

## How To Use The Sinclair Clamp Selection Guide



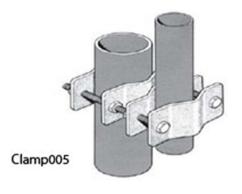
## Clamp Selection Guide

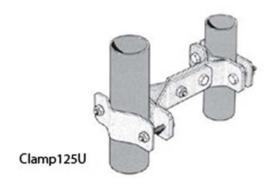
#### **Clamps and Mounting Hardware**

Our standard clamps are designed for mounting base station antennas to a number of different fixtures including pipes, angle rods, wood poles, braces and flat surfaces. These clamps are also ideal for many other clamping applications. We also offer an extensive range of mounting hardware on special order basis, please contact your Sinclair customer service representative for details.

#### **Sinclair Clamps**

The table on the next set of slides summarizes a selection of the clamps offered. For further details including corresponding Sinclair antenna models please download our comprehensive clamp selection guide available at: sinctech.com or contact your Sinclair customer service representative at 1-800-263-3275.







# Available Clamps

| Pipe Parallel to Pipe |                                  |                               |                       |  |  |  |
|-----------------------|----------------------------------|-------------------------------|-----------------------|--|--|--|
| Clamp                 | Material Type                    | Pipe 1                        | Pipe 2                |  |  |  |
| Clamp005              | Carbon Steel, Hot Dip Galvanized | 1.5 - 3.5 " Diameter          | 1.5 - 3.5 " Diameter  |  |  |  |
| Clamp006A             | Carbon Steel, Hot Dip Galvanized | 1.9 - 3.56" Diameter          | 1.9 - 3.56" Diameter  |  |  |  |
| Clamp006B             | Carbon Steel, Hot Dip Galvanized | 2.37 - 4.5" Diameter          | 2.37 - 4.5" Diameter  |  |  |  |
| Clamp006C             | Carbon Steel, Hot Dip Galvanized | 3.5 - 5.563" Diameter         | 3.5 - 5.563" Diameter |  |  |  |
| Clamp006E             | Carbon Steel, Hot Dip Galvanized | 4.0 - 8.63" Diameter          | 4.0 - 8.63" Diameter  |  |  |  |
| Clamp009              | Aluminum                         | 1.5 - 3.5" Diameter           | 1.9" Diameter         |  |  |  |
| Clamp013              | Aluminum                         | 1.5 - 1.9" Diameter           | 1.5 - 1.9" Diameter   |  |  |  |
| Clamp015              | Carbon Steel, Hot Dip Galvanized | 1.5 - 3.5" Diameter           | 1.5 - 3.5" Diameter   |  |  |  |
| Clamp015A             | Carbon Steel, Hot Dip Galvanized | 0.75 - 1.5" Diameter          | 1.5 - 3.5" Diameter   |  |  |  |
| Clamp117              | Aluminum                         | 1.5 - 2.38" Diameter          | 1.9" Diameter         |  |  |  |
| Clamp120              | Carbon Steel, Hot Dip Galvanized | 1.50 - 2.38" Diameter         | 1.50 - 2.38" Diameter |  |  |  |
| Clamp133              | Carbon Steel, Hot Dip Galvanized | 3.5 - 6.63" Diameter          | 3.5 - 6.63" Diameter  |  |  |  |
| Clamp134HD            | Carbon Steel, Hot Dip Galvanized | 1.5 - 3.5" Diameter           | 3.5-6.6" Diameter     |  |  |  |
| Clamp135              | Carbon Steel, Hot Dip Galvanized | 1.5" OR 3/4" & 0.84" Diameter | 1.5 - 2.38" Diameter  |  |  |  |
| Clamp135SS            | Stainless Steel                  | 1.5" OR 3/4" & 0.84" Diameter | 1.5 - 2.38" Diameter  |  |  |  |

| Universal Pipe Parallel to Pipe or Pipe 90 Degrees Clamp Kit |                                  |                       |                       |  |  |  |  |
|--|----------------------------------|-----------------------|-----------------------|--|--|--|--|
| Clamp Material Type Pipe 1 Pipe 2                            |                                  |                       |                       |  |  |  |  |
| Clamp120   | Carbon Steel, Hot Dip Galvanized | 1.50 - 2.38" Diameter | 1.50 - 2.38" Diameter |  |  |  |  |
| Clamp130   | Aluminum                         | 1.5 - 2.88" Diameter  | 1.5 - 2.88" Diameter  |  |  |  |  |
| Clamp147   | Aluminum                         | 2.88 - 4.5" Diameter  | 2.88 - 4.5" Diameter  |  |  |  |  |
| Clamp148   | Aluminum                         | 2.88 - 4.5" Diameter  | 1.5 - 2.88" Diameter  |  |  |  |  |

| Universal Parallel Clamp Kit                 |                                  |                     |                                      |  |  |  |
|--|----------------------------------|---------------------|--------------------------------------|--|--|--|
| Clamp Material Type Pipe 1 Pipe 2            |                                  |                     |                                      |  |  |  |
| Clamp125U (Pipe Parallel to Pipe)            | Carbon Steel, Hot Dip Galvanized | 1.5 - 3.5" Diameter | 1.5 - 3.5" Diameter                  |  |  |  |
| Clamp125U (Pipe Parallel to 90 Degree Angle) | Carbon Steel, Hot Dip Galvanized | 1.5 - 3.5" Diameter | 1.25 - 2.75" Angle Depth, 90 Degrees |  |  |  |
| Clamp125U (Pipe Parallel to 60 Degree Angle) | Carbon Steel, Hot Dip Galvanized | 1.5 - 3.5" Diameter | 1.75 - 3.5" Angle Depth, 60 Degrees  |  |  |  |



# Available Clamps- Continued

| Pipe 90 Degree to Pipe |                                  |                      |                       |  |  |  |
|------------------------|----------------------------------|----------------------|-----------------------|--|--|--|
| Clamp                  | Material Type                    | Pipe 1               | Pipe 2                |  |  |  |
| Clamp001               | Aluminum                         | 1.5" Diameter        | 1.9" Diameter         |  |  |  |
| Clamp008               | Aluminum                         | 1.9" Diameter        | 1.9" Diameter         |  |  |  |
| Clamp010               | Aluminum                         | 1.31 - 1.5" Diameter | 1.31 - 1.5" Diameter  |  |  |  |
| Clamp011               | Aluminum                         | 1.0" Diameter        | 1.9" Diameter         |  |  |  |
| Clamp017               | Carbon Steel, Hot Dip Galvanized | 1.5 - 3.5" Diameter  | 1.5 - 3.5" Diameter   |  |  |  |
| Clamp017HD             | Carbon Steel, Hot Dip Galvanized | 1.5 - 3.0" Diameter  | 2.88 - 4" Diameter    |  |  |  |
| Clamp017S              | Carbon Steel, Hot Dip Galvanized | 0.75 - 1.5" Diameter | 1.5 - 3.5" Diameter   |  |  |  |
| Clamp028               | Carbon Steel, Hot Dip Galvanized | 2.88" Diameter       | 2.88" Diameter        |  |  |  |
| Clamp033               | Carbon Steel, Hot Dip Galvanized | 1.5 - 3.5" Diameter  | 4.0 - 5.56" Diameter  |  |  |  |
| Clamp073               | Carbon Steel, Hot Dip Galvanized | 2.88" Diameter       | 5.5" Diameter         |  |  |  |
| Clamp073A              | Carbon Steel, Hot Dip Galvanized | 1.9" Diameter        | 5.56" Diameter        |  |  |  |
| Clamp102               | Carbon Steel, Hot Dip Galvanized | 1.9" Diameter        | 6.63" Diameter        |  |  |  |
| Clamp103               | Carbon Steel, Hot Dip Galvanized | 2.88" Diameter       | 6.63" Diameter        |  |  |  |
| Clamp104               | Carbon Steel, Hot Dip Galvanized | 2.88" Diameter       | 8.63" Diameter        |  |  |  |
| Clamp115               | Aluminum                         | 0.84" Diameter       | 0.75 - 2.38" Diameter |  |  |  |
| Clamp120               | Carbon Steel, Hot Dip Galvanized | 1.5 - 2.38" Diameter | 1.5 - 2.38" Diameter  |  |  |  |
| Clamp120SS             | Stainless Steel                  | 1.5 - 2.38" Diameter | 1.5 - 2.38" Diameter  |  |  |  |
| Clamp121A              | Carbon Steel, Hot Dip Galvanized | 1.5 - 2.38" Diameter | 2.88" Diameter        |  |  |  |
| Clamp121C              | Carbon Steel, Hot Dip Galvanized | 2.88" Diameter       | 5.0" Diameter         |  |  |  |
| Clamp123A-1            | Carbon Steel, Hot Dip Galvanized | 1.6" Diameter        | 2.88" Diameter        |  |  |  |
| Clamp123B-1            | Carbon Steel, Hot Dip Galvanized | 1.66" Diameter       | 4.0" Diameter         |  |  |  |

| Pipe Parallel or 90 Degree to Pipe |  |  |  |  |  |  |  |
|------------------------------------|--|--|--|--|--|--|--|
| Clamp Material Type Pipe 1 Pipe 2  |  |  |  |  |  |  |  |
| Clamp130                           |  |  |  |  |  |  |  |

| Pipe Omni-directional to Pipe     |                                  |                       |                       |  |  |  |  |
|-----------------------------------|----------------------------------|-----------------------|-----------------------|--|--|--|--|
| Clamp Material Type Pipe 1 Pipe 2 |                                  |                       |                       |  |  |  |  |
| Clamp017H                         | Carbon Steel, Hot Dip Galvanized | 1.5 - 3.5" Diameter   | 1.5 - 3.5" Diameter   |  |  |  |  |
| Clamp064                          | Carbon Steel, Hot Dip Galvanized | 0.75 - 2.38" Diameter | 0.75 - 2.38" Diameter |  |  |  |  |
| Clamp064HD                        | Carbon Steel, Hot Dip Galvanized | 1.5 - 2.38" Diameter  | 1.5 - 2.38" Diameter  |  |  |  |  |



# Available Clamps- Continued

|              | Pipe Parallel to A               | ngle  |                                  |  |  |
|--------------|----------------------------------|---|----------------------------------|--|--|
| <u>Clamp</u> | Material Type                    | Pipe 1  | Pipe 2                           |  |  |
| Clamp015B    | Carbon Steel, Hot Dip Galvanized | 1.5 - 3.5" Diameter   | 2 - 4" Angle Depth, 60 Degrees   |  |  |
| Clamp015C    | Carbon Steel, Hot Dip Galvanized | 1.5 - 3.5" Diameter   | 1.5 - 4" Angle Depth, 90 Degrees |  |  |
| Clamp111     | Carbon Steel, Hot Dip Galvanized | 1.5 - 3.5" Diameter   | 3.5 - 6" Angle Depth, 90 Degrees |  |  |
| Clamp113A    | Carbon Steel, Hot Dip Galvanized | Carbon Steel, Hot Dip Galvanized 1.5 - 3.5" Diameter 4 - 8" Angle Dep |                                  |  |  |
| Clamp128     | Carbon Steel, Hot Dip Galvanized | 3.5 - 6.63" Diameter  | 4 - 8" Angle Depth, 60 Degrees   |  |  |
|              | Pipe 90 Degrees to               | Angle   |                                  |  |  |
| Clamp        | Material Type                    | Pipe 1  | Pipe 2                           |  |  |
| Clamp035     | Carbon Steel, Hot Dip Galvanized | 1.5 - 3.5" Diameter 90 Degrees  | 2 - 4" Angle Depth, 90 Degrees   |  |  |
| Clamp042     | Carbon Steel, Hot Dip Galvanized | 1.5 - 3.5" Diameter 90 Degrees  | 4 - 8" Angle Depth, 60 Degrees   |  |  |
| Clamp122     | Carbon Steel, Hot Dip Galvanized | 1.5 - 3.5" Diameter   | 1.5 - 4" Angle Depth, 90 Degrees |  |  |
| Clampizz     | Carbon Steer, not Dip Garvanizeu | 1.5 - 5.5 Diameter  | 1.5 - 4 Angle Depth, 90 Degrees  |  |  |
|              | Pipe Omni-directional            | to Angle  |                                  |  |  |
| Clamp        | Material Type                    | Pipe 1  | Pipe 2                           |  |  |
| Clamp052A    | Carbon Steel, Hot Dip Galvanized | 1.5 - 3.5" Diameter   | 2 - 4" Angle Depth, 60 Degrees   |  |  |
| Clamp052B    | Carbon Steel, Hot Dip Galvanized | 1.5 - 3.5" Diameter   | 4 - 8" Angle Depth, 60 Degrees   |  |  |
|              | Pipe Parallel to Wood P          | ole or Wall   |                                  |  |  |
| Clamp        | Material Type                    | Pip   | 0                                |  |  |
| Clamp017A    | Carbon Steel, Hot Dip Galvanized | 1.5 - 3.5" Diameter Parallel to Wood                                  |                                  |  |  |
| Clamp017AS   | Carbon Steel, Hot Dip Galvanized | 0.75-1.5" Diameter Parallel to Wood                                   |                                  |  |  |
| Clamp017B    | Carbon Steel, Hot Dip Galvanized | 1.5 - 2.3" Dimeter Perpendicular to \                                 |                                  |  |  |
| Clamp033B    | Carbon Steel, Hot Dip Galvanized | 4.0" Diameter Parallel to Wood Post                                   |                                  |  |  |
|              |                                  |   |                                  |  |  |
|              | Pipe to Brace                    |   |                                  |  |  |
| <u>Clamp</u> | Material Type                    | <u>Pipe</u>   |                                  |  |  |
| Clamp017MX   | Carbon Steel, Hot Dip Galvanized | 1.5 - 2.88" Diameter to Brace   |                                  |  |  |
|              |                                  |   |                                  |  |  |
|              |                                  |   | 5                                |  |  |



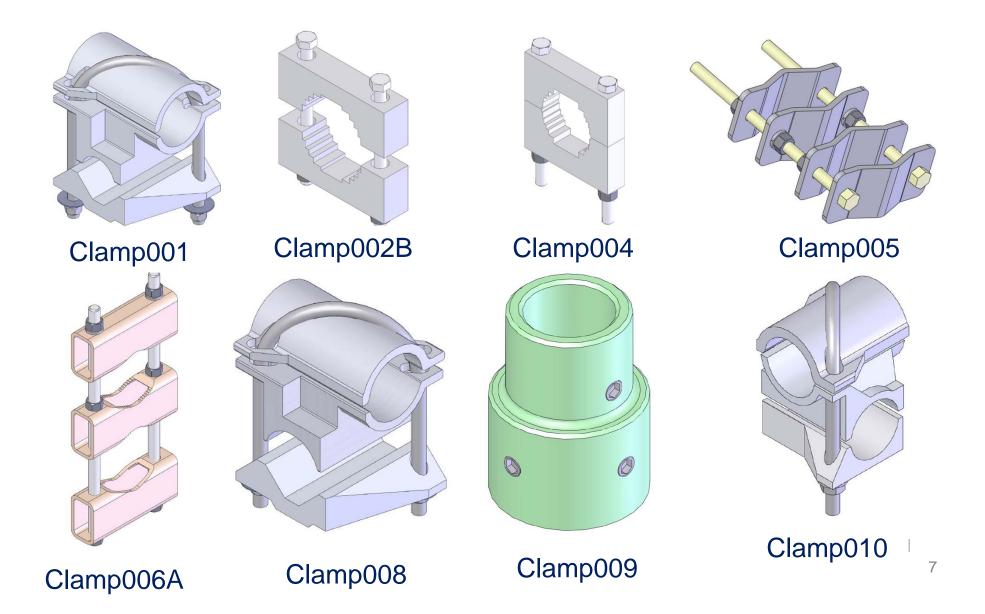
# Available Clamps- Continued

| Pipe to Flat Surface     |                                  |   |  |  |  |  |
|--------------------------|----------------------------------|---|--|--|--|--|
| <u>Clamp</u>             | Material Type                    | <u>Pipe</u>   |  |  |  |  |
| Clamp002                 | Aluminum                         | 1.9" Diameter to Flat Surface (Plate)                   |  |  |  |  |
| Clamp002B                | Aluminum                         | 2.38" Diameter to Flat Surface (Plate)                  |  |  |  |  |
| Clamp004 (Aluminum)      | Aluminum                         | 2.88" Diameter to Flat Surface (Plate)                  |  |  |  |  |
| Clamp004B (Iron Casting) | Iron Casting, Hot Dip Galvanized | 2.88" Diameter to Flat Surface (Plate)                  |  |  |  |  |
| Clamp131                 | Carbon Steel, Hot Dip Galvanized | 3.5 - 6.63" Diameter to Flat Surface (13 1/4 Thick Max) |  |  |  |  |
| WMK-250                  | Aluminum                         | 1.5 IPS (80) pipe with a Clamp008 to allow for rotation |  |  |  |  |

| Pipe to Wall Surface     |                                  |                                     |  |  |  |
|--------------------------|----------------------------------|-------------------------------------|--|--|--|
| Clamp Material Type Pipe |                                  |                                     |  |  |  |
| Clamp136                 | Carbon Steel, Hot Dip Galvanized | 1.5 - 3.5" Diameter to Flat Surface |  |  |  |

|   | Downtilt Clamps                     |  |  |  |  |  |
|---|-------------------------------------|--|--|--|--|--|
| Clamp170 Aluminum/ Steel, Hot Dip Galvanized   1.5 - 2.88" Diampeter Pipe Mounted, No Downtilt (SP304 Ser |                                     |  |  |  |  |  |
|   |                                     | 2.38 - 2.88" Diameter Pipe Mounted, 0 to 20° Mechanical Downtilt |  |  |  |  |
| Clamp141  | Steel, Hot Dip Galvanized           | (SE414 Series)   |  |  |  |  |
|   |                                     | 2.38 - 2.88" Diameter Pipe Mounted, 0 to 20° Mechanical Downtilt |  |  |  |  |
| Clamp142  | Steel, Hot Dip Galvanized           | (SE419 Series)   |  |  |  |  |
|   |                                     | 1.5 - 2.88" Diampeter Pipe Mounted, 0 to 12° Mechanical Downtilt |  |  |  |  |
| Clamp191  | Steel, Hot Dip Galvanized/ Aluminum | (SP304 Series)   |  |  |  |  |
|   |                                     | 38 - 73mm Diameter Pipe Mounted, 0 to 12° Mechanical Downtilt    |  |  |  |  |
| Clamp191M   | Steel, Hot Dip Galvanized/ Aluminum | (SP304 Series)   |  |  |  |  |

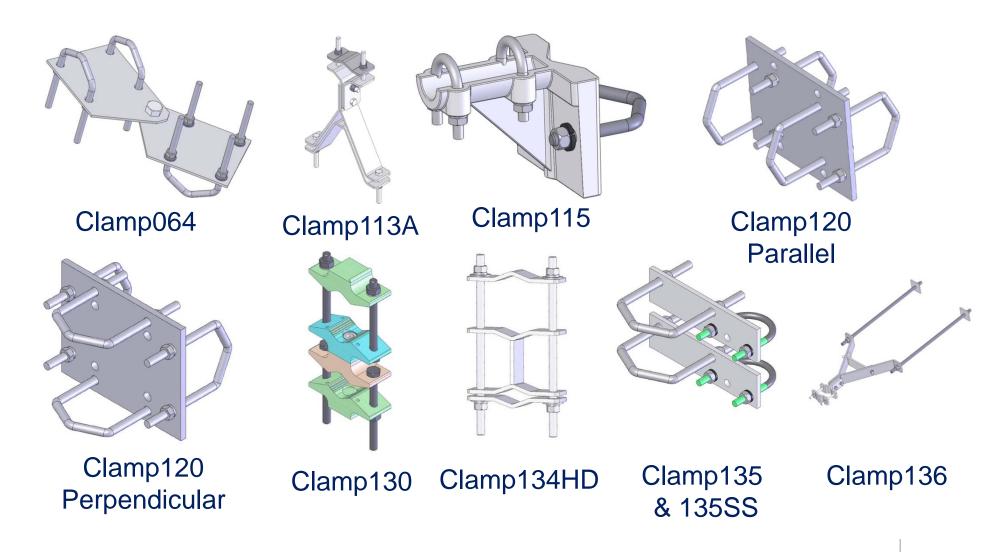




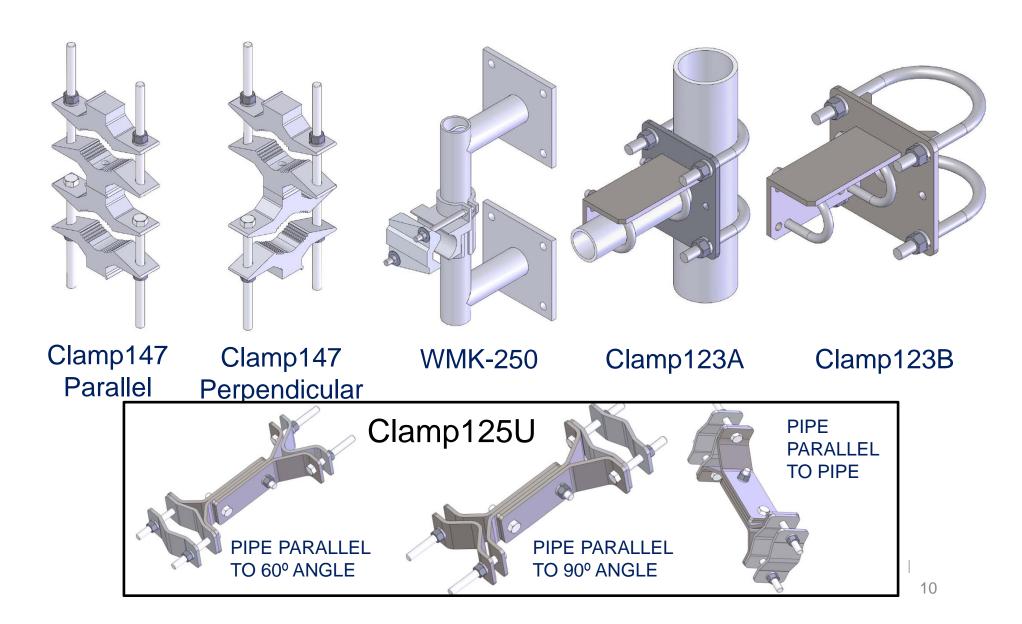




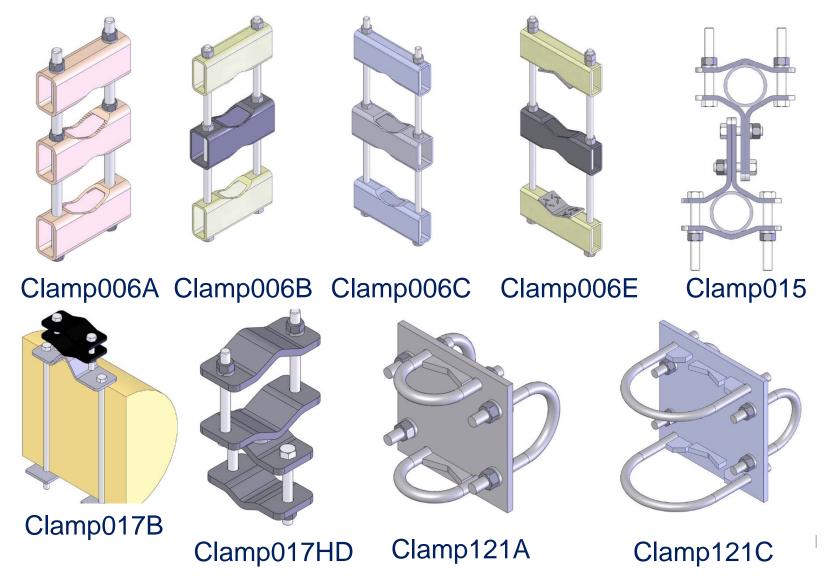














## Clamp Selection Guide

|   | Clamps: Antenna to Tower Leg or Support Pipe |              |                                    |                         |          |                           |
|---|--|--------------|------------------------------------|-------------------------|----------|---------------------------|
| Sinclair Antenna Models   | Clamp Included                               | Qty Required | Round                              | 60°                     | 90°      | wall, pole                |
| SC229 Series, SC320 Series                                      | Clamp005                                     | 2            | Clamp006A OR Clamp147              |                         |          | Clamp017A OR<br>Clamp136  |
| SC225-M Series, SC225-H Series                                  | Clamp005                                     | 2            | Clamp147, Clamp15, OR<br>Clamp130  |                         |          | Clamp017AS OR<br>Clamp136 |
| SC233 Series, SC233M Series                                     | Clamp135                                     | 1            | Qty 2- Clamp015A                   |                         |          | Clamp017AS OR<br>Clamp136 |
| SC281-H Series, SC412-H Series                                  |  | 2            | Clamp006C                          |                         |          | Clamp136A                 |
| SC323 Series, SC323-H Series                                    | Clamp130                                     | 2            | Clamp005                           |                         |          | Clamp017A OR<br>Clamp136  |
| SC329-H Series, SC369H Series                                   | Clamp130                                     | 2            | Clamp005, OR Clamp120              |                         |          | Clamp017AS OR<br>Clamp136 |
| SC381-H Series  |  | 2            | Clamp006C                          |                         |          |                           |
| SC488 Series, SC488-H Series                                    | Clamp130                                     | 2            | Clamp147, OR Clamp005              |                         |          | Clamp017A OR<br>Clamp136  |
| SC489 Series, SC489-H Series, SC420-<br>H Series                | Clamp130                                     | 2            | Clamp147, OR Clamp015              |                         |          | Clamp017A OR<br>Clamp136  |
| SC432D-H Series, SC432T Series, 432T-<br>H Series               |  | 2            | Clamp006B, OR Clamp147             |                         |          | Clamp017A OR<br>Clamp136  |
| SC433 Series  | Clamp130                                     | 1            | Clamp147, OR Clamp005              |                         |          | Clamp017A OR<br>Clamp136  |
| SC746-HL Series   |  | 2            | Clamp147, Clamp130, OR<br>Clamp005 |                         |          | Clamp017A OR<br>Clamp136  |
| SC479-HL Series   |  | 2            | Clamp006B, OR Clamp147             |                         |          | Clamp017A OR<br>Clamp136  |
| SD110 Series, (6 Clamps <35.5 MHz; 4 Clamps for >35.5 MHz)      |  | 6 or 4       | Clamp017, Clamp033, OR<br>Clamp130 | Clamp035 OR<br>Clamp042 | Clamp122 | Clamp017A OR<br>Clamp136  |
| SD112 Series, (12 Clamps <35.5 MHz; 8 Clamps for >35.5 MHz)     |  | 12 or 8      | Clamp017, Clamp033, OR<br>Clamp130 | Clamp035 OR<br>Clamp042 | Clamp122 | Clamp017A OR<br>Clamp136  |
| SD114 Series, (24 Clamps <35.5 MHz;<br>16 Clamps for >35.5 MHz) |  | 24 or 16     | Clamp017, Clamp033, OR<br>Clamp130 | Clamp035 OR<br>Clamp042 | Clamp122 | Clamp017A OR<br>Clamp136  |

<sup>\*</sup> Clamps listed in bold type are those normally included with selected standard antennas as indicated in this document.

<sup>\*\*</sup> No of clamps per antenna. Sinclair reserves the right to supply suitable equivalents if necessary without prior notice.



|  | Clamps: Antenna to Tower Leg or Support Pipe |              |  |                             |                            |                          |
|--|--|--------------|--|-----------------------------|----------------------------|--------------------------|
| Sinclair Antenna Models                      | Clamp Included                               | Qty Required | Round  | 60°                         | 90°                        | wall, pole               |
| SD210 Series, SD210D Series, SD212<br>Series |  | 2            | Clamp005, Clamp015, OR<br>Clamp130                               | Clamp015B,<br>Clamp113A, OR | Clamp015C,<br>Clamp111, OR | Clamp017A OR<br>Clamp136 |
| SD210-H Series                               |  | 2            | Clamp147, OR Clamp015  | Clamp015B,<br>Clamp113A     | Clamp015C, OR<br>Clamp111  | Clamp017A OR<br>Clamp136 |
| SD210R-SF2P60LDF(D00S)                       |  | 2            | Clamp006A OR<br>Clamp006B  |                             |                            | Clamp136                 |
| SD210R-SF2P90LDF(D00S)                       |  | 2            | Clamp006A OR<br>Clamp006B  |                             |                            | Clamp136                 |
| SD210R-SF2P120LDF(D00S)                      |  | 2            | Clamp006A OR<br>Clamp006B  |                             |                            | Clamp136                 |
| SD212R-SF2P60LDF(D00S)                       |  | 2 and 4      | Clamp006A OR<br>Clamp006B (antenna) and<br>Clamp064HD (supports) |                             |                            | Clamp136                 |
| SD212R-SF2P90LDF(D00S)                       |  | 2 and 4      | Clamp006A OR<br>Clamp006B (antenna) and<br>Clamp064HD (supports) |                             |                            | Clamp136                 |
| SD212R-SF2P120LDF(D00S)                      |  | 2            | Clamp006A OR<br>Clamp006B  |                             |                            | Clamp136                 |
| SD214R-SF2P60LDF(D00S)                       |  | 3 and 8      | Clamp006A OR<br>Clamp006B (antenna) and<br>Clamp064HD (supports) |                             |                            | Clamp136                 |
| SD214R-SF2P90LDF(D00S)                       |  | 3 and 8      | Clamp006A OR<br>Clamp006B (antenna) and<br>Clamp064HD (supports) |                             |                            | Clamp136                 |
| SD214R-SF2P120LDF(D00S)                      |  | 3            | Clamp006A or Clamp006B   |                             |                            | Clamp136                 |

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| Sinclair Antenna Models SD212-H Series | Clamps: Antenna to Tower Leg or Support Pipe |              |                                     |                            |                            |                           |  |  |  |
|--|--|--------------|-------------------------------------|----------------------------|----------------------------|---------------------------|--|--|--|
|  | Clamp Included                               | Qty Required | Round                               | 60°                        | 90°                        | wall, pole                |  |  |  |
|  |  | 2            | Clamp006A, OR Clamp147              | Clamp015B OR<br>Clamp113A  | Clamp015C OR<br>Clamp111   | Clamp017A OR<br>Clamp136  |  |  |  |
| SD212D Series                          |  | 2            | Clamp147,Clamp005, OR<br>Clamp015   | Clamp15B,<br>Clamp113A, OR | Clamp015C,<br>Clamp111, OR | Clamp017A OR<br>Clamp136  |  |  |  |
| SD212D-H Series                        |  | 2            | Clamp006C                           | Clamp128                   |                            |                           |  |  |  |
| SD212T-H Series                        |  | 2            | Clamp006E                           | Clamp128                   |                            |                           |  |  |  |
| SD214 Series, SD2352 Series            |  | 2            | Clamp147,Clamp005, OR<br>Clamp015   | Clamp15B,<br>Clamp113A, OR | Clamp015C,<br>Clamp111, OR | Clamp017A OR<br>Clamp136  |  |  |  |
| SD214-H Series (Side mount)            |  | 3            | Clamp147                            | Clamp128                   |                            | Clamp017A OR<br>Clamp136  |  |  |  |
| SD214-H Series (Top mount)             |  | 2            | Clamp006C                           | Clamp128                   |                            | Clamp136                  |  |  |  |
| SD218 Series, SD218 Series             |  | 4            | Clamp147, Clamp015, OR<br>Clamp130  | Clamp15B,<br>Clamp113A, OR | Clamp015C,<br>Clamp111, OR | Clamp017A OR<br>Clamp136  |  |  |  |
| SD222 Series, SD224 Series             | Clamp130                                     | 2            | Clamp005, OR Clamp015               |                            |                            | Clamp017AS OR<br>Clamp136 |  |  |  |
| SD235 Series                           | Clamp015                                     | 2            | Clamp005, Clamp015, OR<br>Clamp125U |                            |                            | Clamp017A OR<br>Clamp136  |  |  |  |
| SD235-H Series                         |  | 2            | Clamp006B                           |                            |                            | Clamp017A OR<br>Clamp136  |  |  |  |
| SD235D Series, SD2352 Series           |  | 2            | Clamp006B                           |                            |                            | Clamp136                  |  |  |  |
| SD2352-H Series                        |  | 2            | Clamp006C                           |                            |                            |                           |  |  |  |
| SD235D-H Series                        |  | 2            | Clamp006E                           |                            |                            |                           |  |  |  |

<sup>\*</sup> Clamps listed in bold type are those normally included with selected standard antennas as indicated in this document.

<sup>\*\*</sup> No of clamps per antenna. Sinclair reserves the right to supply suitable equivalents if necessary without prior notice.



| Sinclair Antenna Models                           |                | Clamps: Antenna to Tower Leg or Support Pipe |   |                            |                            |                            |  |  |  |  |  |
|---|----------------|--|---|----------------------------|----------------------------|----------------------------|--|--|--|--|--|
|   | Clamp Included | Qty Required                                 | Round   | 60°                        | 90°                        | wall, pole                 |  |  |  |  |  |
| SD310-H Series, SD312-H Series,<br>SD314-H Series |                | 2  | Clamp005, Clamp130, OR<br>Clamp125U           | Clamp15B,<br>Clamp113A, OR | Clamp015C,<br>Clamp111, OR | Clamp017A OR<br>Clamp136   |  |  |  |  |  |
| SD314D-H Series                                   |                | 3  | Clamp005, Clamp130, OR<br>Clamp125U           | Clamp15B,<br>Clamp113A, OR | Clamp015C,<br>Clamp111, OR | Clamp017A OR<br>Clamp136   |  |  |  |  |  |
| SD318-H Series                                    |                | 3  | Clamp005, Clamp130, OR<br>Clamp125U           | Clamp15B,<br>Clamp113A, OR | Clamp015C,<br>Clamp111, OR | Clamp017A OR<br>Clamp136   |  |  |  |  |  |
| SD335 Series                                      |                | 2  | Clamp005, Clamp015,<br>Clamp130, OR Clamp125U |                            |                            | Clamp017A OR<br>Clamp136   |  |  |  |  |  |
| SD335-H Series                                    |                | 2  | Clamp005, Clamp015, OR<br>Clamp125U           |                            |                            | Clamp017A OR<br>Clamp136   |  |  |  |  |  |
| SD3352 Series                                     | Clamp130       | 2  | Clamp005, Clamp015, OR<br>Clamp125U           |                            |                            | Clamp017A OR<br>Clamp136   |  |  |  |  |  |
| SD3352D Series                                    |                | 2  | Clamp006B                                     |                            |                            |                            |  |  |  |  |  |
| SD3352D-H Series                                  |                | 2  | Clamp006C                                     |                            |                            |                            |  |  |  |  |  |
| SD3352-H Series                                   | Clamp130       | 2  | Clamp147, Clamp005, OR<br>Clamp015,           |                            |                            | Clamp017A OR<br>Clamp136   |  |  |  |  |  |
| SE412 Series, SE414 Series, SE419<br>Series       | Clamp130       | 1  | Clamp 141 DT(for SE414);<br>142 DT(for SE419) | N/A                        | N/A                        | N/A                        |  |  |  |  |  |
| SG101A Series, SG101C Series,<br>SC101-Series     | Clamp120       | 2  | Clamp005, OR Clamp015                         | Clamp015B OR<br>Clamp113A  | Clamp015C OR<br>Clamp111   | Clamp002,<br>Clamp017A, OR |  |  |  |  |  |
| SG201 Series, SG217 Series                        | Clamp135       | 1  |   | Clamp015B OR<br>Clamp113A  | Clamp015C OR<br>Clamp111   | Clamp017AS OR<br>Clamp136  |  |  |  |  |  |
| SG238 Series                                      | Clamp135       | 1  |   |                            |                            |                            |  |  |  |  |  |
| SG238-H Series                                    | Clamp130       | 2  |   | Clamp015B,<br>Clamp113A    | Clamp015C OR<br>Clamp111   | Clamp017AS OR<br>Clamp136  |  |  |  |  |  |
| SG301 Series, SG317 Series, SG401<br>Series       | Clamp135       | 1  |   | Clamp015B,<br>Clamp113A    | Clamp015C OR<br>Clamp111   | Clamp017AS OR<br>Clamp136  |  |  |  |  |  |

<sup>\*</sup> Clamps listed in bold type are those normally included with selected standard antennas as indicated in this document.

<sup>\*\*</sup> No of clamps per antenna. Sinclair reserves the right to supply suitable equivalents if necessary without prior notice.



| Sinclair Antenna Models                       | Clamps: Antenna to Tower Leg or Support Pipe |              |  |     |     |                              |  |  |  |
|---|--|--------------|--|-----|-----|------------------------------|--|--|--|
|   | Clamp Included                               | Qty Required | Round  | 60° | 90° | wall, pole                   |  |  |  |
| SP440 Series, SP441 Series                    | Clamp167                                     | 1            |  | N/A | N/A | N/A                          |  |  |  |
| SP470 Series                                  | Clamp166                                     | 1            |  | N/A | N/A | N/A                          |  |  |  |
| SP304V Series                                 |  | 1            | Clamp170 kit without DT,<br>Clamp191 kit with DT | N/A | N/A | Clamp kit 191 with down tilt |  |  |  |
| SV227 Series, SV228 Series                    | Clamp004                                     | 2            |  | N/A | N/A | N/A                          |  |  |  |
| SV260 Series, SV227 Series, SV228-H<br>Series | Clamp004                                     | 2            |  | N/A | N/A | N/A                          |  |  |  |
| SV302-H Series, SV360 Series, SV460<br>Series | Clamp004                                     | 2            |  | N/A | N/A | N/A                          |  |  |  |
| SV402 Series                                  | Clamp130                                     | 2            | 249678-1 only                                    | N/A | N/A | N/A                          |  |  |  |
| SY203 Series, SY203-H Series                  | Clamp001                                     | 1            |  | N/A | N/A | N/A                          |  |  |  |
| SY206(E) Series, SY250(E) Series (F2 thru F5) | Clamp008                                     | 1            |  | N/A | N/A | N/A                          |  |  |  |
| SY206-SF1SNM(E), SY250-SF1SNM(E)              | Clamp008                                     | 1            |  | N/A | N/A | N/A                          |  |  |  |
| SY206(C) Series                               | Clamp001                                     |              |  | N/A | N/A | N/A                          |  |  |  |
| SY206-H (E) Series                            | Clamp064                                     | 1            | Swivel clamp only                                | N/A | N/A | N/A                          |  |  |  |

<sup>\*</sup> Clamps listed in bold type are those normally included with selected standard antennas as indicated in this document.

<sup>\*\*</sup> No of clamps per antenna. Sinclair reserves the right to supply suitable equivalents if necessary without prior notice.



| Sinclair Antenna Models  | Clamps: Antenna to Tower Leg or Support Pipe |                     |                     |     |     |            |  |  |  |
|--|--|---------------------|---------------------|-----|-----|------------|--|--|--|
|  | Clamp Included                               | <b>Qty Required</b> | Round               | 60° | 90° | wall, pole |  |  |  |
| SY2062(C)Series  | Clamp001                                     | 2                   |                     | N/A | N/A | N/A        |  |  |  |
| SY2062(E) Series   | Clamp008                                     | 2                   |                     | N/A | N/A | N/A        |  |  |  |
| SY2066-H(E) Series (Heated Array)  | Clamp184                                     | 1                   | Doughnut Clamp      | N/A | N/A | N/A        |  |  |  |
| SY250 Series   | Clamp001                                     | 1                   | Clamp017B, pole mtg | N/A | N/A | N/A        |  |  |  |
| SY260 Series   | Clamp004                                     | 2                   |                     | N/A | N/A | N/A        |  |  |  |
| SY303 Series, SY307 Series, SY350<br>Series, SY3072 Series               | Clamp115                                     | 1                   |                     | N/A | N/A | N/A        |  |  |  |
| SY360 Series, SY460 Series, SY260<br>Series                              | Clamp004                                     | 2                   |                     | N/A | N/A | N/A        |  |  |  |
| SY3074 Series  | Clamp115,<br>Clamp001                        | 4,2                 |                     | N/A | N/A | N/A        |  |  |  |
| SY407 Series, SY406 Series, SY415<br>Series, SY4062 Series, SY450 Series | Clamp115                                     | 1                   |                     | N/A | N/A | N/A        |  |  |  |
| SY306R-H Series  | Clamp002B                                    | 2                   |                     | N/A | N/A | N/A        |  |  |  |
| SY406R-H Series, SY415R-H Series,<br>SY4152R-H Series                    | Clamp002B                                    | 2                   |                     | N/A | N/A | N/A        |  |  |  |

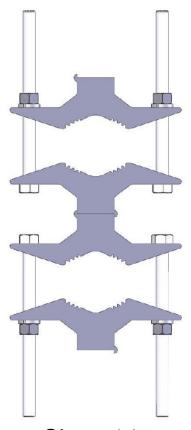
<sup>\*</sup> Clamps listed in bold type are those normally included with selected standard antennas as indicated in this document.

<sup>\*\*</sup> No of clamps per antenna. Sinclair reserves the right to supply suitable equivalents if necessary without prior notice.



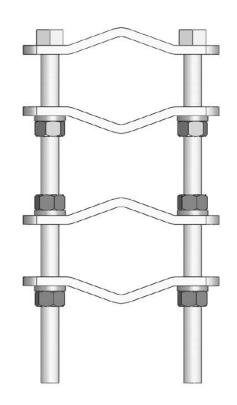
#### Model Of Interest: SD214-SF2P2SNM(D00)

For A Round Tower Leg, the three clamps that can be used are the Clamp147, Clamp005, or the Clamp015.



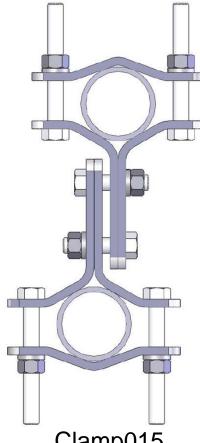
Clamp147

Specification: 2.88 - 4.5" O.D. To 2.88 - 4.5" O.D Pipe



Clamp005

Specifications: 1.5 - 3.5" OD To 1.5 - 3.5" OD Pipe



Clamp015

Specifications: 1.5 - 3.5" OD To 1.5 – 3.5" OD Pipe



# Clamp147 vs. Clamp005 vs. Clamp015

- The first Pipe specification is for the antenna.
- The base pipe diameter for the SD214-HF2P2SNM(DOS) is 2.88 inches.
- The Clamp147 spec for the first pipe is 2.88 4.5" O.D. Pipe
- The Clamp005 and Clamp015 spec for the first pipe is 1.5 3.5" OD Pipe.
- Both clamps will accommodate the 2.88 inch pipe diameter. Either the Clamp005 or Clamp015 may be better since the diameter of the antenna is somewhere in the middle of the spec versus the Clamp147 where the diameter is the starting point.
- The next thing to look at is the diameter of the tower leg where you want to secure the antenna.



# Clamp147 vs. Clamp005 vs. Clamp015

- The Clamp147 spec for the second pipe is 2.88 4.5" O.D.
   Pipe
- The Clamp005 and Clamp015 spec for the second pipe is 1.5 -3.5" OD Pipe.
- If the tower leg or support pipe has an outer diameter that is greater than 3.5 inches, then the only clamp that will work is the Clamp147.
- If the tower leg or support pipe has an outer diameter is greater than 1.5 inches, but less than 2.88 inches, then either the Clamp005 or Clamp015.
- If the tower leg or support pipe has an outer diameter between 2.88 inches and 3.5 inches, either clamp will work.

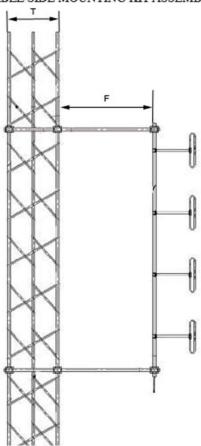


## Sinclair Side Mount Kits

#### **Sinclair Side Mount Kits**

Sinclair's side-mounting kits offer sturdy support for antennas that can be side mounted in situations where top mounting is not the best option.

SMK-125-A7 ADJUSTABLE SIDE MOUNTING KIT ASSEMBLY



SMK-325-A3 ADJUSTABLE SIDE MOUNTING KIT ASSEMBLY





## Sinclair Side Mount Kits

| <b>SMK Model Number</b> | <b>Spacing From Tower (F)</b> | Tower Leg Spacing (T) |
|-------------------------|-------------------------------|-----------------------|
| SMK-125-A3              | 3 feet 6 inches (max)         | 36 inches (max)       |
| SMK-125-A7              | 7 feet 6 inches (max)         | 36 inches (max)       |
| SMK-135-A3-T3           | 3 feet 6 inches (max)         | 36 inches (max)       |
| SMK-225-A3              | 3 feet 6 inches (max)         | 60 inches (max)       |
| SMK-225-A3-T5           | 3 feet 6 inches (max)         | 60 inches (max)       |
| SMK-225-A7              | 7 feet 6 inches (max)         | 60 inches (max)       |
| SMK-225-A7-T5           | 7 feet 6 inches (max)         | 60 inches (max)       |
| SMK-325-A3              | 3 feet 6 inches (max)         | 60 inches (max)       |
| SMK-325-A7              | 7 feet 6 inches (max)         | 60 inches (max)       |
| SMK-335-A3              | 3 feet 6 inches (max)         | 60 inches (max)       |
| SMK-335-A7              | 7 feet 6 inches (max)         | 60 inches (max)       |
| SMK-345-A7              | 7 feet 6 inches (max)         | 60 inches (max)       |
| SMK-425-A3-T3           | 3 feet 6 inches (max)         | 36 inches (max)       |
| SMK-425-A7-T3           | 7 feet 6 inches (max)         | 36 inches (max)       |
| SMK-435-A3-T3           | 3 feet 6 inches (max)         | 36 inches (max)       |
| SMK-435-A7-T3           | 7 feet 6 inches (max)         | 36 inches (max)       |



## Antenna Side Mounting Kits

|   | Clamps: Antenna to Tower Leg or Support Pipe                                 |                 |          |   |  |  |  |  |  |
|---|--|-----------------|----------|---|--|--|--|--|--|
| Antenna Side Mounting Kits for Offset Mounting:   | Clamps Included<br>For Securing<br>Side Mount Kit to<br>Antenna and<br>Tower | Qty<br>Included | Round    | 60°   | 90°  | wall, pole                             |  |  |  |
| For SD222-Series, SD224-Series, SD210-<br>Series, SD212-Series, OR SD214-Series;<br>Recommend <b>SMK-125-A3</b> | Clamp120   | 6               | Included | Clamp035,pipe 1.5" to 3.5", angle 2" to 4"  | Clamp122, pipe 1.5" to 3.5", angle 1.5" to 4"    | Clamp136, pipe 1.5" to 3.5", wall only |  |  |  |
| For SD222-Series, SD224-Series, SD210-<br>Series, SD212-Series, OR SD214-Series;<br>Recommend <b>SMK-125-A7</b> | Clamp120   | 6               | Included | Clamp035, pipe 1.5" to 3.5", angle 2" to 4" | Clamp122, pipe 1.5" to 3.5",<br>angle 1.5" to 4" | Clamp136, pipe 1.5" to 3.5", wall only |  |  |  |
| For SD310-H Series, SD312-H Series, SD314-H Series, SD310D, OR SD312D Series; Recommend <b>SMK-125-A3</b>       | Clamp120   | 6               | Included | Clamp035, pipe 1.5" to 3.5", angle 2" to 4" | Clamp122, pipe 1.5" to 3.5",<br>angle 1.5" to 4" | Clamp136, pipe 1.5" to 3.5", wall only |  |  |  |
| For SD314D-H Series OR SD318-H<br>SeriesSeries (three support pipes); Recommend<br>SMK-135-A3-T3                | Clamp017   | 9               | Included | Clamp035, pipe 1.5" to 3.5", angle 2" to 4" | Clamp122, pipe 1.5" to 3.5",<br>angle 1.5" to 4" | Clamp136, pipe 1.5" to 3.5", wall only |  |  |  |
| For SD210-H Series, SD212-H Series;<br>Recommend <b>SMK-425-A3-T3</b>   | Clamp017 (tower);<br>Clamp017HD<br>(antenna)                                 | 4, 2            | Included | Clamp035, pipe 1.5" to 3.5", angle 2" to 4" | Clamp122, pipe 1.5" to3.5",<br>angle 1.5" to 4"  | Clamp136, pipe 1.5" to 3.5", wall only |  |  |  |
| For SD210-H Series, SD212-H Series;<br>Recommend <b>SMK-425-A7-T3</b>   | Clamp017 (tower);<br>Clamp017HD<br>(antenna)                                 | 4, 2            | Included | Clamp035, pipe 1.5" to 3.5", angle 2" to 4" | Clamp122, pipe 1.5" to3.5",<br>angle 1.5" to 4"  | Clamp136, pipe 1.5" to 3.5", wall only |  |  |  |
| SD214-H Series; Recommend SMK-435-A3-T3 (Three support pipes)   | Clamp017 (tower);<br>Clamp017HD<br>(antenna)                                 | 6, 3            | Included | Clamp035, pipe 1.5" to 3.5", angle 2" to 4" | Clamp122, pipe 1.5" to 3.5",<br>angle 1.5" to 4" | Clamp136, pipe 1.5" to 3.5", wall only |  |  |  |
| SD214-H Series; Recommend SMK-435-A7-T3 (Three support pipes)   | Clamp017 (tower);<br>Clamp017HD<br>(antenna)                                 | 6, 3            | Included | Clamp035, pipe 1.5" to 3.5", angle 2" to 4" | Clamp122, pipe 1.5" to 3.5",<br>angle 1.5" to 4" | Clamp136, pipe 1.5" to 3.5", wall only |  |  |  |

<sup>\*</sup> Clamps listed in bold type are those normally included with selected standard antennas as indicated in this document.

<sup>\*\*</sup> No of clamps per antenna. Sinclair reserves the right to supply suitable equivalents if necessary without prior notice.



## Antenna Side Mounting Kits-Continued

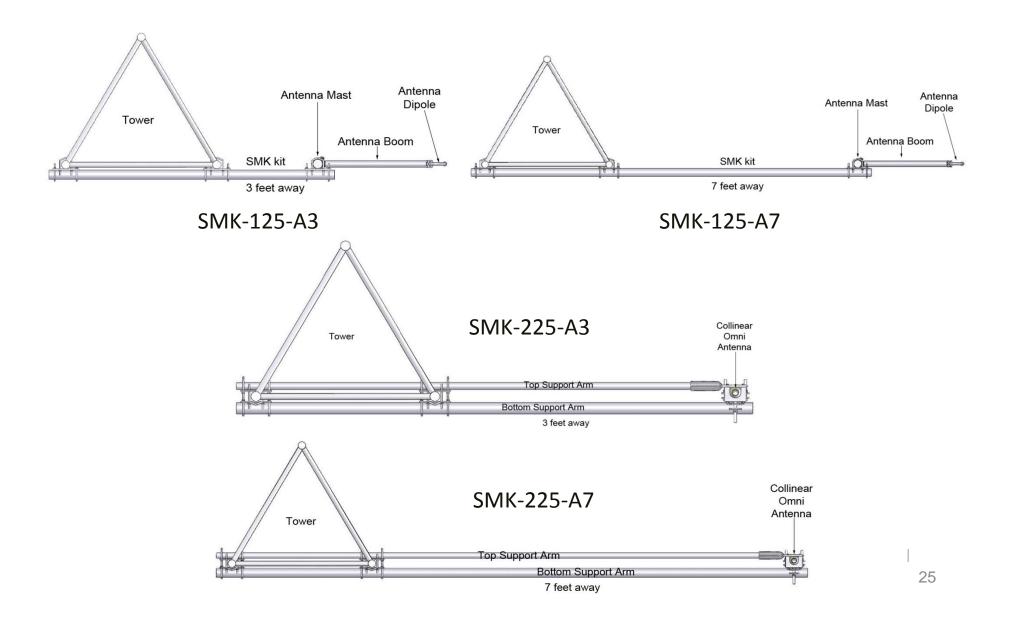
|  | Clamps: Antenna to Tower Leg or Support Pipe                                 |                 |  |   |   |            |  |  |  |
|--|--|-----------------|--|---|---|------------|--|--|--|
| Antenna Side Mounting Kits<br>For Offset Mounting:                                 | Clamps Included<br>For Securing<br>Side Mount Kit to<br>Antenna and<br>Tower | Qty<br>Included | Round  | 60°   | 90°   | wall, pole |  |  |  |
| For SC229-Series, SC320-Series, OR SC249-Series; Recommend <b>SMK-225-A3</b>       | Clamp120 (Tower),<br>Clamp017 (Antenna)                                      | 6, 2            | Included   | Clamp035, pipe 1.5" to 3.5", angle 2" to 4" | Clamp122, pipe 1.5" to3.5",<br>angle 1.5" to 4" | N/A        |  |  |  |
| For SC229-SFXSNM(F2210-E6011), SC226, OR SC328; Recommend <b>SMK-225-A3-T5</b>     | Clamp017   | 8               | Included   | Clamp035, pipe 1.5" to 3.5", angle 2" to 4" | Clamp122, pipe 1.5" to3.5",<br>angle 1.5" to 4" |            |  |  |  |
| For SC229-Series, SC320-Series, OR SC249-Series; Recommend <b>SMK-225-A7</b>       | Clamp120 (Tower),<br>Clamp017 (Antenna)                                      | 6, 2            | Included   | Clamp035, pipe 1.5" to 3.5", angle 2" to 4" | Clamp122, pipe 1.5" to3.5",<br>angle 1.5" to 4" | N/A        |  |  |  |
| For SC229-SFXSNM(F2210-E6011), SC226, OR SC328; Recommend <b>SMK-225-A7-T5</b>     | Clamp017   | 8               | Included   | Clamp035, pipe 1.5" to 3.5", angle 2" to 4" | Clamp122, pipe 1.5" to3.5",<br>angle 1.5" to 4" |            |  |  |  |
| For SC420, SC480, SC481, OR SC488 Series;<br>Recommend <b>SMK-325-A3</b>           | Clamp017   | 8               | Included   | Clamp035, pipe 1.5" to 3.5", angle 2" to 4" | Clamp122, pipe 1.5" to3.5",<br>angle 1.5" to 4" | N/A        |  |  |  |
| For SC420, SC480, SC481, OR SC488 Series;<br>Recommend <b>SMK-325-A7</b>           | Clamp017   | 8               | Included   | Clamp035, pipe 1.5" to 3.5", angle 2" to 4" | Clamp122, pipe 1.5" to3.5",<br>angle 1.5" to 4" | N/A        |  |  |  |
| For SC432, SC432D, SC432T, SC479, OR SC412-Series; Recommend <b>SMK-335-A3</b>     | Clamp017   | 8               | Included   | Clamp035, pipe 1.5" to 3.5", angle 2" to 4" | Clamp122, pipe 1.5" to3.5",<br>angle 1.5" to 4" | N/A        |  |  |  |
| For SC432, SC432D, SC432T, SC479, OR<br>SC412-Series; Recommend <b>SMK-335-A7</b>  | Clamp017   | 8               | Included   | Clamp035, pipe 1.5" to 3.5", angle 2" to 4" | Clamp122, pipe 1.5" to3.5",<br>angle 1.5" to 4" | N/A        |  |  |  |
| For SC281-H Series, SC381-H Series, OR SC412-H Series; Recommend <b>SMK-345-A7</b> | Clamp121C<br>(Antenna Only)  | 2               | Not Supplied. Recommend<br>Clamp017 HD (1.5"-4.0"<br>diameter) | N/A   | N/A   | N/A        |  |  |  |

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<sup>\*\*</sup> No of clamps per antenna. Sinclair reserves the right to supply suitable equivalents if necessary without prior notice.



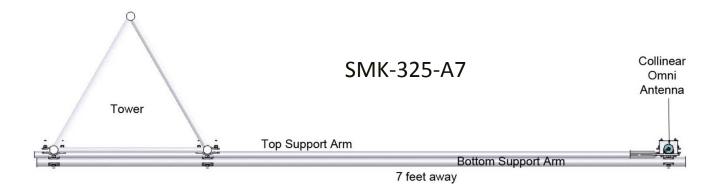
# Top View of Side Mount Kits





## Top View of Side Mount Kits-Continued







## Top View of Side Mount Kits-Continued







## Selecting the right Side Mount Kit

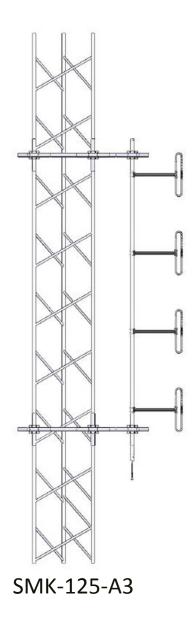
When side mounting the SD222-SF, SD224-SF, SD210-SF, SD212-SF, or SD214-SF series, we recommend that the customer supports the antenna at both the top and bottom of the mast. The Sinclair SMK kits should be recommended to the customer when they order any antenna.

For the above mentioned series, there are two kits that can be recommended:

SMK-125-A3 or SMK-125-A7



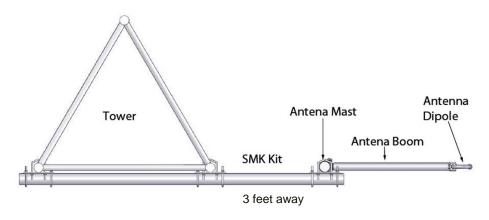
## SMK-125-A3 vs. SMK-125-A7



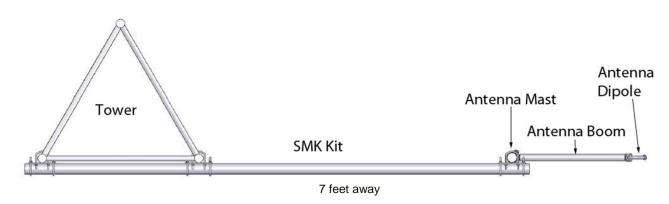
SMK-125-A7



### SMK-125-A3 vs. SMK-125-A7



SMK-125-A3



SMK-125-A7



### SMK-125-A3 vs. SMK-125-A7

- Difference between the two is how far the antenna will be away from the tower.
- For the A3, it will be 3 feet away.
- For the A7, it will be 7 feet away.
- Both include a top and bottom support arm for the antenna
- Only for Exposed Dipole type of antenna



## Top View of Side Mount Kits-Continued

