsh Environment
Q	Northern Climate (High Wind/High Ice)

1[1] — COLOR OPTIONS[4]

1	Natural White (Standard) *Corresponds to the RFS standard configuration. Other options are available upon request.*
D	Dark Grey (RAL 7030)
G	Grey (RAL7000)
L	Light Grey (RAL 7035)
O	Olive Green (RAL 6003)

T[1] — RADOME OPTIONS

T	Teflon Radome
R	Rigid radome for standard performance antenna only
L	No logo on radome

FEED HORN RECTANGULAR WAVEGUIDE SIZE

Frequency	IEC	EIA
36	R40	WR-229
44	R48	WR-187
W57	R70	WR-137
U57	R70	WR-137
59	R70	WR-137
W59	R70	WR-137
W60	R70	WR-137
65	R70	WR-137
71**	R70	WR-137
W71	R84	WR-112
78	R84	WR-112
W100	R100	WR-90
101	R100	WR-90
100	R100	WR-90
103	R100	WR-90
105	R100	WR-90
107	R100	WR-90
127	R120	WR-75
142	R140	WR-62
190	R220	WR-42
220	R220	WR-42
250***	R220	WR-42
280	R320	WR-28
320	R320	WR-28
380	R320	WR-28
420	R500	WR-19

** 71 is available with R84/WR-112 as option
***250 is available with PBR260 as option

* Antenna versions that support specific vendor radios are not shown in this table

Some options might not be available on all antennas – please refer to RFS for specific requests

[1] Digits are omitted when options are not present
[2] Lens antenna only
[3] Specific to North America
[4] Other color options are available upon request

Why RFS?

RFS has been a leader in designing and manufacturing microwave antennas for more than 30 years and has deployed several million microwave antennas around the globe. With manufacturing facilities on five continents, RFS can ensure its customers enjoy low transportation costs and short lead times.

Here are just a few of the reasons customers choose RFS microwave antennas

- **Innovative structural designs** minimize materials without sacrificing mechanical stability.
  - Lightweight, yet robust antennas reduce tower loading as well as installation costs and time.
- **Mechanical designs are based on advanced calculation methods**, such as the finite element method.
  - Mechanical stability and higher wind resistance reduce maintenance requirements and increase antenna life span.
- **A spun backring design** on antenna dishes 1.8 m (6 ft) and larger increases mechanical stability and link security.
- **Rear-mounted feeds** on most models simplify installation.
- **Small antennas meet key radiation pattern requirements**.
  - Smaller antennas can be used in place of larger antennas to simplify site negotiations and minimize leasing costs.
- **Modular designs, low maintenance requirements and long-term reliability** reduce total cost of ownership.
- **Compact packaging** reduces transportation requirements and simplifies logistics.
- **Very simple installation procedures** accelerate installations and reduce training requirements.
- **Optional split-reflector designs** further reduce packaging and transportation requirements.
- **Customized fittings** allow specific radios and hot-standby couplers to be mounted directly on the antenna, eliminating the need for a waveguide link to the radio[1].
- **Extensive testing and qualification procedures** mean there are no compromises in performance or safety. Our customers have complete confidence in our microwave antennas.

[1] RFS CompactLine and CompactLine EASY antennas support integrated radios.

For more information, please contact the nearest RFS sales office:

Southern Europe, Middle East, Africa & India
www.rfsworld.com/sales/semeai

Northern Europe
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