



## Applications

### Overview

Amphenol RF offers a wide variety of external RF antennas which complement our expansive portfolio of RF connector interfaces. External antennas are often mounted on the outside of a device by means of an RF connector. They are engineered for indoor and outdoor use with robust designs available for harsher environments.

External antennas can use either the monopole or dipole design and are typically used for higher power transmission and reception. They are ideal for applications such as Bluetooth, wireless protocols, WLAN/WWAN and IoT.

### Features and Benefits

- Familiar RF interface connections (SMA, RP-SMA, N-Type)
- Single, dual and wideband options
- Common antenna applications are supported
- Straight and swivel whip style designs
- Panel and external mounted cable designs
- Waterproof IP67 configurations available
- Custom solutions upon request

For more information on External RF Antennas, visit:

<https://www.amphenolrf.com/antennas.html>



Access Point



Radio



Navigation



Routers / Gateway / Mesh



Set-Top Box



Surveying Equipment



Security Cameras

### Amphenol RF

Four Old Newtown Road  
Danbury, CT 06810

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or call 800.627.7100

## Ordering Information



Part Number	SMA	ST0226-30-002-A	ST0228-30-002-A	ST0228-30-001-A	ST1226-30-001-A
	RP-SMA	ST0226-30-502-A	ST0228-30-502-A	ST0228-30-501-A	ST1226-30-501-A
Frequency Range (GHz)	2.4 - 2.5   5.15 - 5.85				2.4 - 2.5   5.15 - 5.85   5.925 - 7.125
Return Loss (dB)	< -10		< -10		< -10
Max Input Power (W)	1		2		5
Gain, Peak/Average (dB)	3.0/-0.6   3.4/-1.3		2.7/-0.5   4.0/-0.6		2.0/1.6   3.0/-1.1
Efficiency, Average (%)	86   75		89   87		75   78
Length (mm)	109   88 (bend)		109   88 (bend)		136   114 (bend)
Diameter (mm)	10		10		10
Temperature Range (°C)	-40 to 85				
Humidity	Non-condensing 65°C 95% RH				
RoHS	RoHS Compliant				



Part Number	SMA	ST0356-32-001-A	ST0330-31-002-A	ST0326-30-004-A	ST0457-20-001-A	ST0428-31-001-A	ST1326-30-001-A
	RP-SMA	ST0356-32-501-A	ST0330-31-502-A	ST0326-30-504-A	ST0457-20-501-A	ST0428-31-501-A	ST1326-30-501-A
Frequency Range (GHz)	0.69 - 0.96   1.7 - 2.2   2.3 - 2.7				0.69 - 0.96   1.7 - 2.2   2.3 - 2.7   3.3 - 3.8	0.69 - 0.96   1.7 - 2.2   2.3 - 2.7   3.3 - 3.8   5.15 - 5.95	
Return Loss (dB)	< -7   < -8   < -10		< -5   < -10   < -10		< -5   < -10   < -10	*GP needed, < -5	
Max Input Power (W)	2		2		1	10	
Gain, Peak/Average (dB)	3.0/-2.7   1.7/-3.3   2.2/-3.6		0.6/-2.8   0.2/-5.4   1.6/-5.8		4.7/-3.7   4.0/-1.5   4.1/1.2	*0.8/-2.6   3.7/-1.3   3.2/-1.7   2.0/-2.9	
Efficiency, Average (%)	55   47   44		55   29   27		43   71   76	*60   75   68   54	
Length (mm)	170   1000 (Cable)		115   1000 (Cable)		151   128 (bend)	72   40 (bend)	
Diameter (mm)	83x48		10		10	10	
Temperature Range (°C)	-40 to 85						
Humidity	Non-condensing 65°C 95% RH						
RoHS	RoHS Compliant						
Mechanical Feature	N/A		N/A		Hinged w/ Swivel	Hinged	Hinged w/ Swivel

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## Ordering Information



Part Number	ST0226-40-501-B	ST0226-41-301-B	ST0227-41-501-A	ST0326-40-001-B ST0326-40-501-B
RF Interconnect Type	RP-SMA (Plug)	N-TYPE (Plug)	RP-SMA (Plug)	SMA(Plug) RP-SMA (Plug)
Frequency Range (GHz)	2.4 - 2.5   5.15 - 5.85	2.4 - 2.5   4.9 - 5.825	2.4 - 2.5   5.15 - 5.825	0.698 - 0.8   0.8 - 0.96   1.71 - 2.17   2.3 - 2.69   3.3 - 5   5.15 - 5.925
Return Loss (dB)	< -10   < -10	< -9   < -9	< -10   < -10	< -3   < -7   < -7   < -7   < -7   < -5
Max Input Power (W)	1	1	2	1
Gain, Peak/Average (dB)	3.5/-1.7   5.7/-1.8	3.5/-1.3   6.0/-2	3.0/-2.4   2.0/-5.2	3.0/-4.2   3.2/-4.6   3.1/-1.3   3.2/- 1.2   5.5/-1.5   5.5/-2.6
Efficiency, Average (%)	68   67	75   64	57   30	38   35   75   75   71   55
Length (mm)	200	215	115 (Cable)	220 (bend)
Diameter (mm)	13	20	22	13
Temperature Range (°C)	-40 to 85	-30 to 70	-40 to 65	-40 to 65
IP Rating	IP65	IP67	N/A	N/A
RoHS	RoHS Compliant			
Mechanical Feature	N/A	N/A	N/A	Hinged w/ Swivel



Part Number	ST0428-31-002-A	ST1228-30-501-A	ST1228-40-501-A
RF Interconnect Type	SMA (Plug)	RP-SMA (Plug)	RP-SMA (Plug)
Frequency Range (GHz)	0.617 - 0.95   1.42 - 1.52   1.71 - 2.69   3.3 - 5   5.15 - 5.925	2.4 - 2.5   5.15 - 5.825   5.925 - 7.125	2.4 - 2.5   5.15 - 5.825   5.925 - 7.125
Return Loss (dB)	< -6   < -7   < -7   < -7   < -7	< -10   < -10   < -5	< -10   < -10   < -6
Max Input Power (W)	1	1	1
Gain, Peak/Average (dB)	1.8/-3.8   2.2/-2.8   3.3/-1.7   3.0/-1.9 / 3.8/-2.6	2.5/-0.7   4.0/-1.2   4.2/-1.6	4.4/-1.3   4.1/-1.3   4.7/-1.2
Efficiency, Average (%)	42   52   68   65   55	85   75   70	74   73   76
Length (mm)	142 (bend)	123.7 (bend)	203 (bend)
Diameter (mm)	13	12.7	12.7
Temperature Range (°C)	-40 to 85	-30 to 70	-30 to 70
IP Rating	N/A	IP67	IP67
RoHS	RoHS Compliant		
Mechanical Feature	Hinged w/ Swivel	Hinged w/ Swivel	Hinged w/ Swivel

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