

## ANTENNAS

### About Linx Antennas

The antenna is a critical and often neglected component of any RF product. It plays a vital role in determining the range, reliability and legality of any RF link. Linx offers a variety of antenna styles designed to achieve maximum performance and cost efficiency from most discrete or modular designs. All antennas are designed to comply with FCC and similar world approval standards.



### LINX "WHIP" STYLE 1/4-WAVE ANTENNAS

Quarter-wavelength monopole antennas yield the best performance of any antenna style offered by Linx. When referenced to an appropriate groundplane, these antennas are highly efficient with excellent pattern symmetry and minimal proximity detuning.

\*PLEASE NOTE\*: While exact center frequencies are specified below, whip-style antennas are generally broadband and provide about 40 MHz of useable bandwidth.

#### PW Series Quarter Wave

Designed for permanent attachment, PW Series 1/4-wave whips give outstanding performance in a rugged and cost-effective package. The antenna is attached by placing its base through a 1/4" hole in the product and securing it with a nut or by threading it into a PEM-style insert. This method of attachment is highly secure and saves the cost of an antenna connector. The antenna is fed through the base with RG-174 coax cable which may be soldered directly to the board or attached using a 50-ohm connector. Standard cable length is 8.5". Custom lengths and terminations are available by special order.

- Low Cost
- Outstanding VSWR (<1.2 typ.)
- Excellent performance
- Omni-Directional Pattern
- Flexible main shaft
- Rugged Construction

Quantity	418	433	902-928
<200	\$5.07	\$4.97	\$4.78
200-999	\$4.81	\$4.72	\$4.53
1,000-4,999	\$4.16	\$4.08	\$3.92
>5000	Call	Call	Call
Part #'s	ANT-***-PW-QW (Stud-Mount)		
***= 418, 433, 868, 916 MHz			
Comes standard in black. Custom colors available in production quantities.			

#### CW Series Quarter Wave

CW Series antennas feature an FCC Part 15-compliant Reverse Polarity SMA connector. This allows for easy field replacement and simplifies packaging and shipment. Like the PW Series, these antennas deliver outstanding performance in a rugged and cosmetically attractive package. Linx offers a wide variety of PCB and chassis-mount RP-SMA mating connectors.

Bottom View  
RP SMA



- Fully weatherized
- Damage-resistant
- Permanent stud-mount or Part 15-compliant RP-SMA connectorized style
- Available in Grey, Black or Custom Colors
- Use with plastic\* or metal enclosures

\*Requires proximity groundplane



Quantity	418	433	902-928
<200	\$5.74	\$5.61	\$5.36
200-999	\$5.51	\$5.39	\$5.15
1,000-4,999	\$4.93	\$4.82	\$4.60
>5000	Call	Call	Call
Part #'s	ANT-***-CW-QW (Connectorized)		
***= 418, 433, 868, 916 MHz			
Comes standard in black. Custom colors available in production quantities.			

## LINX CONNECTORIZED ANTENNAS

The antennas on this page feature  15-compliant RP-SMA connectors to allow removal for replacement or transport. Many of the antennas also feature reduced height packages  which are significantly more compact than a straight "whip" style. Reduced height antennas provide excellent performance; however, their operational bandwidth is narrower than a straight whip (typically 20 Mhz), so greater care should be exercised in layout and placement.

**\*Please Note\*** The listed frequencies are the antennas' typical center frequencies.

### RH Series Reduced Height

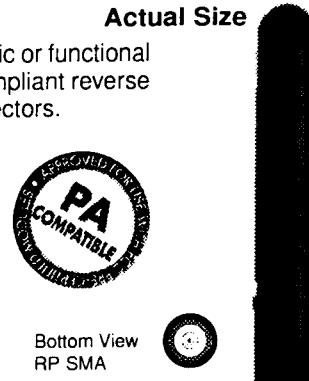
Significantly smaller than our larger whips, the RH Series is ideally suited for products where cosmetic or functional requirements dictate a compact, aesthetically pleasing antenna. The antenna features a Part 15-compliant reverse polarity SMA connection which mates with all Linx PCB and chassis-mount RP-SMA mating connectors.

Quantity	Price (All Frequencies)
<200	\$5.25
200-999	\$4.88
1,000-4,999	\$4.38
>5000	Call
Part #'s	ANT-***-CW-RH

\*\*\*= 315, 418, 433, 868, 916-(902-928) MHz  
Comes standard in black.

- Reduced height helical whip
- Very low VSWR (<1.9 typ.)
- Excellent performance
- Omni-directional pattern
- Flexible main shaft
- Rugged construction
- Fully weatherized
- Damage-resistant
- Part 15-compliant RP-SMA connector
- Use with plastic\* or metal enclosures

\*Requires proximity groundplane



### HD Series Reduced Height

The HD Series sets new standards for field durability. This reduced height 1/4-wave antenna is ready for years of abuse thanks to a highly flexible internal helical which is overmolded with a heavy-duty protective jacket. The HD Series is an excellent choice for outdoor application, or for use in adverse environments where the antenna must resist shock, harsh weather, and tampering. The HD Series uses a Part 15-compliant RP-SMA connector.

Quantity	Price (All Frequencies)
<200	\$5.50
200-999	\$5.13
1,000-4,999	\$4.63
>5000	Call
Part #'s	ANT-***-CW-HD

\*\*\*= 315, 418, 433, 868, 916-(902-928) MHz  
Comes standard in black.

- Reduced height helical whip
- Very low VSWR (<2 typ.)
- Excellent performance
- Omni-directional pattern
- Flexible main shaft
- Extra heavy-duty construction
- Fully weatherized
- Damage-resistant
- Part 15-compliant RP-SMA connector
- Use with plastic\* or metal enclosures

\*Requires proximity groundplane



### RCS Ultra-Compact Right Angle

The RCS Series is ideally suited for products requiring an attractive yet compact antenna in a right-angle form factor. The 1/4-wave antenna features a Part 15-compliant RP-SMA connection which mates with all Linx PCB and chassis RP-SMA connectors.

Quantity	
<200	\$5.25
200-999	\$4.49
1,000-4,999	\$4.03
>5000	Call
Part #'s	ANT-***-CW-RCS

\*\*\*= 916-(902-928MHz), 2.4GHz Comes standard in black.

- Reduced height helical whip
- Very low VSWR (<1.9 typ.)
- Excellent performance
- Omni-directional pattern
- Rugged construction
- Fully weatherized & damage-resistant
- Single-screw permanent attachment
- Multi-step base for mounting flexibility
- Use with plastic\* or metal enclosures

\*Requires proximity groundplane



### RCL Compact Right Angle

The RCL Series is similar to the RCS Series above but in a larger form factor. It is useful in products where additional height above the product's case is needed or a slightly wider operational bandwidth is desired. The 2.4GHz version has a center-fed 1/2-wave element with internal ground reference. All other frequencies are 1/4-wave.

Quantity	
<200	\$5.50
200-999	\$4.48
1,000-4,999	\$4.38
>5000	Call
Part #'s	ANT-***-CW-RCL

\*\*\*= 916-(902-928MHz), 2.4GHz Comes standard in black.

- Multi-position reduced height whip
- Mount tilts & rotates
- Excellent performance
- Omni-directional pattern
- Rugged construction
- Fully weatherized & damage-resistant
- Single-screw permanent attachment
- Use with plastic\* or metal enclosures

\*Requires proximity groundplane

