

Table of Contents

Tower Mounts	1
Leg Mounting Solutions	2
Application Guide	6-7
Face Mounting Solutions	8
Application Guide	14-16
Monopole Mounts	17
Low Profile Chain Mounts	18
Light Duty Chain Mounts	19
Heavy Duty Chain Mounts	20
Microwave Components	21
Application Guide	22-24
Roof-top Mounts	25
Roof Frames	26
Mounting Components	28
Customs	29
Waveguide	31
Coaxial Support Components	32
Waveguide Bridge Kits	33
Cable Ladder Kits	34
Site Related	35
Microwave Ice Shields	36
Power Telco Racks	38
Equipment Platforms	38

Selection Guide

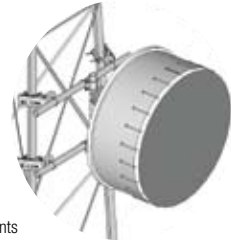
Tower Mounts



Universal Pipe Mount Kits
Page 2



Microwave Dish Strut Support
Page 4

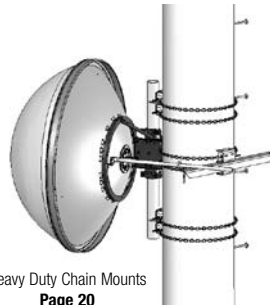


Tower Face Mounts
Page 8

Monopole Mounts



Low-profile Chain Mounts
Page 18



Heavy Duty Chain Mounts
Page 20



Low-profile Co-location Kits
Page 21

Roof-top Mounts



Universal Tripod Mounts
Page 26



Wall Mounts
Page 28



Roof-top Peak Mounts
Page 29

Waveguide



Coaxial Supports
Page 32

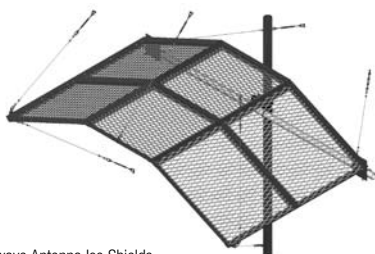


Waveguide Bridge Kits
Page 33



Universal Cable Ladder Kits
Page 34

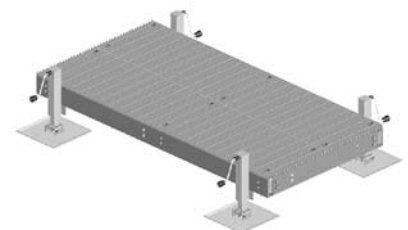
Site Related Components



Microwave Antenna Ice Shields
Page 36



Power Telco Racks
Page 38



Equipment Platforms
Page 38



- Tower Leg Mounting Solutions
- Tower Face Mounting Solutions

Tower Mounts

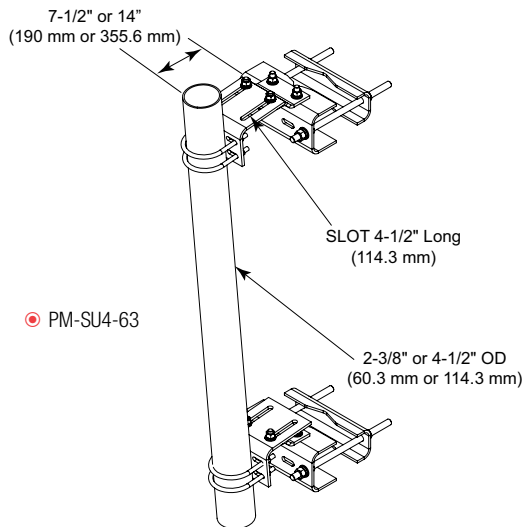
Leg Mounting Solutions

Universal Sliding Pipe Mount Kits

Application:	Lattice towers
Size:	2-3/8" (60.3 mm) OD or 4-1/2" (114.3 mm) OD
Design:	Pipe with saddle mount and adjustable clamps
Feature:	Universal sliding bracket with up to 7° of taper
Mounts to:	Straight or tapered legs up to 16" (406.4 mm) OD, 16" (406.4 mm) angle 60°, or 12" (304.8 mm) angle 90°
Material:	Hot dip galvanized steel
Includes:	Universal saddle mount, sliding pipe mount brackets, with or without pipe
Order Separately:	Pipes for base kits

Wind Rating*: 120 mph (BWS) per latest revision of TIA/EIA-222 at 150' AGL

*Typical installation of one 8' microwave antenna with stiff arm



Part Number	Description	Weight, lb (kg)
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Universal Sliding Pipe Mount Kits, for Round or 60° Angle Legs up to 8" (203.2 mm), or 6" (152.4 mm) 90° Angle Legs, 2-3/8" (60.3 mm) Antenna Mounting Pipe

PM-SU2-B	Base Kit, Order Pipe Separately, Kit of 2	80 (32.3)
PM-SU2-72	2-3/8" OD x 72" (60.3 mm OD x 1.8 m)	101 (45.8)
PM-SU2-96	2-3/8" OD x 96" (60.3 mm OD x 2.4 m)	114 (51.7)

Universal Sliding Pipe Mount Kits, for Round or 60° Angle Legs up to 16" (406.4 mm), or 12" (304.8 mm) 90° Angle Legs, 2-3/8" (60.3 mm) Antenna Mounting Pipe

PML-SU2-B	Base Kit, Order Pipe Separately, Kit of 2	80 (32.3)
PML-SU2-72	2-3/8" OD x 72" (60.3 mm OD x 1.8 m)	101 (45.8)
PML-SU2-96	2-3/8" OD x 96" (60.3 mm OD x 2.4 m)	114 (51.7)

Universal Sliding Pipe Mount Kits, for Round or 60° Angle Legs up to 8" (203.2 mm), or 6" (152.4 mm) 90° Angle Legs, 14" (355.6 mm) Stand-off, 2-3/8" (60.3 mm) Antenna Mounting Pipe

PM-SU2L-B	Base Kit, Order Pipe Separately, Kit of 2	90 (40.9)
PM-SU2L-72	2-3/8" OD x 72" (60.3 mm OD x 1.8 m)	110 (49.9)
PM-SU2L-96	2-3/8" OD x 96" (60.3 mm OD x 2.4 m)	121 (54.9)

Universal Sliding Pipe Mount Kits, for Round or 60° Angle Legs up to 16" (406.4 mm), or 12" (304.8 mm) 90° Angle Legs, 14" (355.6 mm) Stand-off, 2-3/8" (60.3 mm) Antenna Mounting Pipe

PML-SU2L-B	Base Kit, Order Pipe Separately, Kit of 2	90 (40.9)
PML-SU2L-72	2-3/8" OD x 72" (60.3 mm OD x 1.8 m)	110 (49.9)
PML-SU2L-96	2-3/8" OD x 96" (60.3 mm OD x 2.4 m)	121 (54.9)

Universal Sliding Pipe Mount Kits, for Round or 60° Angle Legs up to 8" (203.2 mm), or 6" (152.4 mm) 90° Angle Legs, 4-1/2" (114.3 mm) Antenna Mounting Pipe

PM-SU4-B	Base Kit, Order Pipe Separately, Kit of 2	81 (36.8)
PM-SU4-63	4-1/2" OD x 63" (114.3 mm OD x 1.6 m)	138 (62.6)
PM-SU4-96	4-1/2" OD x 96" (114.3 mm OD x 2.4 m)	169 (76.7)

Universal Sliding Pipe Mount Kits, for Round or 60° Angle Legs up to 16" (406.4 mm), or 12" (304.8 mm) 90° Angle Legs, 4-1/2" (114.3 mm) Antenna Mounting Pipe

PML-SU4-B	Base Kit, Order Pipe Separately, Kit of 2	81 (36.8)
PML-SU4-63	4-1/2" OD x 63" (114.3 mm OD x 1.6 m)	138 (62.6)
PML-SU4-96	4-1/2" OD x 96" (114.3 mm OD x 2.4 m)	169 (76.7)

Universal Sliding Pipe Mount Kits, for Round or 60° Angle Legs up to 8" (203.2 mm), or 6" (152.4 mm) 90° Angle Legs, 14" (355.6 mm) Stand-off 4-1/2" (114.3 mm) Antenna Mounting Pipe

PM-SU4L-B	Base Kit, Order Pipe Separately, Kit of 2	90 (40.9)
PM-SU4L-63	4-1/2" OD x 63" (114.3 mm OD x 1.6 m)	145 (65.8)
PM-SU4L-96	4-1/2" OD x 96" (114.3 mm OD x 2.4 m)	175 (79.4)

Universal Sliding Pipe Mount Kits, for Round or 60° Angle Legs up to 16" (406.4 mm), or 12" (304.8 mm) 90° Angle Legs, 14" (355.6 mm) Stand-off, 4-1/2" (114.3 mm) Antenna Mounting Pipe

PML-SU4L-B	Base Kit, Order Pipe Separately, Kit of 2	90 (40.9)
PML-SU4L-63	4-1/2" OD x 63" (114.3 mm OD x 1.6 m)	145 (65.8)
PML-SU4L-96	4-1/2" OD x 96" (114.3 mm OD x 2.4 m)	175 (79.4)

Tower Mounts

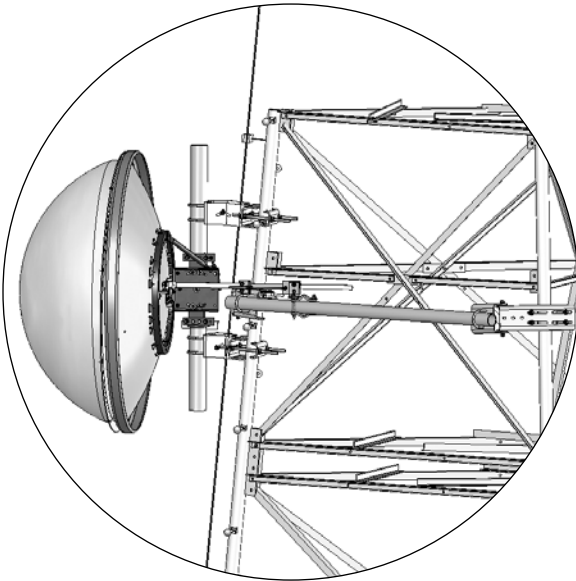
Leg Mounting Solutions

Universal Pipe Mount Kits

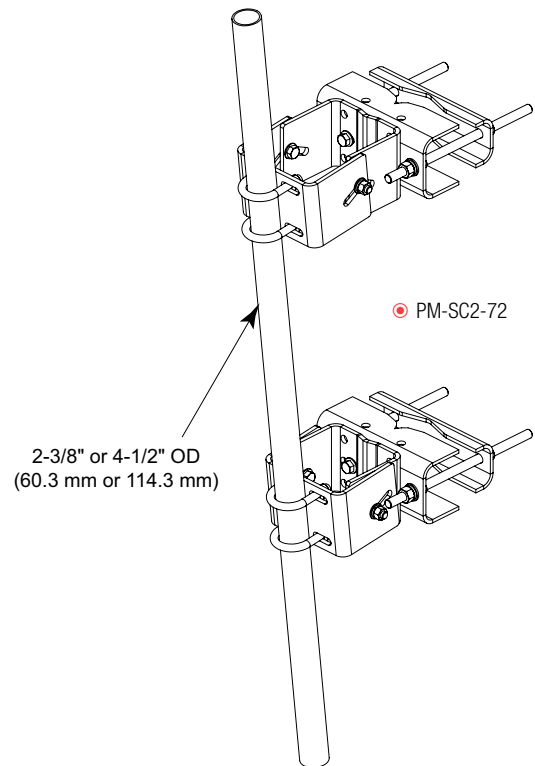
Application:	Lattice towers
Size:	2-3/8" (60.3 mm) OD or 4-1/2" (114.3 mm) OD
Design:	Pipe with saddle mount and adjustable clamps
Feature:	Open face taper adjustment
Mounts to:	Straight or tapered legs up to 16" (406.4 mm) OD, 16" (406.4 mm) angle 60°, or 12" (304.8 mm) angle 90°
Material:	Hot dip galvanized steel
Includes:	Universal saddle mount, taper adjustment brackets, with or without pipe
Order Separately:	Pipes for base kits

Wind Rating*: 120 mph (BWS) per latest revision of TIA/EIA-222 at 150' AGL

**Typical installation of one 8' microwave antenna with stiff arm*



Part Number	Description
Universal Pipe Mount Kit With Open Face Taper Adjustment, for Round or 60° Angle Legs up to 8" (203.2 mm) or 6" (152.4 mm) 90° Angle Legs	
PM-SC2-72	2-3/8" x 72" (60.3 mm x 1.8 m) Antenna Mounting Pipe
PM-SC2-96	2-3/8" x 96" (60.3 mm x 2.4 m) Antenna Mounting Pipe
PM-SC2-B	Pipe Ordered Separately
PM-SC4-63	4-1/2" x 63" (114.3 mm x 1.6 m) Antenna Mounting Pipe
PM-SC4-96	4-1/2" x 96" (114.3 mm x 2.4 m) Antenna Mounting Pipe
PM-SC4-B	Pipe Ordered Separately
Universal Pipe Mount Kit With Open Face Taper Adjustment, for Round or 60° Angle Legs up to 16" (406.4 mm), or 12" (304.8 mm) 90° Angle Legs	
PML-SC2-72	2-3/8" x 72" (60.3 mm x 1.8 m) Antenna Mounting Pipe
PML-SC2-96	2-3/8" x 96" (60.3 mm x 2.4 m) Antenna Mounting Pipe
PML-SC2-B	Pipe Ordered Separately
PML-SC4-63	4-1/2" x 63" (114.3 mm x 1.6 m) Antenna Mounting Pipe
PML-SC4-96	4-1/2" x 96" (114.3 mm x 2.4 m) Antenna Mounting Pipe
PML-SC4-B	Pipe Ordered Separately

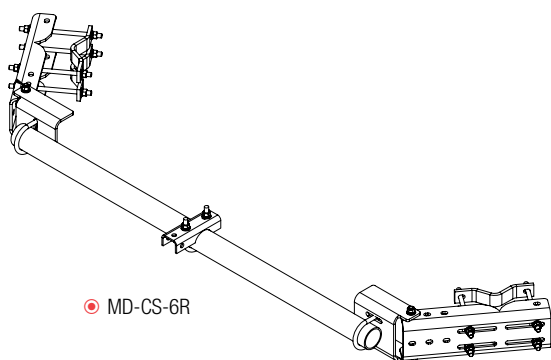


Tower Mounts

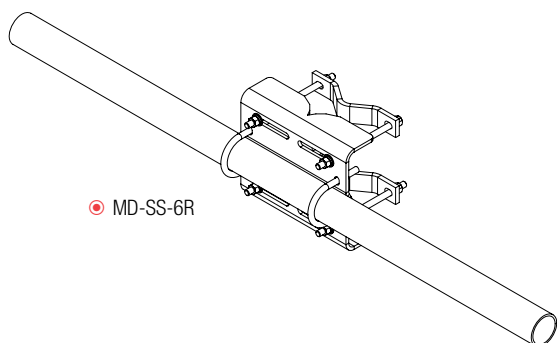
Leg Mounting Solutions

Microwave Dish Support

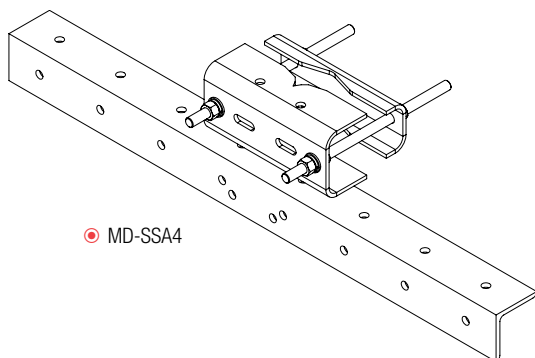
Application:	Lattice towers
Size:	4', 6', 8', or 10' (1.2 m, 1.8 m, 2.4 m, or 3.1 m) Tower faces
Design:	Round or angle strut support kits
Feature:	Tower face strut support kits
Mounts to:	Straight or tapered legs up to 16" (406.4 mm) OD, 16" (406.4 mm) angle 60°, or 12" (304.8 mm) angle 90°
Material:	Hot dip galvanized steel



MD-CS-6R



MD-SS-6R



MD-SSA4

Part Number Description

Tower Face Mounted Microwave Dish Channel Support Kit, for Round or 60° Angle Legs up to 8" (203.2 mm), or 6" (152.4 mm) 90° Angle Legs

MD-CS-6R	6' (1.8 m) Plain End Pipe
MD-CS-8R	8' (2.4 m) Plain End Pipe
MD-CS-10R	10' (3.1 m) Plain End Pipe

Tower Face Mounted Microwave Dish Channel Support Kit, for 8" (203.2 mm) to 16" (406.4 mm) Round, or 8" (203.2 mm) to 16" (406.4 mm) 60° Angle Legs or 6" (152.4 mm) to 12" (304.8 mm) 90° Angle Legs

MDL-CS-6R	6' (1.8 m) Plain End Pipe
MDL-CS-8R	8' (2.4 m) Plain End Pipe
MDL-CS-10R	10' (3.1 m) Plain End Pipe

Tower Leg Mounted Microwave Dish Strut Support, for Round or 90° Angle Legs up to 8" (203.2 mm), or 6" (152.4 mm) 60° Angle Legs

MD-SS-6R	6' (1.8 m) Pipe
MD-SS-8R	8' (2.4 m) Pipe

Tower Leg Mounted Microwave Dish Strut Support Kit, for 8" (203.2 mm) to 16" (406.4 mm) Round, or 8" (203.2 mm) to 16" (406.4 mm) 60° Angle Legs or 6" (152.4 mm) to 12" (304.8 mm) 90° Angle Legs

MDL-SS-6R	6' (1.8 m) Pipe
MDL-SS-8R	8' (2.4 m) Pipe

Tower Leg Mounted Microwave Dish Strut Support, for Round or 60° Angle Legs up to 8" (203.2 mm), or 6" (152.4 mm) 90° Angle Legs

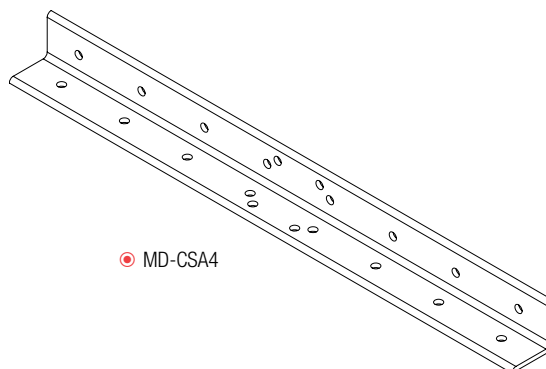
MD-SSA4	4' (1.2 m) Angle
MD-SSA6	6' (1.8 m) Angle

Tower Leg Mounted Microwave Dish Strut Support Kit, for 8" (203.2 mm) to 16" (406.4 mm) Round, or 8" (203.2 mm) to 16" (406.4 mm) 60° Angle Legs or 6" (152.4 mm) to 12" (304.8 mm) 90° Angle Legs

MDL-SSA4	4' (1.2 m) Angle
MDL-SSA6	6' (1.8 m) Angle

Angle for MD-CS Series

MD-CSA4	3/8" x 3-1/2" x 3-1/2" x 4' (9.5 mm x 88.9 mm x 88.9 mm x 1.2 m)
MD-CSA6	3/8" x 3-1/2" x 3-1/2" x 6' (9.5 mm x 88.9 mm x 88.9 mm x 1.8 m)
MD-CSA8	3/8" x 3-1/2" x 3-1/2" x 8' (9.5 mm x 88.9 mm x 88.9 mm x 2.4 m)



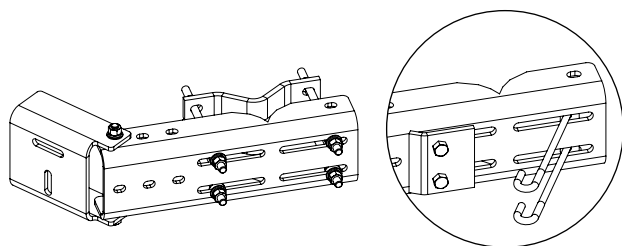
MD-CSA4

Tower Mounts

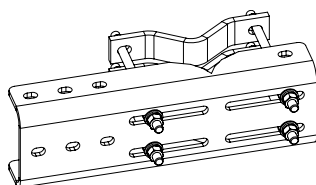
Leg Mounting Solutions

Microwave Strut Support

Application:	Lattice towers
Size:	21" (533.4 mm) channel
Design:	Universal support bracket
Feature:	Universal strut attachment
Mounts to:	Straight or tapered legs up to 16" (406.4 mm) OD, 16" (406.4 mm) angle 60°, or 12" (304.8 mm) angle 90°
Material:	Hot dip galvanized steel
Includes:	Support bracket, attachment hardware
Order Separately:	Microwave strut pipe or angle, u-bolt



● MD-CS / ● MD-CSL



● MD-CS-B

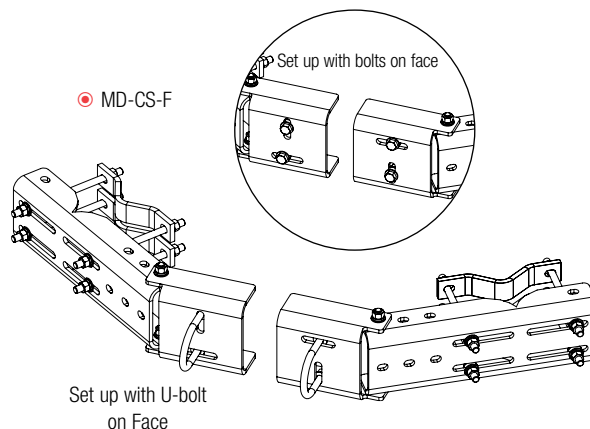
Part Number Description

Microwave Dish Strut Support Bracket for Round or 60° Angle Legs up to 8" (203.2 mm), or 6" (152.4 mm) 90° Angle Legs

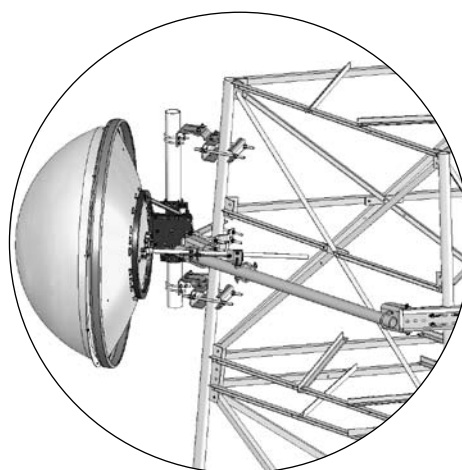
MD-CS	Universal, for Mounting up to 3-1/2" (88.9 mm) Face Pipes on Round or Angle Legs (Kit of 1)
MD-CSL	Universal, for Mounting up to 4-1/2" (114.3 mm) Face Pipes on Round or Angle Legs (Kit of 1)
MD-CS-F	Face Mounted, for Mounting up to 3-1/2" (88.9 mm) Face Pipes on Round or Angle Legs (Kit of 2)
MD-CS-B	Face Mounted, (Kit of 1)

Microwave Dish Strut Support Bracket, for 8" (203.2 mm) to 16" (406.4 mm) Round, or 8" (203.2 mm), to 16" (406.4 mm) 60° Angle Legs or 6" (152.4 mm) to 12" (304.8 mm) 90° Angle Legs

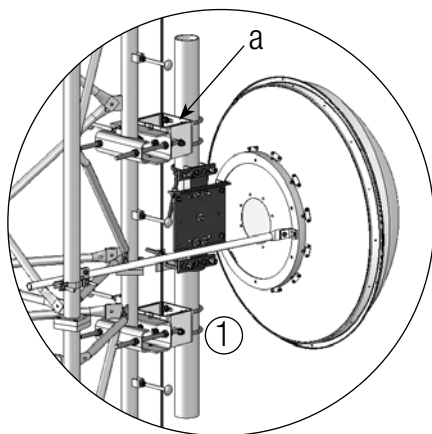
MDL-CS	Universal, for Mounting up to 3-1/2" (88.9 mm) Face Pipes on Round or Angle Legs (Kit of 1)
MDL-CSL	Universal, for Mounting up to 4-1/2" (114.3 mm) Face Pipes on Round or Angle Legs (Kit of 1)
MDL-CS-F	Face Mounted, for Mounting up to 3-1/2" (88.9 mm) Face Pipes on Round or Angle Legs (Kit of 2)
MDL-CS-B	Face Mounted, (Kit of 1)



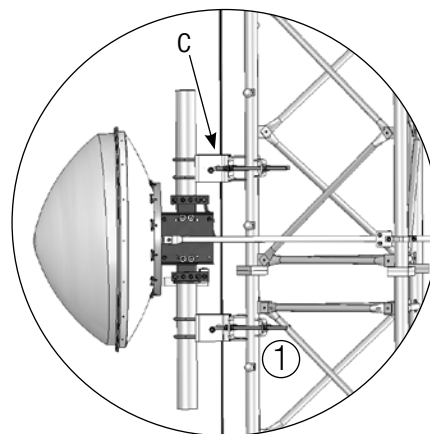
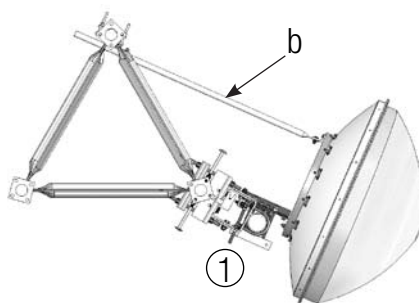
Set up with U-bolt on Face



Application Guide



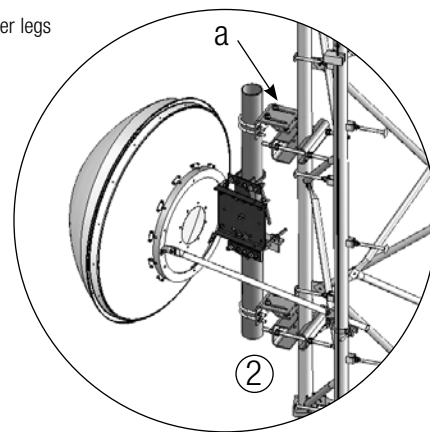
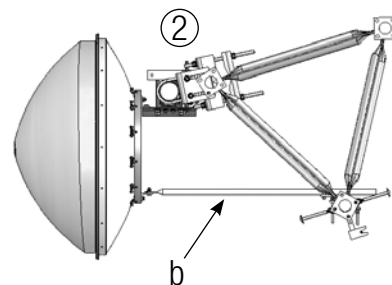
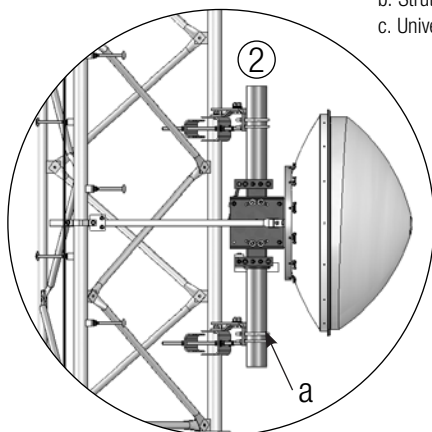
- a. Open face allows safety climb to pass through
- b. Strut returns back to tower at recommended angle
- c. Taper adjustment allows for vertical mounting solution



Key	Part Number	Description	Page #
1	PM-SC4-63	Universal Pipe Mount Kit With Open Face	3
2	PM-SU4-63	Universal Pipe Mount Kit	2

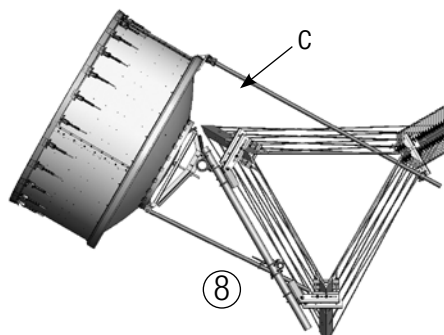
* Shown with Andrew PX2F series antennas and supports

- a. Sliding taper brackets allow for 7° of non-incremental adjustment
- b. Strut returns straight back to tower
- c. Universal saddle mounts up to 8" (203.2 mm) dia. straight or taper legs

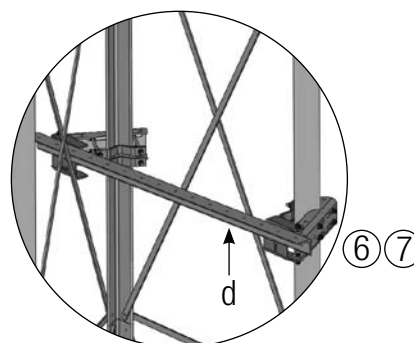
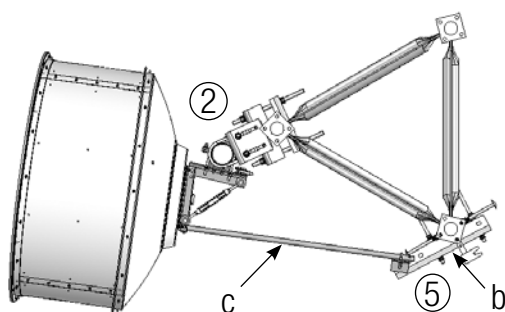
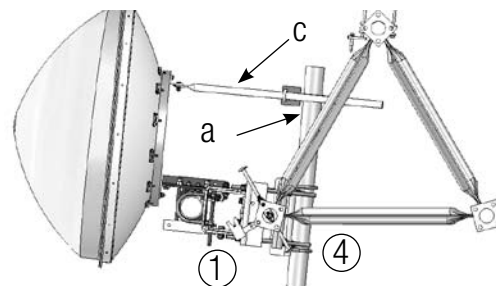


Tower Mounts

Application Guide

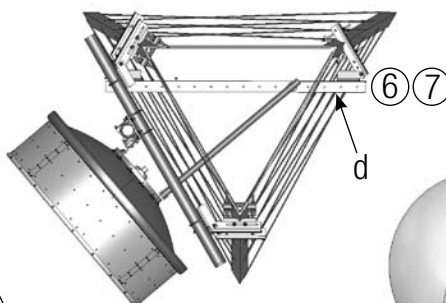
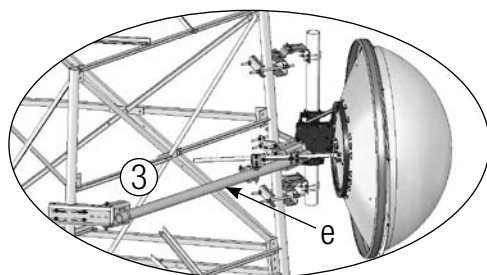


- a. MD-SS-6R Provides strut support for offset single leg attachments
- b. MD-CS-B Universal strut support for round or angle legs
- c. Strut returns straight back to tower at recommended angle
- d. MD-CS-F Will allow MD-CSA6 to attach to tower face with universal attachment brackets

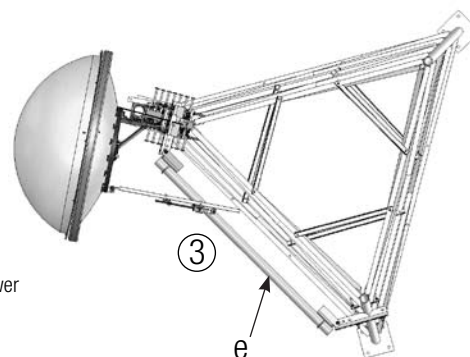


Key	Part Number	Description	Page #
1	PM-SC4-63	Universal Pipe Mount Kit With Open Face	3
2	PM-SU4-63	Universal Pipe Mount Kit	2
3	MD-CS-6R	Tower Face Mounted Dish Strut Support Kit	4
4	MD-SS-6R	Tower Leg Mounted Dish Strut Support Kit	4
5	MD-CS-B	Microwave Dish Strut Support Bracket	5
6	MD-CS-F	Tower Face Mounted Dish Strut Support Kit	5
7	MD-CSA6	Microwave Dish Strut Support Angle	4
8	TF-M3-8	Tower Face Mount with Dual Face Support	8

* Shown with Andrew VHLP and HPX series antennas and supports



- e. MD-CS-6R Provides strut support for the tower face with universal leg attachment brackets

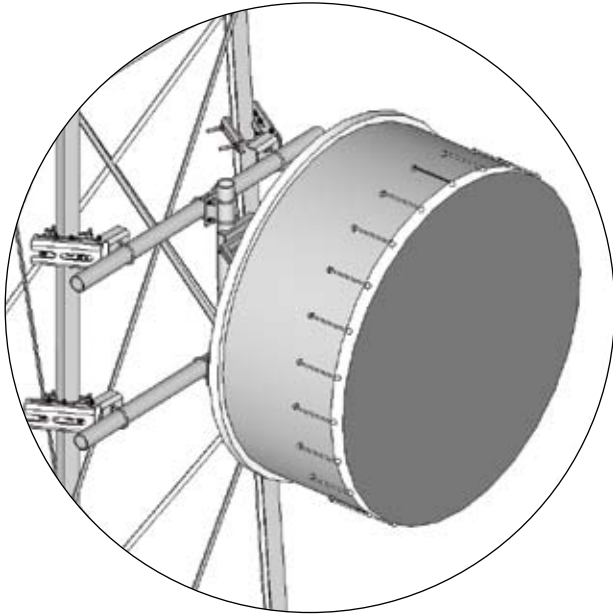


Tower Mounts

Face Mounting Solutions

Tower Face Mounts

Application:	Lattice towers
Size:	8' (2.4 m), 14' (4.2 m), or 20' (6.1 m) face widths
Design:	Pipe with saddle mounts and adjustable clamps
Feature:	Universal taper adjustment for up to 9° of taper with 48" of separation
Mounts to:	Straight or tapered legs up to 16" (406.4 mm) OD, 16" (406.4 mm) angle 60°, or 12" (304.8 mm) angle 90°
Material:	Hot dip galvanized steel
Includes:	Universal saddle mounts, slider brackets, pipe, crossover plates, hardware
Order Separately:	Strut support kits, stand-off brackets



Part Number Description

Tower Face Mount With Dual Face Supports. Includes 4-1/2" OD x 63" (114.3 mm OD x 1.6 m) Antenna Pipe up to 8" (203.2 mm) Legs

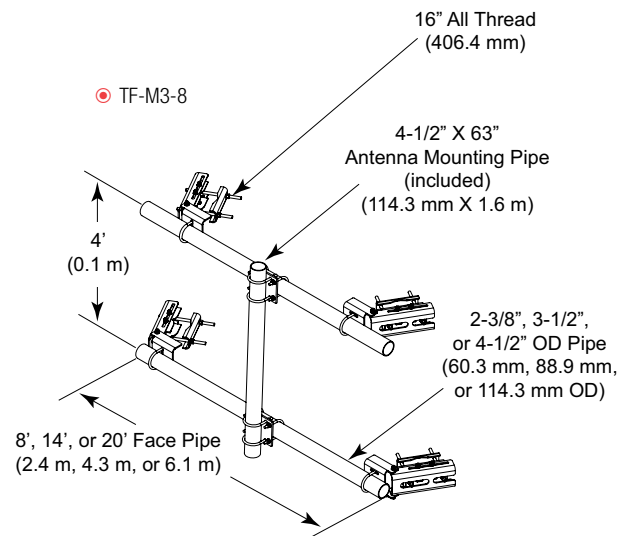
TF-M2-8	8' x 2-3/8" OD (2.4 m x 60.3 mm OD)
TF-M2-14	14' x 2-3/8" OD (4.3 m x 60.3 mm OD)
TF-M2-20	20' x 2-3/8" OD (6.1 m x 60.3 mm OD)
TF-M3-8	8' x 3-1/2" OD (2.4 m x 88.9 mm OD)
TF-M3-14	14' x 3-1/2" OD (4.3 m x 88.9 mm OD)
TF-M3-20	20' x 3-1/2" OD (6.1 m x 88.9 mm OD)
TF-M4-8	8' x 4-1/2" OD (2.4 m x 114.3 mm OD)
TF-M4-14	14' x 4-1/2" OD (4.3 m x 114.3 mm OD)

Tower Face Mount With Dual Face Supports. Includes 4-1/2" OD x 63" (114.3 mm OD x 1.6 m) Antenna Pipe, for up to 16" (406.4 mm) Legs

TFL-M2-8	8' x 2-3/8" OD (2.4 m x 60.3 mm OD)
TFL-M2-14	14' x 2-3/8" OD (4.3 m x 60.3 mm OD)
TFL-M2-20	20' x 2-3/8" OD (6.1 m x 60.3 mm OD)
TFL-M3-8	8' x 3-1/2" OD (2.4 m x 88.9 mm OD)
TFL-M3-14	14' x 3-1/2" OD (4.3 m x 88.9 mm OD)
TFL-M3-20	20' x 3-1/2" OD (6.1 m x 88.9 mm OD)
TFL-M4-8	8' x 4-1/2" OD (2.4 m x 114.3 mm OD)
TFL-M4-14	14' x 4-1/2" OD (4.3 m x 114.3 mm OD)

Microwave Antenna Diameter	Tower Face Mount							
	TF-M2-8	TF-M2-14	TF-M2-20	TF-M3-8	TF-M3-14	TF-M3-20	TF-M4-8	TF-M4-14
2' (0.6 m)	X	X	X	X	X	X	X	X
4' (1.2 m)	X	X	X	X	X	X	X	X
6' (1.8 m)	X	-	-	X	X	X	X	X
8' (2.4 m)	-	-	-	X	X	X	X	X
10' (3.1 m)	-	-	-	X	X	X	X	X
12' (3.7 m)	-	-	-	X	X	-	X	X
15' (4.6 m)	-	-	-	-	-	-	X	-

* TF-M and TFL-M Series typical applications

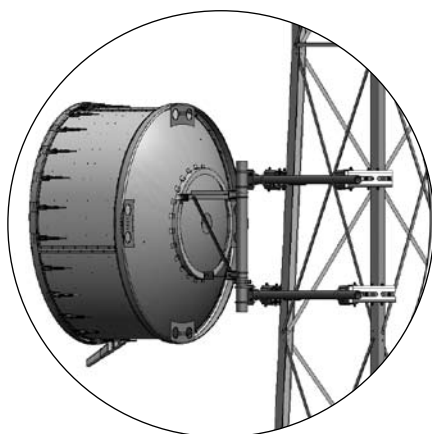


Tower Mounts

Face Mounting Solutions

Face Mounts With Single Strut or Dual Strut Support

Application:	Lattice towers
Size:	8', 14', or 20' (2.4 m, 4.2 m, or 6.1 m) Face widths
Design:	Pipe with saddle mounts and adjustable clamps
Feature:	Universal taper adjustment for up to 9° of taper with 48" (1.2 m) of separation
Mounts to:	Straight or tapered legs up to 16" (406.4 mm) OD, 16" (406.4 mm) angle 60°, or 12" (304.8 mm) angle 90°
Material:	Hot dip galvanized steel
Includes:	Universal saddle mounts, slider brackets, pipe, crossover plates, tieback supports, hardware
Order Separately:	Stand-off brackets



● TF-M3S Series



● TFL-M3S2 Series

Part Number Description

Tower Face Mount, Includes 4-1/2" OD x 63" (114.3 mm OD x 1.6 m) Antenna Pipe With One 2-3/8" x 63" (60.3 mm x 1.6 m) Strut Support up to 8" (203.2 mm) Legs

TF-M2S-8	8' x 2-3/8" OD (2.4 m x 60.3 mm OD)
TF-M2S-14	14' x 2-3/8" OD (4.3 m x 60.3 mm OD)
TF-M2S-20	20' x 2-3/8" OD (6.1 m x 60.3 mm OD)
TF-M3S-8	8' x 3-1/2" OD (2.4 m x 88.9 mm OD)
TF-M3S-14	14' x 3-1/2" OD (4.3 m x 88.9 mm OD)
TF-M3S-20	20' x 3-1/2" OD (6.1 m x 88.9 mm OD)
TF-M4S-8	8' x 4-1/2" OD (2.4 m x 114.3 mm OD)
TF-M4S-14	14' x 4-1/2" OD (4.3 m x 114.3 mm OD)

Tower Face Mount With Dual Face Supports. Includes 4-1/2" OD x 63" (114.3 mm OD x 1.6 m) Antenna Pipe With One 2-3/8" x 63" (60.3 mm x 1.6 m) Strut Support, for up to 16" (406.4 mm) Legs

TFL-M2S-8	8' x 2-3/8" OD (2.4 m x 60.3 mm OD)
TFL-M2S-14	14' x 2-3/8" OD (4.3 m x 60.3 mm OD)
TFL-M2S-20	20' x 2-3/8" OD (6.1 m x 60.3 mm OD)
TFL-M3S-8	8' x 3-1/2" OD (2.4 m x 88.9 mm OD)
TFL-M3S-14	14' x 3-1/2" OD (4.3 m x 88.9 mm OD)
TFL-M3S-20	20' x 3-1/2" OD (6.1 m x 88.9 mm OD)
TFL-M4S-8	8' x 4-1/2" OD (2.4 m x 114.3 mm OD)
TFL-M4S-14	14' x 4-1/2" OD (4.3 m x 114.3 mm OD)

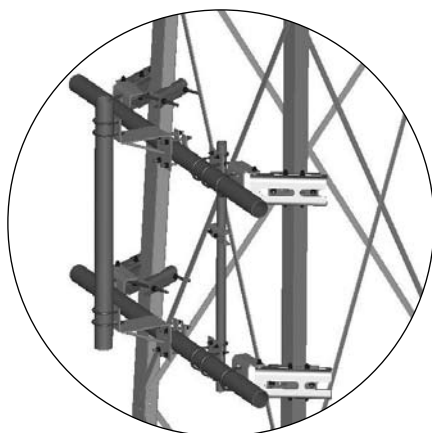
Tower Face Mount With Dual Face Supports. Includes 4-1/2" OD x 63" (114.3 mm OD x 1.6 m) Antenna Pipe With Two 2-3/8" x 63" (60.3 mm x 1.6 m) Strut Support up to 8" (203.2 mm) Legs

TF-M2S2-8	8' x 2-3/8" OD (2.4 m x 60.3 mm OD)
TF-M2S2-14	14' x 2-3/8" OD (4.3 m x 60.3 mm OD)
TF-M2S2-20	20' x 2-3/8" OD (6.1 m x 60.3 mm OD)
TF-M3S2-8	8' x 3-1/2" OD (2.4 m x 88.9 mm OD)
TF-M3S2-14	14' x 3-1/2" OD (4.3 m x 88.9 mm OD)
TF-M3S2-20	20' x 3-1/2" OD (6.1 m x 88.9 mm OD)
TF-M4S2-8	8' x 4-1/2" OD (2.4 m x 114.3 mm OD)
TF-M4S2-14	14' x 4-1/2" OD (4.3 m x 114.3 mm OD)

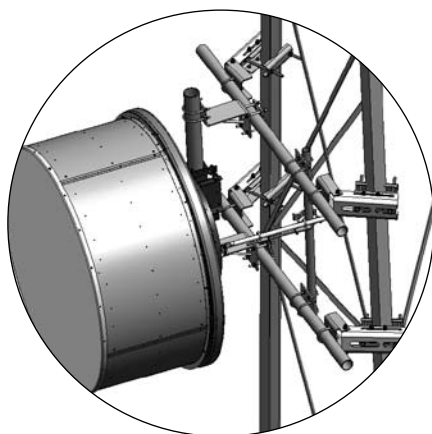
Tower Face Mount With Dual Face Supports. Includes 4-1/2" OD x 63" (114.3 mm OD x 1.6 m) Antenna Pipe With Two 2-3/8" x 63" (60.3 mm x 1.6 m) Strut Support, for up to 16" (406.4 mm) Legs

TFL-M2S2-8	8' x 2-3/8" OD (2.4 m x 60.3 mm OD)
TFL-M2S2-14	14' x 2-3/8" OD (4.3 m x 60.3 mm OD)
TFL-M2S2-20	20' x 2-3/8" OD (6.1 m x 60.3 mm OD)
TFL-M3S2-8	8' x 3-1/2" OD (2.4 m x 88.9 mm OD)
TFL-M3S2-14	14' x 3-1/2" OD (4.3 m x 88.9 mm OD)
TFL-M3S2-20	20' x 3-1/2" OD (6.1 m x 88.9 mm OD)
TFL-M4S2-8	8' x 4-1/2" OD (2.4 m x 114.3 mm OD)
TFL-M4S2-14	14' x 4-1/2" OD (4.3 m x 114.3 mm OD)

Face Mounting Solutions



TF-ML4 Series



TF-ML3S Series

Part Number Description

Tower Face Mount With Dual Face Supports. Includes 4-1/2" OD x 63" (114.3 mm OD x 1.6 m) Antenna Pipe With 14" (355.6 mm) Stand-off

TF-ML2-8	8' x 2-3/8" OD (2.4 m x 60.3 mm OD)
TF-ML2-14	14' x 2-3/8" OD (4.3 m x 60.3 mm OD)
TF-ML2-20	20' x 2-3/8" OD (6.1 m x 60.3 mm OD)
TF-ML3-8	8' x 3-1/2" OD (2.4 m x 88.9 mm OD)
TF-ML3-14	14' x 3-1/2" OD (4.3 m x 88.9 mm OD)
TF-ML3-20	20' x 3-1/2" OD (6.1 m x 88.9 mm OD)
TF-ML4-8	8' x 4-1/2" OD (2.4 m x 114.3 mm OD)
TF-ML4-14	14' x 4-1/2" OD (4.3 m x 114.3 mm OD)

Tower Face Mount With Dual Face Supports. Includes 4-1/2" OD x 63" (114.3 mm OD x 1.6 m) Antenna Pipe With 14" (355.6 mm) Stand-off, for up to 16" (406.4 mm) Legs

TFL-ML2-8	8' x 2-3/8" OD (2.4 m x 60.3 mm OD)
TFL-ML2-14	14' x 2-3/8" OD (4.3 m x 60.3 mm OD)
TFL-ML2-20	20' x 2-3/8" OD (6.1 m x 60.3 mm OD)
TFL-ML3-8	8' x 3-1/2" OD (2.4 m x 88.9 mm OD)
TFL-ML3-14	14' x 3-1/2" OD (4.3 m x 88.9 mm OD)
TFL-ML3-20	20' x 3-1/2" OD (6.1 m x 88.9 mm OD)
TFL-ML4-8	8' x 4-1/2" OD (2.4 m x 114.3 mm OD)
TFL-ML4-14	14' x 4-1/2" OD (4.3 m x 114.3 mm OD)

Tower Face Mount With Dual Face Supports. Includes 4-1/2" OD x 63" (114.3 mm OD x 1.6 m) Antenna Pipe With 14" (355.6 mm) Stand-off, One 2-3/8" x 63" (60.3 mm x 1.6 m) Strut Support

TF-ML2S-8	8' x 2-3/8" OD (2.4 m x 60.3 mm OD)
TF-ML2S-14	14' x 2-3/8" OD (4.3 m x 60.3 mm OD)
TF-ML2S-20	20' x 2-3/8" OD (6.1 m x 60.3 mm OD)
TF-ML3S-8	8' x 3-1/2" OD (2.4 m x 88.9 mm OD)
TF-ML3S-14	14' x 3-1/2" OD (4.3 m x 88.9 mm OD)
TF-ML3S-20	20' x 3-1/2" OD (6.1 m x 88.9 mm OD)
TF-ML4S-8	8' x 4-1/2" OD (2.4 m x 114.3 mm OD)
TF-ML4S-14	14' x 4-1/2" OD (4.3 m x 114.3 mm OD)

Tower Face Mount With Dual Face Supports. Includes 4-1/2" OD x 63" (114.3 mm OD x 1.6 m) Antenna Pipe With 14" (355.6 mm) Stand-off, One 2-3/8" x 63" (60.3 mm x 1.6 m) Strut Support, for up to 16" (406.4 mm) Legs

TFL-ML2S-8	8' x 2-3/8" OD (2.4 m x 60.3 mm OD)
TFL-ML2S-14	14' x 2-3/8" OD (4.3 m x 60.3 mm OD)
TFL-ML2S-20	20' x 2-3/8" OD (6.1 m x 60.3 mm OD)
TFL-ML3S-8	8' x 3-1/2" OD (2.4 m x 88.9 mm OD)
TFL-ML3S-14	14' x 3-1/2" OD (4.3 m x 88.9 mm OD)
TFL-ML3S-20	20' x 3-1/2" OD (6.1 m x 88.9 mm OD)
TFL-ML4S-8	8' x 4-1/2" OD (2.4 m x 114.3 mm OD)
TFL-ML4S-14	14' x 4-1/2" OD (4.3 m x 114.3 mm OD)

Tower Mounts

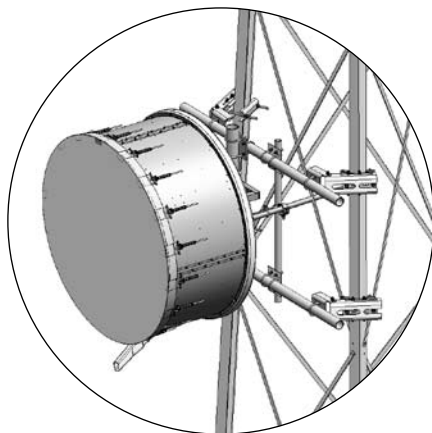
Face Mounting Solutions



● TF-ML3S2 Series

Tower Face Mount Strut Support Kits

Application:	Lattice towers
Size:	Three versions
Design:	Pipe with crossover plates
Feature:	Can be adjusted to mount anywhere on tower face mount
Mounts to:	Tower face mount kits
Material:	Hot dip galvanized steel
Includes:	Plates, strut support, hardware, pipe
Order Separately:	Tower face mount kit



Part Number Description

Tower Face Mount With Dual Face Supports. Includes 4-1/2" OD x 63" (114.3 mm OD x 1.6 m) Antenna Pipe With 14" (355.6 mm) Stand-off and Two 2-3/8" x 63" (60.3 mm x 1.6 m) Strut Support up to 8" (203.2 mm) Legs

TF-ML2S2-8	8' x 2-3/8" OD (2.4 m x 60.3 mm OD)
TF-ML2S2-14	14' x 2-3/8" OD (4.3 m x 60.3 mm OD)
TF-ML2S2-20	20' x 2-3/8" OD (6.1 m x 60.3 mm OD)
TF-ML3S2-8	8' x 3-1/2" OD (2.4 m x 88.9 mm OD)
TF-ML3S2-14	14' x 3-1/2" OD (4.3 m x 88.9 mm OD)
TF-ML3S2-20	20' x 3-1/2" OD (6.1 m x 88.9 mm OD)
TF-ML4S2-8	8' x 4-1/2" OD (2.4 m x 114.3 mm OD)
TF-ML4S2-14	14' x 4-1/2" OD (4.3 m x 114.3 mm OD)

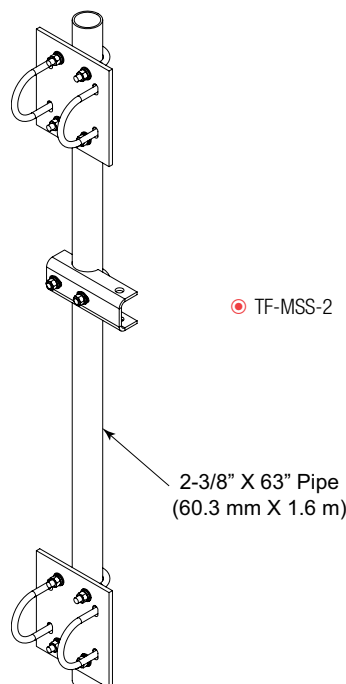
Tower Face Mount With Dual Face Supports. Includes 4-1/2" OD x 63" (114.3 mm OD x 1.6 m) Antenna Pipe With 14" (355.6 mm) Stand-off and Two 2-3/8" x 63" (60.3 mm x 1.6 m) Strut Support, for up to 16" (406.4 mm) Legs

TFL-ML2S2-8	8' x 2-3/8" OD (2.4 m x 60.3 mm OD)
TFL-ML2S2-14	14' x 2-3/8" OD (4.3 m x 60.3 mm OD)
TFL-ML2S2-20	20' x 2-3/8" OD (6.1 m x 60.3 mm OD)
TFL-ML3S2-8	8' x 3-1/2" OD (2.4 m x 88.9 mm OD)
TFL-ML3S2-14	14' x 3-1/2" OD (4.3 m x 88.9 mm OD)
TFL-ML3S2-20	20' x 3-1/2" OD (6.1 m x 88.9 mm OD)
TFL-ML4S2-8	8' x 4-1/2" OD (2.4 m x 114.3 mm OD)
TFL-ML4S2-14	14' x 4-1/2" OD (4.3 m x 114.3 mm OD)

Part Number Description Weight, lb (kg)

Tower Face Mount Strut Support Kits, 2-3/8" OD x 63" Pipe

TF-MSS-2	2-3/8" OD x 2-3/8" OD (60.3 mm x 60.3 mm)	42 (19.1)
TF-MSS-3	2-3/8" OD x 3-1/2" OD (60.3 mm x 88.9 mm)	44 (20.2)
TF-MSS-4	2-3/8" OD x 4-1/2" OD (60.3 mm x 114.3 mm)	48 (21.8)

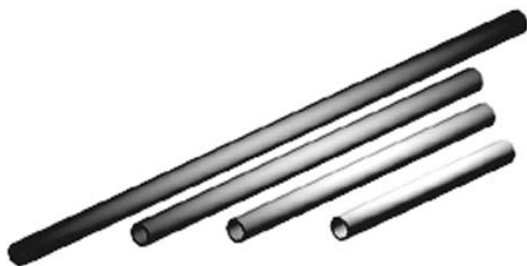
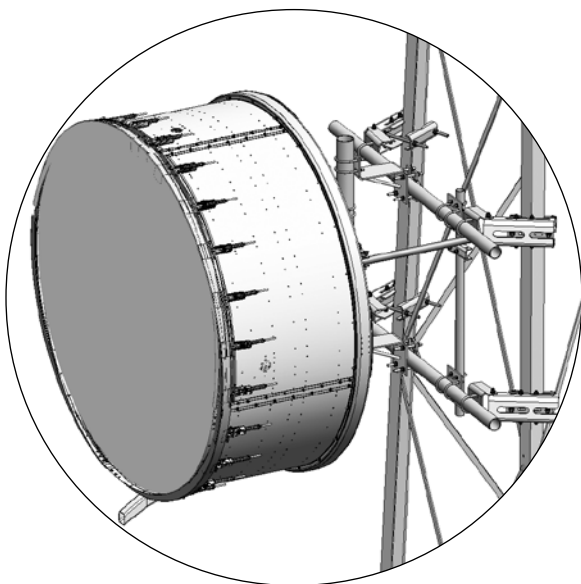


Tower Mounts

Face Mounting Solutions

Tower Face Mount Stand-off Bracket

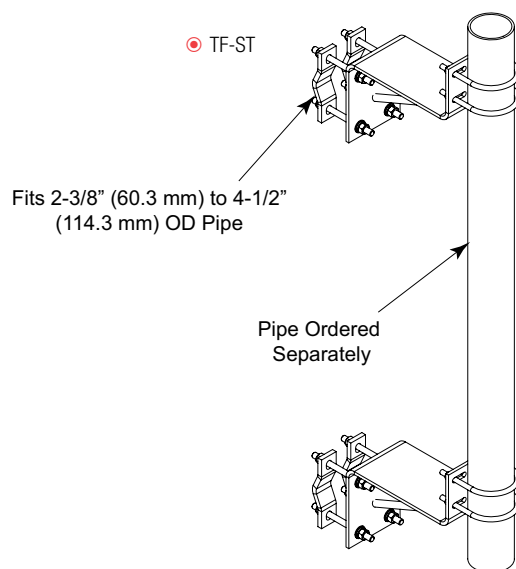
Application:	Lattice towers
Size:	4-1/2" (114.3 mm) OD
Design:	4-1/2" (114.3 mm) OD pipe mount stand-off
Feature:	14" (355.6 mm) stand-off
Mounts to:	Tower face mount kits
Material:	Hot dip galvanized steel
Includes:	Stand-off, attachment hardware
Order Separately:	Tower face mount kit



Part Number	Description	Weight, lb (kg)
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Tower Face Mount Stand-off Bracket

TF-ST	14" (355.6 mm) Stand-off	65 (29.5)
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Part Number	Description	Weight, lb (kg)
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Plain End Pipes

MT-650	2-3/8" OD x 48" (60.3 mm OD x 1.2 m)	14 (6.4)
MT-651	2-3/8" OD x 72" (60.3 mm OD x 1.8 m)	21 (9.5)
MT-651-96	2-3/8" OD x 96" (60.3 mm OD x 2.4 m)	33.5 (15.2)
MT-537	2-3/8" OD x 126" (60.3 mm OD x 3.2 m)	39.7 (18)
MT-537-170	2-3/8" OD x 170" (60.3 mm OD x 4.3 m)	52.7 (23.9)
MT-538	2-3/8" OD x 21' (60.3 mm OD x 6.4 m)	77.7 (35.2)
MT-547-48	3-1/2" OD x 48" (88.9 mm OD x 1.2 m)	46.7 (21.2)
MT-547-72	3-1/2" OD x 72" (88.9 mm OD x 1.8 m)	70 (31.8)
MT-547-96	3-1/2" OD x 96" (88.9 mm OD x 2.4 m)	93.3 (42.3)
MT-547-126	3-1/2" OD x 126" (88.9 mm OD x 3.2 m)	125 (56.7)
MT-547	3-1/2" OD x 21' (88.9 mm OD x 6.4 m)	158.8 (72.1)
MT-653-63	4-1/2" OD x 63" (114.3 mm OD x 1.6 m)	57 (25.86)
MT-654-96	4-1/2" OD x 96" (114.3 mm OD x 2.4 m)	88 (39.92)
MT 539	4-1/2" OD x 126" (114.3 mm OD x 3.2 m)	114 (51.71)
MT-654-150	4-1/2" OD x 150" (114.3 mm OD x 3.8 m)	156 (70.76)
MTC987205	4-1/2" OD x 14' (114.3 mm OD x 4.3 m)	
GUB-4240	1/2" x 2-1/2" x 4" (12.7 mm x 63.5 mm x 101.6 mm) Galvanized U-bolt	0.6 (0.27)
GUB-4355	1/2" x 3-5/8" x 5" (12.7 mm x 92.1 mm x 127 mm) Galvanized U-bolt Assembly	0.8 (0.36)

Tower Mounts

Face Mounting Solutions

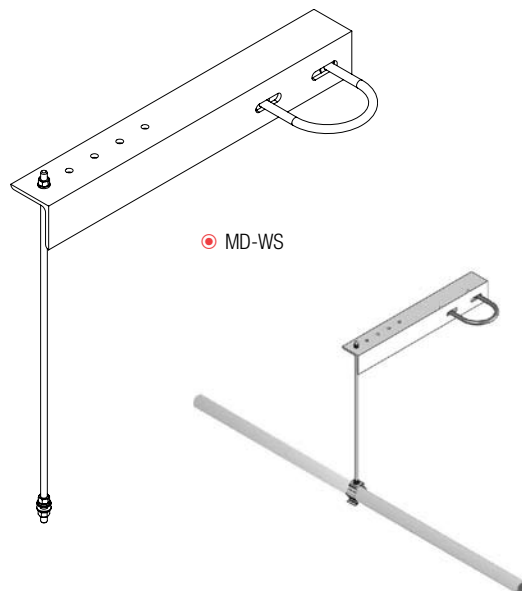
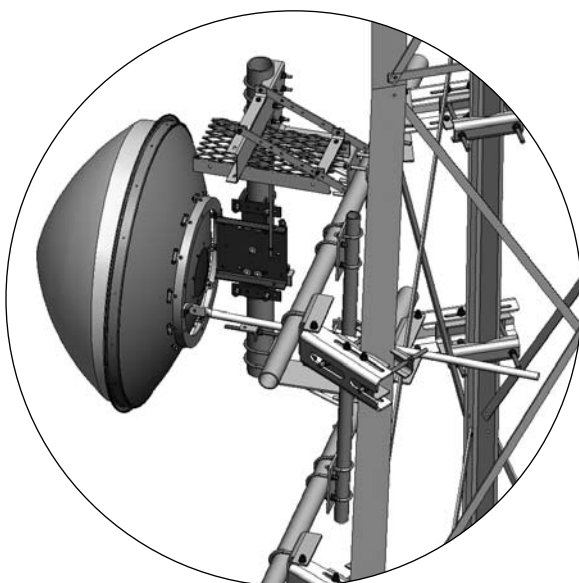
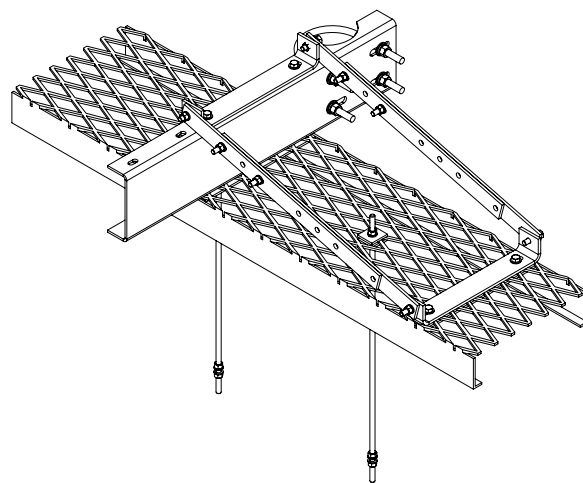
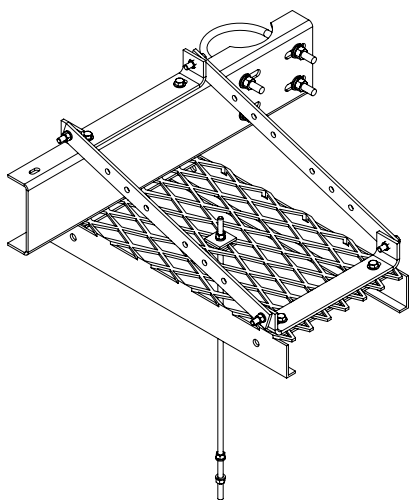
Microwave Dish Waveguide Shields

Application:	Lattice towers
Size:	Three versions (see table)
Design:	Support and protection for waveguide
Feature:	Protects waveguide from falling debris
Mounts to:	4-1/2" (114.3 mm) OD pipe
Material:	Hot dip galvanized steel
Includes:	Ice shield and all attachment hardware
Order Separately:	Pipe mount

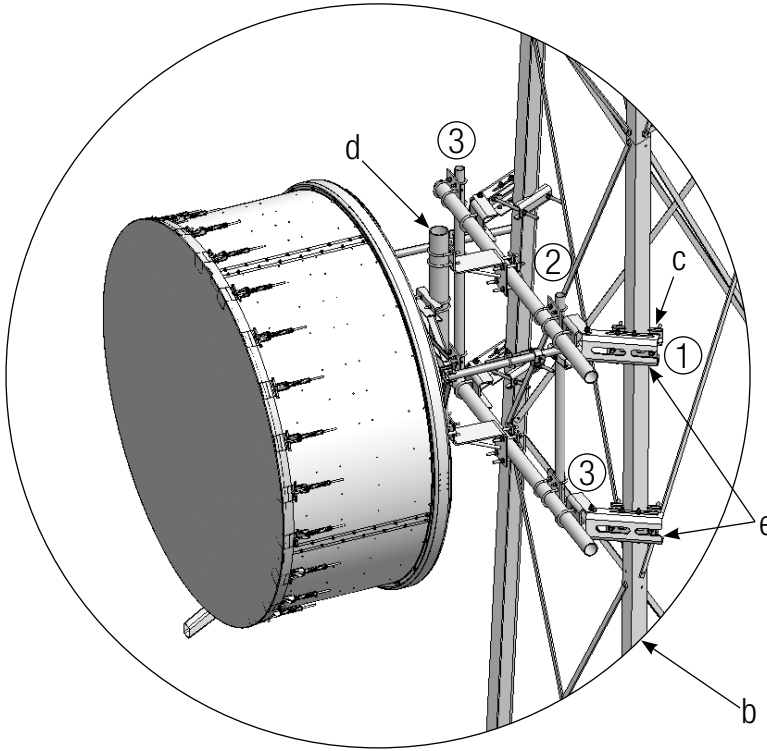
Part Number	Description	Weight, lb (kg)
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Microwave Dish Waveguide Shields

MD-IS2	Microwave Dish Waveguide Shield, 12" x 24" Shield	42 (19.1)
MD-IS4	Microwave Dish Waveguide Shield, 12" x 48" Shield	61 (27.7)
MD-WS	Microwave Dish Waveguide Shield, 24" Angle	12 (5.4)



Application Guide

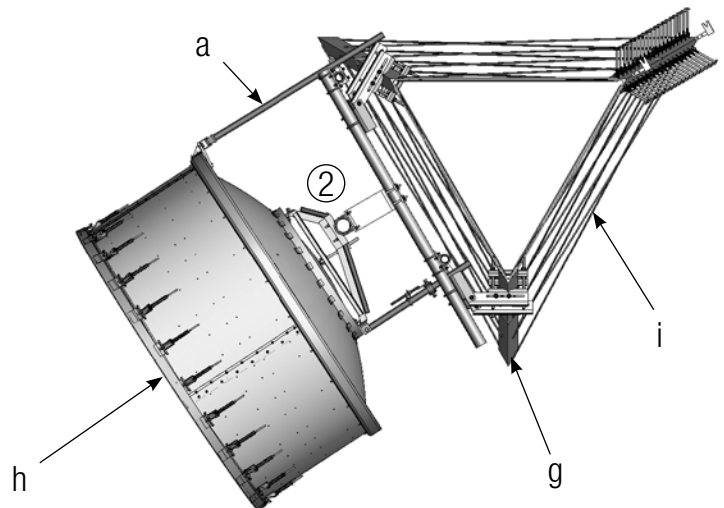


- a. Strut returns back to tower at recommended angle
- b. Tapered leg
- c. Channel supports adjust for inclination of tower leg taper
- d. True vertical antenna support
- e. Dual face support allows four point connection to structure
- f. Optional TF-ST allows greater work space and elliptical path

Key	Part Number	Description	Page #
1	TF-M3-14	Tower Face Mount With 14' (4.2 m) Face Pipes 3-1/2"OD (88.9 mm)	8
2	TF-ST	Tower Face Mount Stand-off Bracket	12
3	TF-MSS-3	Tower Face Mount Strut Support Kit 2-3/8" OD x 3-1/2" OD (60.3 mm x 88.9 mm)	11

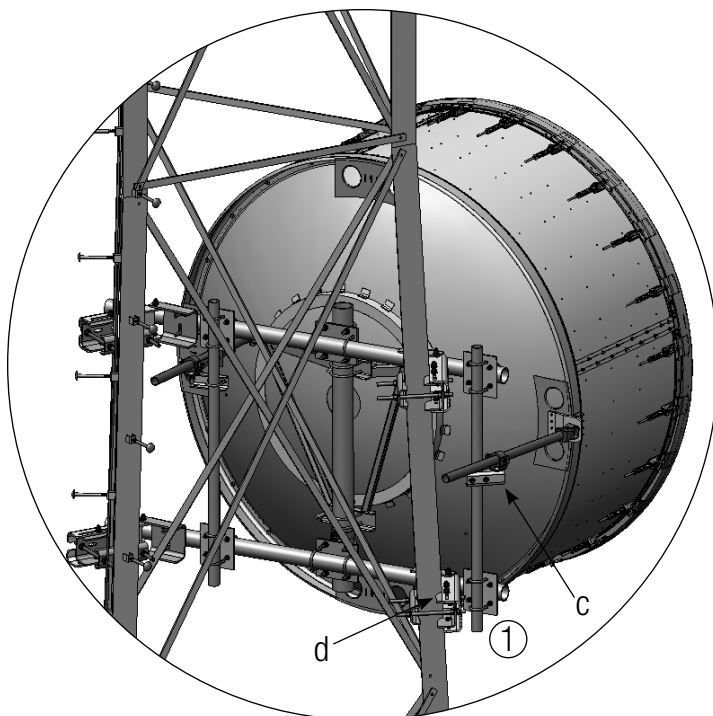
* Shown with Andrew HSX series antennas and supports

- g. 6" (152.4 mm) 60° Angle tower leg
- h. 8' (2.4 m) HSX8 series antenna and supports
- i. 10' (3.0 m) Tower face



Tower Mounts

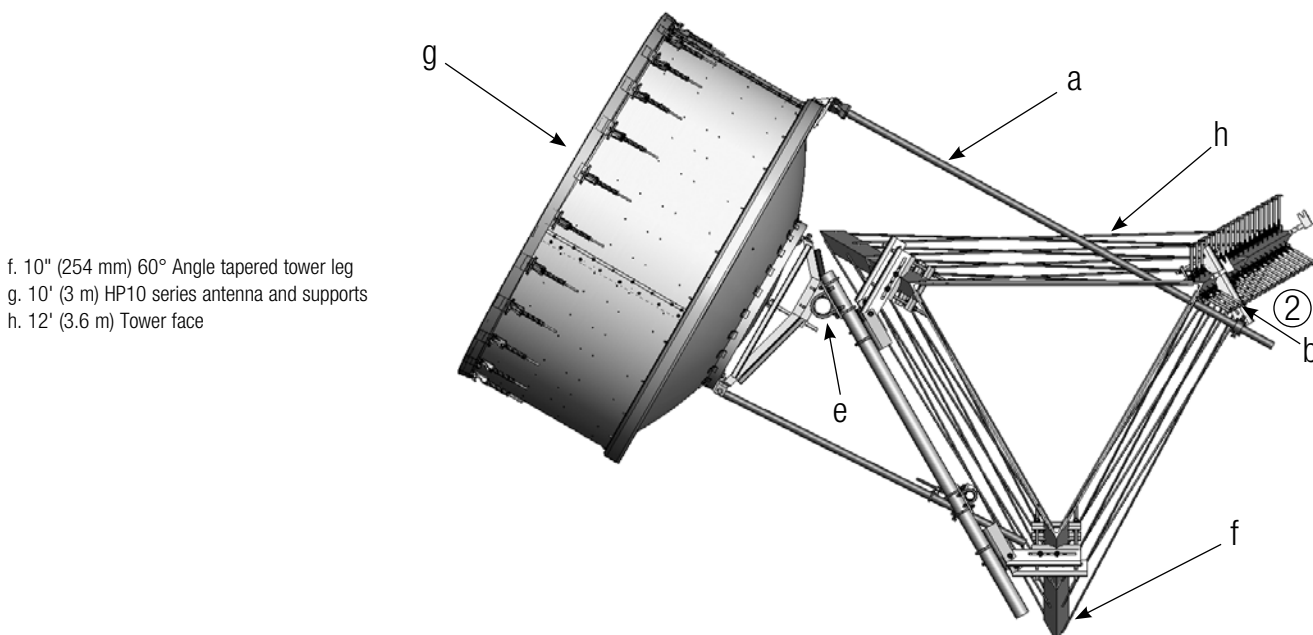
Application Guide



- a. Strut returns back to tower at recommended angle
- b. Optional strut attachment back to tower leg at recommended angle
- c. Strut attachment allows for vertical adjustment
- d. Universal saddle mounts up to up to 16" (406.4 mm) OD straight or tapered legs
- e. Mount can be positioned along horizontal support for azimuth adjustment

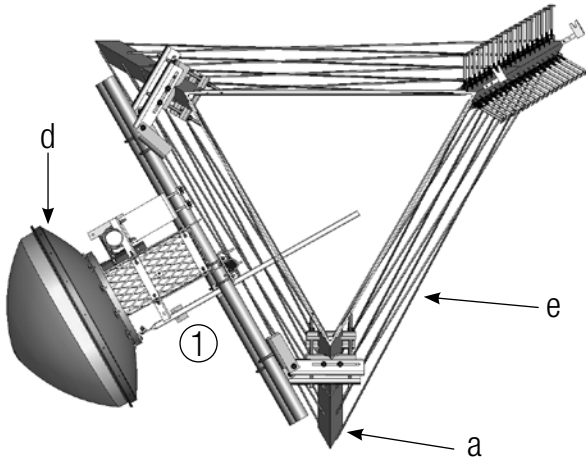
Key	Part Number	Description	Page #
1	TFL-M3S2-14	Tower Face Mount Kit With 14' (4.2 m) Face Pipes 3-1/2"OD (88.9 mm) Kit Includes Two TF-MSS-3's	9
2	MD-CS-B	Microwave Dish Strut Support Bracket	5

* Shown with Andrew HP series antennas and supports

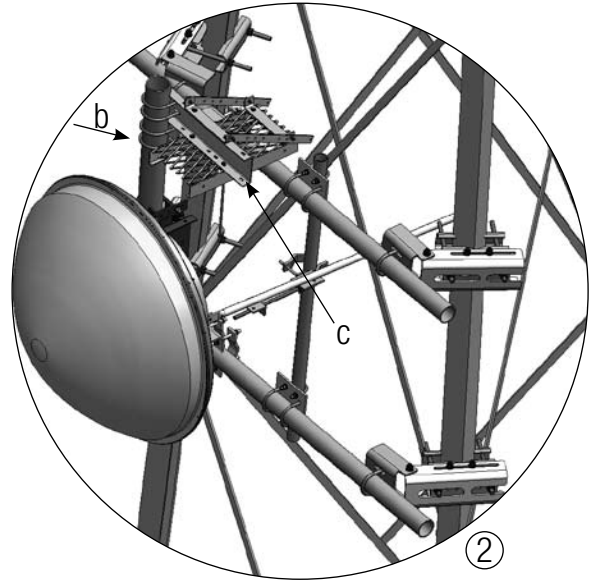


- f. 10" (254 mm) 60° Angle tapered tower leg
- g. 10' (3 m) HP10 series antenna and supports
- h. 12' (3.6 m) Tower face

Application Guide

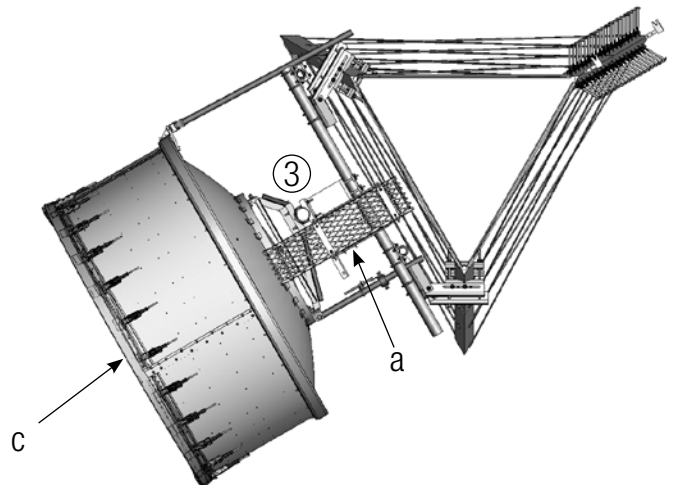
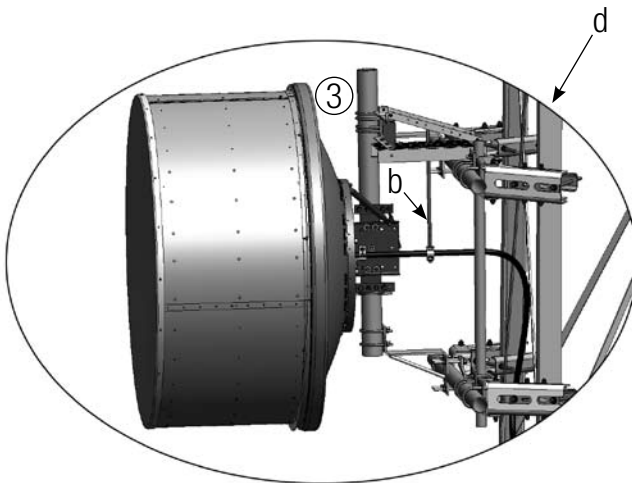


- a. 6" (152.4 mm) 60° Tapered tower leg
- b. Mounts to existing 4-1/2" OD (114.3 mm) vertical pipe mount
- c. Offers multiple attachment points on grating
- d. 3' (1.0 m) Dish
- e. 6' (1.8 m) Tower face



Key	Part Number	Description	Page #
1	MD-IS2	Microwave Dish Cable Ice Shield	13
2	TF-M2S-8	Tower Face Mount Kit With 8' (2.4 m) Face Pipes 2-3/8" OD (60.3 mm) Kit Includes One TF-MSS-2	9
3	MD-IS4	Microwave Dish Cable Ice Shield	13

* Shown with Andrew PX2F and HP series antennas and supports



- a. Grating can be mounted at any azimuth to protect and follow elliptical waveguide
- b. Threaded support rod for elliptical waveguide
- c. 10' (3.0 m) HP series dish
- d. 6" (152.4 mm) 60° Tapered tower leg



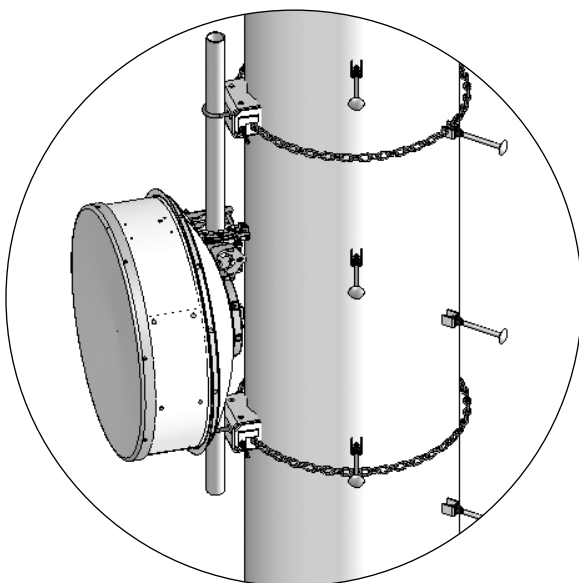
- Low Profile Chain Mounts
- Light Duty Chain Mounts
- Heavy Duty Chain Mounts
- Microwave Components

Monopole Mounts

Low-profile Chain Mounts

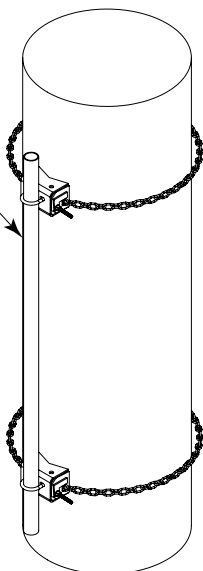
Low-profile Chain Mounts

Application:	Monopoles
Size:	2-3/8" (60.3 mm) OD pipe mounts
Design:	Single antenna chain mounts
Feature:	Universal, low-profile mount
Mounts to:	8" to 60" (203.2 mm to 1524 mm) OD
Material:	Hot dip galvanized steel
Includes:	See description



2-3/8" (60.3 mm)
OD Pipe

CM-30S-72



Part Number	Description	Weight, lb (kg)
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**Chain Mount Kits, 8" to 30" (203.2 mm to 711.2 mm) OD,
25" to 94.2" (635 mm to 2393 mm) Circumference, 8' (2.4 m) Chain**

Single Chain Mount Kit

CM-30S-B	Base Kit, 2-3/8" (60.3 mm) OD, Pipe Ordered Separately	26.76 (12.1)
CM-30S-72	One 2-3/8" OD x 72" (60.3 mm OD x 1.8 m) Pipe	47.76 (21.7)
CM-30S-96	One 2-3/8" OD x 96" (60.3 mm OD x 2.4 m) Pipe	60.26 (27.3)

**Single Chain Mount Kits With Stand-off, 8" to 30" (203.2 mm to 711.2 mm) OD,
25" to 94.2" (635 mm to 2393 mm) Circumference, 8' (2.4 m) Chain**

CML-30S-B	Base Kit, 2-3/8" (60.3 mm) OD, Pipe Ordered Separately	70 (31.8)
CML-30S-72	One 2-3/8" OD x 72" (60.3 mm OD x 1.8 m) Pipe	90 (40.8)
CML-30S-96	One 2-3/8" OD x 96" (60.3 mm OD x 2.4 m) Pipe	105.76 (48.0)

**Chain Mount Kits, 8" to 60" (203.2 mm to 1524 mm) OD,
25" to 188" (635 mm to 4785 mm) Circumference, 16' (4.9 m) Chain**

Single Chain Mount Kit

CM-60S-B	Base Kit, 2-3/8" (60.3 mm) OD Pipe Ordered Separately	38.78 (17.6)
CM-60S-72	One 2-3/8" OD x 72" (60.3 mm OD x 1.8 m) Pipe	59.76 (27.1)
CM-60S-96	One 2-3/8" OD x 96" (60.3 mm OD x 2.4 m) Pipe	72.26 (32.8)

**Single Chain Mount Kits With Stand-off, 8" to 60" (203.2 mm to 1524 mm) OD,
25" to 188" (635 mm to 4785 mm) Circumference, 16' (4.9 m) Chain**

CML-60S-B	Base Kit, 2-3/8" (60.3 mm) OD, Pipe Ordered Separately	80 (36.3)
CML-60S-72	One 2-3/8" OD x 72" (60.3 mm OD x 1.8 m) Pipe	105 (47.6)
CML-60S-96	One 2-3/8" OD x 96" (60.3 mm OD x 2.4 m) Pipe	117.76 (53.4)

Man Rating: 250 lb vertical man load at 15 mph (BWS)

Wind Rating*: 120 mph (BWS) 1/2" radial ice at 100' AGL per latest revision of TIA/EIA-222

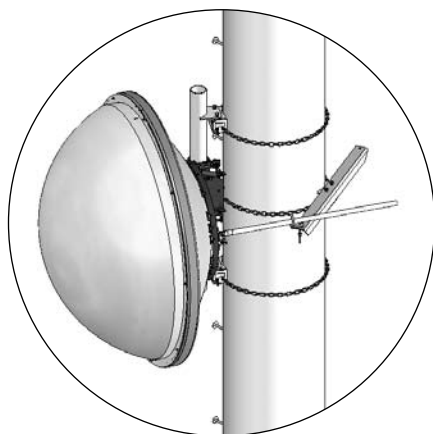
**Typical installation of one 6' (1.8 m) microwave antenna per sector*

Monopole Mounts

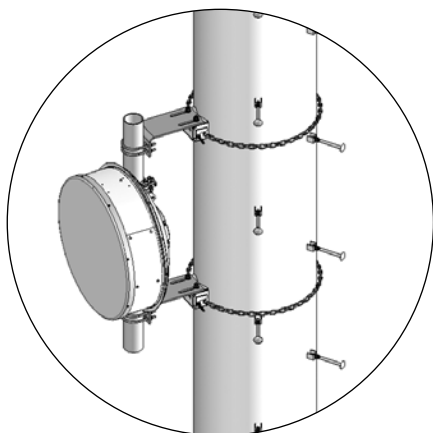
Light Duty Chain Mounts

Light Duty Chain Mounts

Application:	Monopoles
Size:	4-1/2" (114.3 mm) OD pipe mounts
Design:	Single antenna mount
Feature:	Single chain support
Mounts to:	8" to 60" (203.2 mm to 1.5 m) OD
Material:	Hot dip galvanized steel
Includes:	Pipe mounts and chains
Order Separately:	Stiff arm and pipe mounts as needed



● CM-L30-63 with CM-SL30



● CML-L30-63

Part Number	Description	Wt. lb (kg)
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Light Duty Chain Mount Kits, 8" to 30" (203.2 mm to 711.2 mm) OD, 25" to 94.2" (635 mm to 2393 mm) Circumference, 8' (2.4 m) Chain

CM-L30-B	Base Kit, Pipe Mount Ordered Separately	26.14 (11.9)
CM-L30-63	4-1/2" OD x 63" (114.3 mm OD x 1.6 m) Pipe Mount	90.64 (41.1)

Light Duty Chain Mount Kits With Stand-off, 8" to 30" (203.2 mm to 711.2 mm) OD, 25" to 94.2" (635 mm to 2393 mm) Circumference, 8' (2.4 m) Chain

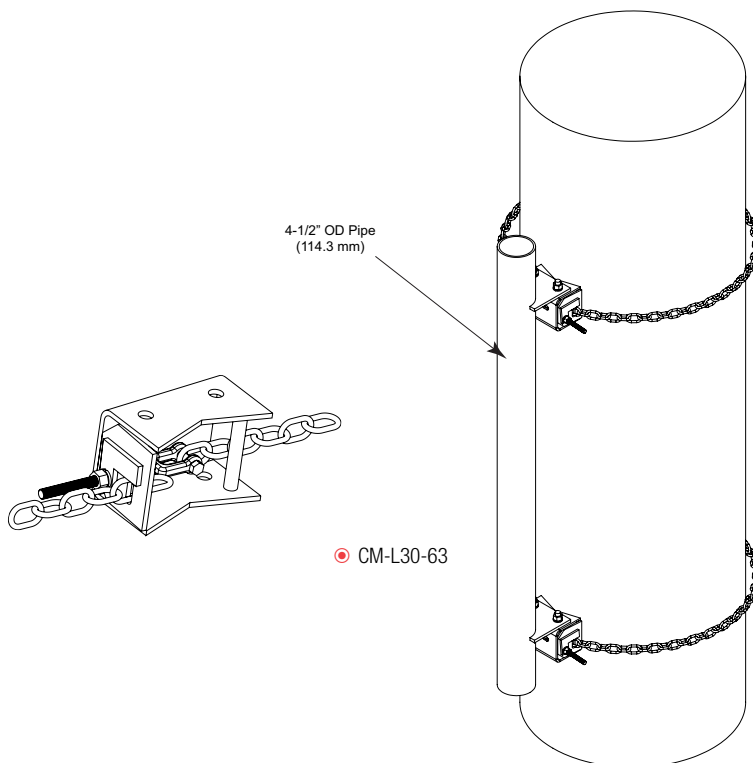
CML-L30-B	Base Kit, Pipe Mount Ordered Separately	30 (13.6)
CML-L30-63	4-1/2" OD x 63" (114.3 mm OD x 1.6 m) Pipe Mount	130 (59.0)

Light Duty Chain Mount Kits, 8" to 60" (203.2 mm to 1524 mm) OD, 25" to 188" (635 mm to 4785 mm) Circumference, 16' (4.9 m) Chain

CM-L60-B	Base Kit, Pipe Mount Ordered Separately	38.14 (17.3)
CM-L60-63	4-1/2" OD x 63" (114.3 mm OD x 1.6 m) Pipe Mount	102.64 (46.6)

Light Duty Chain Mount Kits With Stand-off, 8" to 60" (203.2 mm to 1524 mm) OD, 25" to 188" (635 mm to 4785 mm) Circumference, 16' (4.9 m) Chain

CML-L60-B	Base Kit, Pipe Mount Ordered Separately	40 (18.1)
CML-L60-63	4-1/2" OD x 63" (114.3 mm OD x 1.6 m) Pipe Mount	140 (63.5)



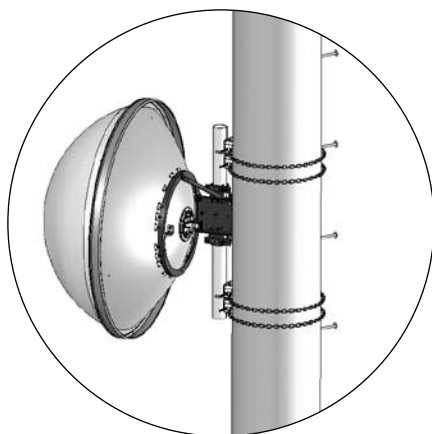
● CM-L30-63

Monopole Mounts

Heavy Duty Chain Mounts

Heavy Duty Chain Mounts

Application:	Monopoles
Size:	4-1/2" (114.3 mm) OD pipe mounts
Design:	Single antenna mount
Feature:	Double chain support
Mounts to:	8" to 60" (203.2 mm to 1.5 m) OD
Material:	Hot dip galvanized steel
Includes:	Pipe mounts and chains
Order Separately:	Stiff arm and pipe mounts as needed



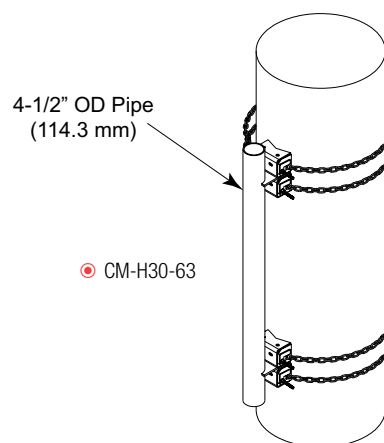
Part Number	Description	Weight, lb (kg)
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Heavy Duty Chain Mount Kits, 8" to 30" (203.2 mm to 711.2 mm) OD, 25" to 94.2" (635 mm to 2393 mm) Circumference, 8' (2.4 m) Chain

CM-H30-B	Base Kit, Pipe Mount Ordered Separately	52.12 (23.6)
CM-H30-63	4-1/2" OD x 63" (114.3 mm OD x 1.6 m) Pipe Mount	116.62 (52.9)

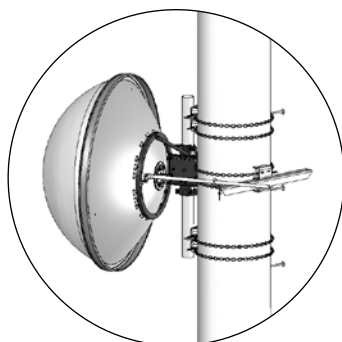
Heavy Duty Chain Mount Kits, 8" to 60" (203.2 mm to 1524 mm) OD, 25" to 188" (635 mm to 4785 mm) Circumference, 16' (4.9 m) Chain

CM-H60-B	Base Kit, Pipe Mount Ordered Separately	76.12 (34.5)
CM-H60-63	4-1/2" OD x 63" (114.3 mm OD x 1.6 m) Pipe Mount	140.62 (63.8)



Monopole Stiff Arm Mounts

Application:	Monopoles
Size:	48" (1.2 m) arm
Design:	Chain mounted support arm
Feature:	Adapts stiff arm to monopole
Mounts to:	8" to 60" (203.2 mm to 1.5 m) OD
Material:	Hot dip galvanized steel
Includes:	Arm and chains
Order Separately:	Antenna chain mount and stiff arm



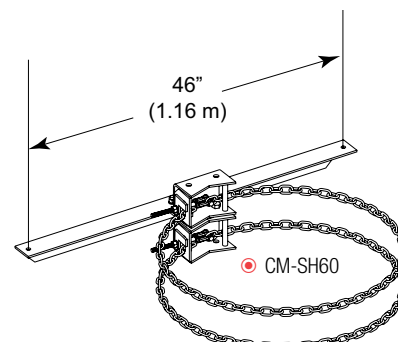
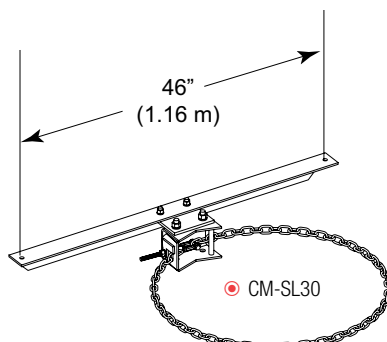
Part Number	Description	Weight, lb (kg)
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Monopole Stiff Arm Mount Kits, 8" to 30" (203.2 mm to 711.2 mm) OD, 25" to 94.2" (635 mm to 2393 mm) Circumference

CM-SL30	Light Duty Stiff Arm Mount, Single 8' (2.4 m) Chain	37.0 (16.8)
CM-SH30	Heavy Duty Stiff Arm Mount, Double 8' (2.4 m) Chains	50.0 (22.7)

Monopole Stiff Arm Mount Kits, 8" to 60" (203.2 mm to 1524 mm) OD, 25" to 188" (635 mm to 4785 mm) Circumference

CM-SL60	Light Duty Stiff Arm Mount, Single 16' (4.9 m) Chain	43.0 (19.5)
CM-SH60	Heavy Duty Stiff Arm Mount, Double 16' (4.9 m) Chains	62.0 (28.1)

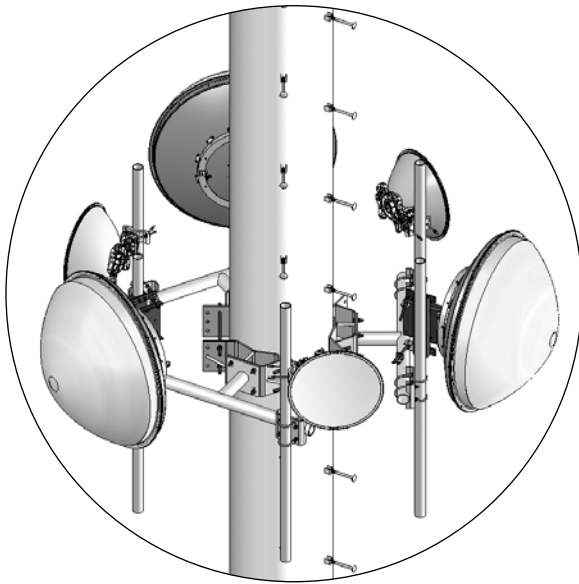


Monopole Mounts

Microwave Components

Low-profile Adjustable Co-location Kit

Application:	Monopoles
Size:	57" (1.4 m) face with 48" (1.2 m) separation
Design:	Universal double antenna mount
Feature:	Down tilt capabilities
Mounts to:	12" to 50" (304.8 mm to 1.27 m) OD monopoles
Material:	Hot dip galvanized steel
Includes:	Mount, weldment, hardware
Order Separately:	Available with or without pipe



Man Rating: 250 lb vertical man load at 15 mph (BWS)

Wind Rating*: 120 mph (BWS) per latest revision of TIA/EIA-222
 140 mph 3-second gust, Exposure "D" per FBC, at 150' AGL

Part Number	Description	Weight, lb (kg)
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Universal Monopole Co-location Kit, 12" to 50" (304.8 mm to 1.27 m) OD Pole, Without Pipe Mounts

MC-DPMM-B	Pipe Mounts Ordered Separately	335 (152.0)
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Universal Monopole Co-location Kit, 12" to 50" (304.8 mm to 1.27 m) OD Pole, With 2-3/8" (60.3 mm) OD Pipe Mounts

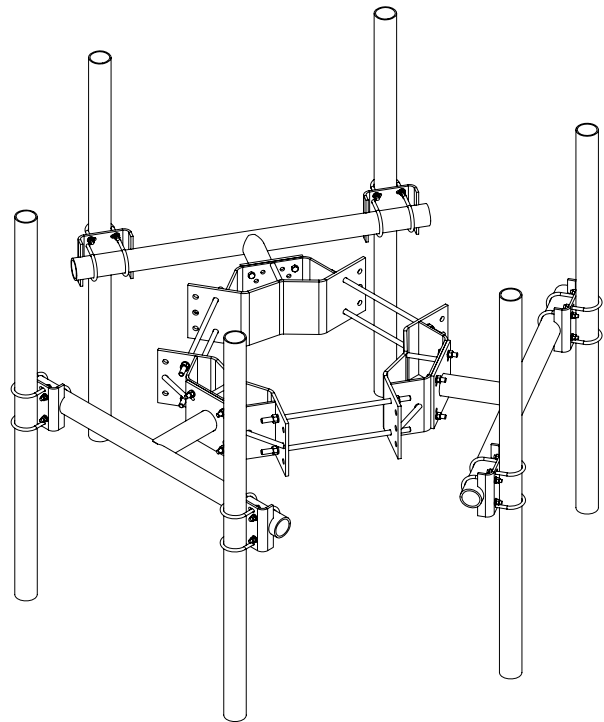
MC-DPM2M-6-B	Pipes Ordered Separately	545 (247.2)
MC-DPM2M-6-72	Six 2-3/8" OD x 72" (60.3 mm OD x 1.8 m)	675 (306.2)
MC-DPM2M-6-96	Six 2-3/8" OD x 96" (60.3 mm OD x 2.4 m)	720 (326.6)
MC-DPM2M-6-126	Six 2-3/8" OD x 126" (60.3 mm OD x 3.2 m)	775 (351.5)

Universal Monopole Co-location Kit, 12" to 50" (304.8 mm to 1.27 m) OD Pole, With 2-7/8" (73 mm) OD Pipe Mounts

MC-DPM3M-6-B	Pipes Ordered Separately	555 (251.7)
MC-DPM3M-6-72	Six 2-7/8" OD x 72" (73 mm OD x 1.8 m)	765 (347.0)
MC-DPM3M-6-96	Six 2-7/8" OD x 96" (73 mm OD x 2.4 m)	835 (378.8)
MC-DPM3M-6-126	Six 2-7/8" OD x 126" (73 mm OD x 3.2 m)	925 (419.6)

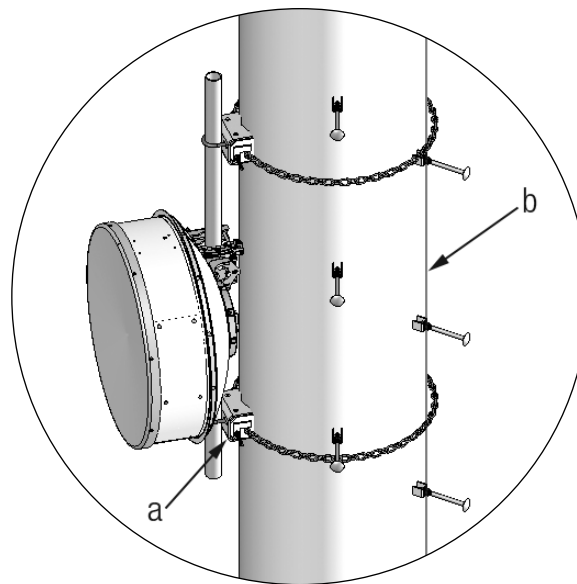
Universal Monopole Co-location Kit, 12" to 50" (304.8 mm to 1.27 m) OD Pole, With 3-1/2" (88.9 mm) OD Pipe Mounts

MC-DPM35M-6-B	Pipes Ordered Separately	555 (251.7)
MC-DPM35M-6-72	Six 3-1/2" OD x 72" (88.9 mm OD x 1.8 m)	830 (376.5)
MC-DPM35M-6-96	Six 3-1/2" OD x 96" (88.9 mm OD x 2.4 m)	925 (419.6)
MC-DPM35M-6-126	Six 3-1/2" OD x 126" (88.9 mm OD x 3.2 m)	1035 (469.5)



Monopole Mounts

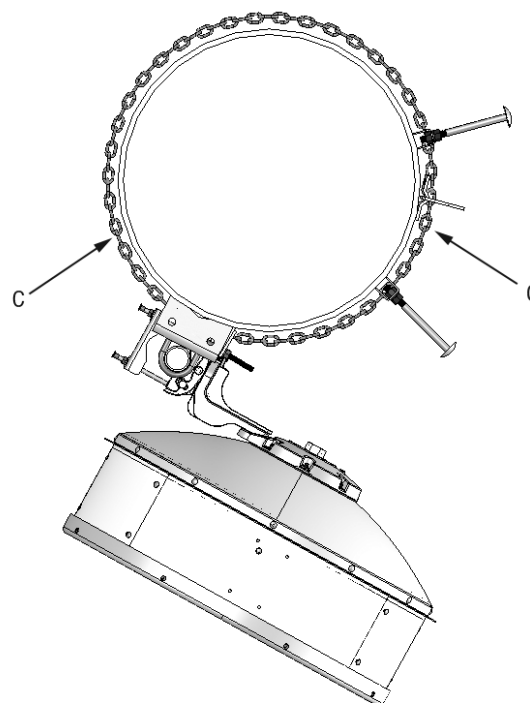
Application Guide



Key	Part Number	Description	Page #
1	CM-30S-72	Low-profile Single Chain Mount Kit	18

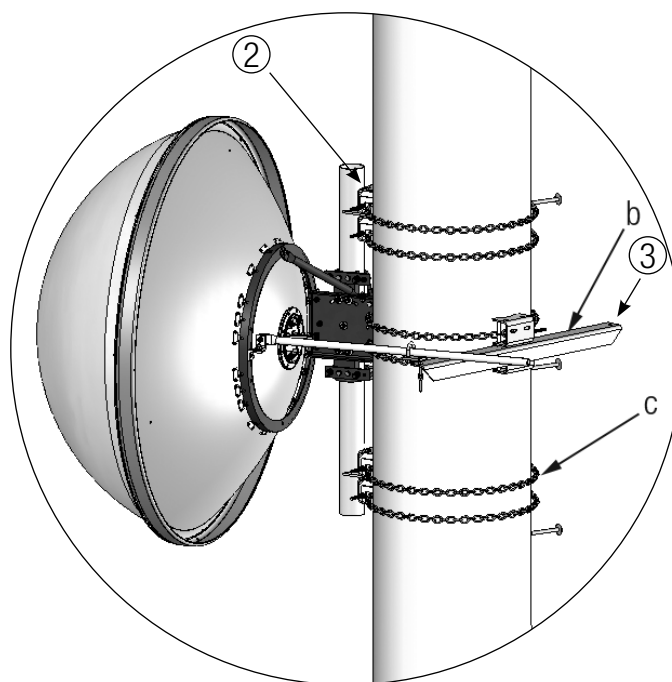
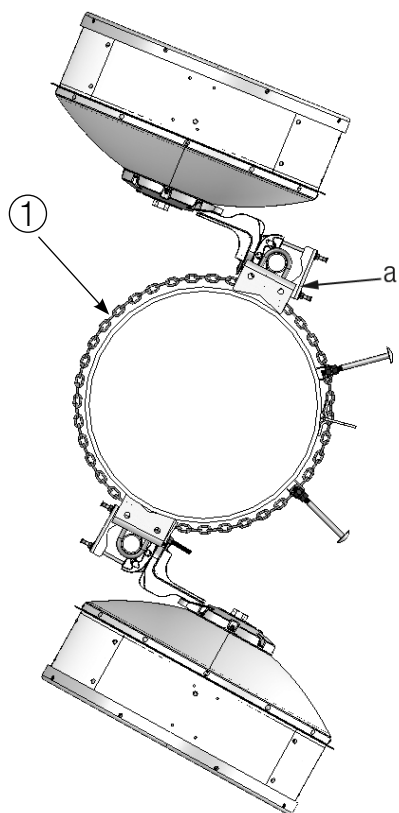
* Shown with VHLP Series Antennas

- a. Single point locking adjustment
- b. Mounts to both round and polygon poles
- c. Chain support offers 360° of azimuth adjustability
- d. Low-profile clearance allows for unobstructed climbing



Monopole Mounts

Application Guide



Key	Part Number	Description	Page #
1	CM-30D-72	Low-profile Double Chain Mount Kit	18
2	CM-H30-63	Heavy Duty Chain Mount Kit	20
3	CM-SH30	Monopole Stiff Arm Mount Kit	20

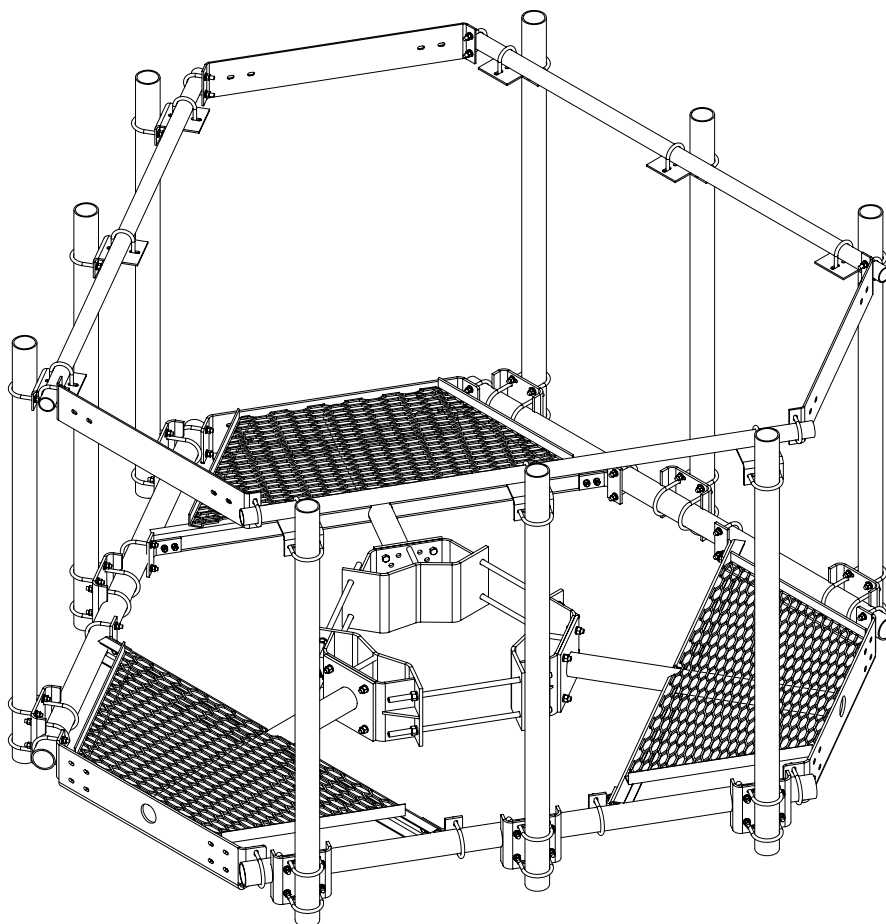
* Shown with VHLP and PXF2 Series Antennas

- a. Sliding brackets allow for double supports at desired azimuth
- b. Stiff arm mount provides strut support at recommended angle
- c. Dual chain supports for larger antenna



Monopole Mounts

Customs



Custom Mount for Multiple Dishes With 84" (2.1 m)
Face and 3-1/2" (88.9 mm) Vertical Pipe



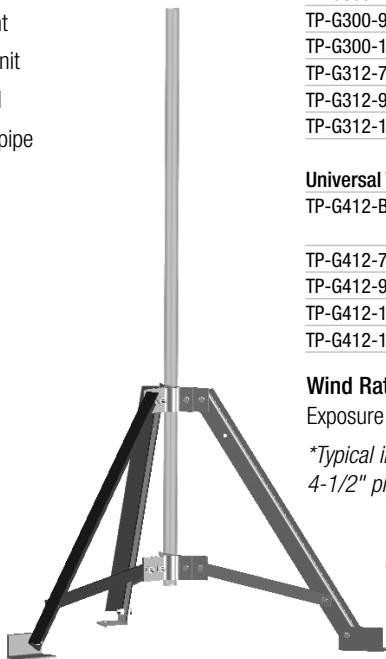
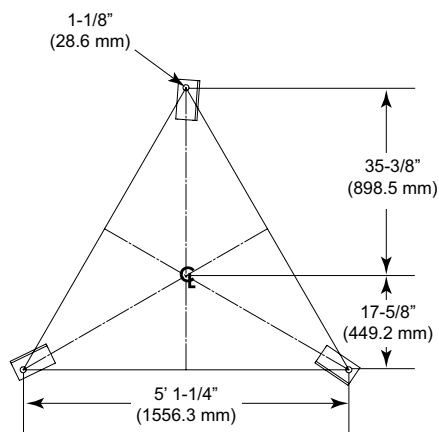
- Roof Frames
- Mounting Components
- Customs

Roof-Top Mounts

Roof Frames

Universal Tripod Mounts

Application: Roof-top
Size: 2-7/8" (73 mm), 3-1/2" (88.9 mm, or 4-1/2" (114.3 mm) OD
Design: Heavy duty tripod mount
Feature: Interchangeable base unit
Material: Hot dip galvanized steel
Includes: Mount, with or without pipe
Order Separately: Roof sled and pipe



TP-G300-96

Part Number	Description	Weight, lb (kg)
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Universal Tripod Mount, 2-7/8" or 3-1/2" (73 mm or 88.9 mm) OD

TP-G300-B	Base Only for 2-7/8" (73 mm) or 3-1/2" (88.9 mm) OD, Pipe Ordered Separately	114.3 (51.8)
TP-G300-72	2-7/8" OD x 72" (73 mm OD x 1.8 m)	145 (65.8)
TP-G300-96	2-7/8" OD x 96" (73 mm OD x 2.4 m)	160 (72.6)
TP-G300-126	2-7/8" OD x 126" (73 mm OD x 3.2 m)	170 (77.1)
TP-G312-72	3-1/2" OD x 72" (88.9 mm OD x 1.8 m)	150 (68.0)
TP-G312-96	3-1/2" OD x 96" (88.9 mm OD x 2.4 m)	170 (77.1)
TP-G312-126	3-1/2" OD x 126" (88.9 mm OD x 3.2 m)	190 (86.2)

Universal Tripod Mount, 4-1/2" (114.3 mm) OD

TP-G412-B	Base Only for 4-1/2" (114.3 mm) OD, Pipe Ordered Separately	173.4 (78.7)
TP-G412-72	4-1/2" OD x 72" (114.3 mm OD x 1.8 m)	238.2 (108.0)
TP-G412-96	4-1/2" OD x 96" (114.3 mm OD x 2.4 m)	259.8 (117.8)
TP-G412-126	4-1/2" OD x 126" (114.3 mm OD x 3.2 m)	286.8 (130.1)
TP-G412-150	4-1/2" OD x 150" (114.3 mm OD x 3.8 m)	308.4 (139.9)

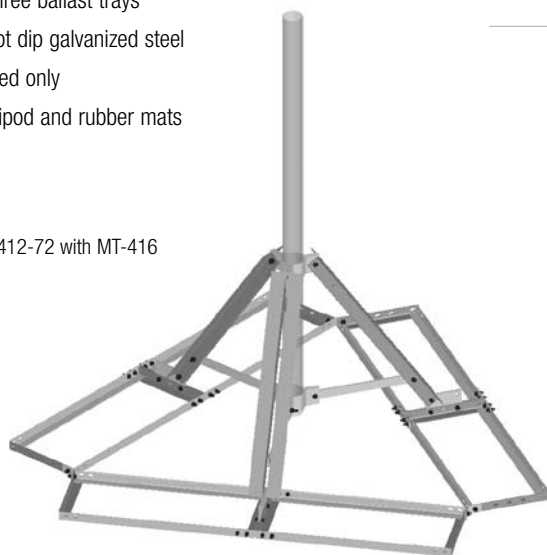
Wind Rating*: 85 mph (BWS) per latest revision of TIA/EIA-222 Exposure "C" per UBC, at 100' AGL

*Typical installation of one 6' standard microwave antenna using 4-1/2" pipe must See Engineering Data Table for ballast

Non-penetrating Roof Ballast Sled for Tripods

Application: Roof-top
Size: 87" (2.2 m) faces
Design: Converts tripods to non-penetrating
Feature: Three ballast trays
Material: Hot dip galvanized steel
Includes: Sled only
Order Separately: Tripod and rubber mats

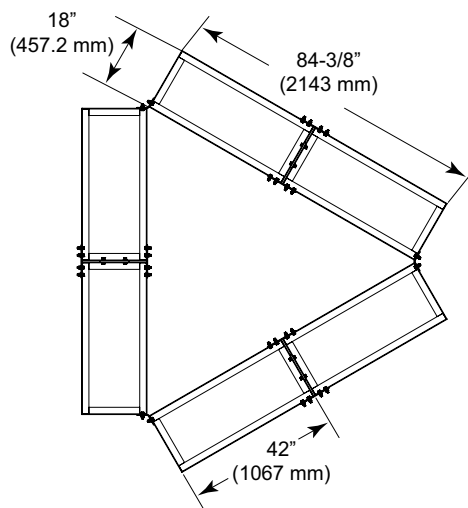
TP-G412-72 with MT-416



Part Number	Description	Weight, lb (kg)
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Non-penetrating Roof Ballast Sled for Tripods

MT-416	Non-penetrating Roof Sled, Tripod Mount Ordered Separately	171.7 (77.9)
MT-F1637	Rubber Mat, 1/2" x 18" x 48" (12.7 mm x 0.5 m x 1.2 m), Six Mats Required for Ballast Tray	16.2 (7.3)



Roof-Top Mounts

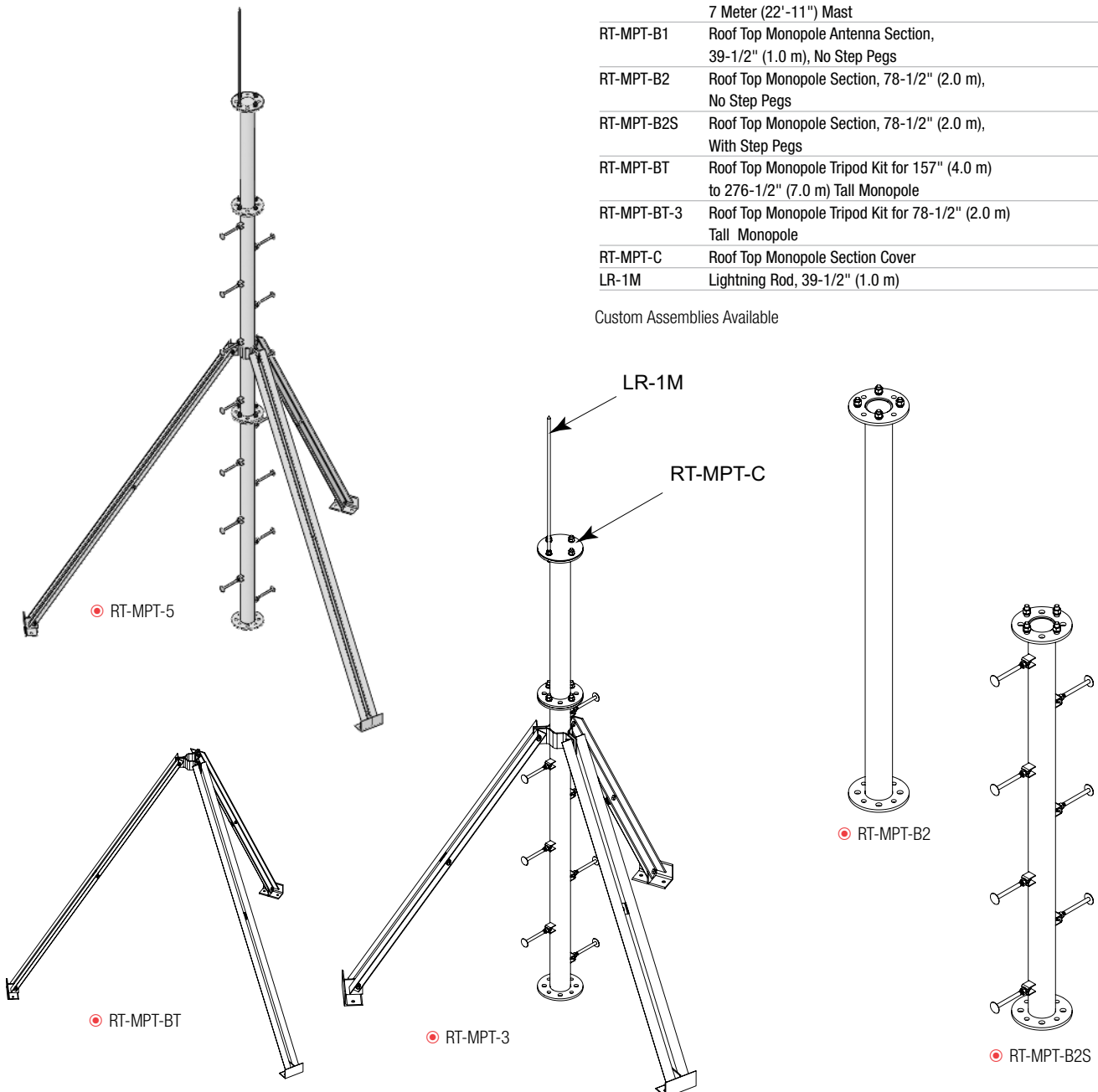
Roof Frames

Roof-top Monopole Tripods

Application:	Roof-top
Design:	Spliced center pole with angle kicker legs
Feature:	Splice vertical post
Mounts to:	Roof-top
Material:	Hot dip galvanized steel
Includes:	Center post, kicker angles, hardware

Part Number	Description	Weight, lb (kg)
Monopole Tripod Assemblies		
RT-MPT-3	Roof-top Monopole Tripod Assembly, 3 Meter (9'-9") Mast	380 (172.4)
RT-MPT-4	Roof-top Monopole Tripod Assembly, 4 Meter (13'-1") Mast	405 (183.7)
RT-MPT-5	Roof-top Monopole Tripod Assembly, 5 Meter (16'-5") Mast	470 (213.2)
RT-MPT-6	Roof-top Monopole Tripod Assembly, 6 Meter (19'-8") Mast	505 (229.1)
RT-MPT-7	Roof-top Monopole Tripod Assembly, 7 Meter (22'-11") Mast	565 (256.3)
RT-MPT-B1	Roof Top Monopole Antenna Section, 39-1/2" (1.0 m), No Step Pegs	
RT-MPT-B2	Roof Top Monopole Section, 78-1/2" (2.0 m), No Step Pegs	
RT-MPT-B2S	Roof Top Monopole Section, 78-1/2" (2.0 m), With Step Pegs	
RT-MPT-BT	Roof Top Monopole Tripod Kit for 157" (4.0 m) to 276-1/2" (7.0 m) Tall Monopole	
RT-MPT-BT-3	Roof Top Monopole Tripod Kit for 78-1/2" (2.0 m) Tall Monopole	
RT-MPT-C	Roof Top Monopole Section Cover	
LR-1M	Lightning Rod, 39-1/2" (1.0 m)	

Custom Assemblies Available

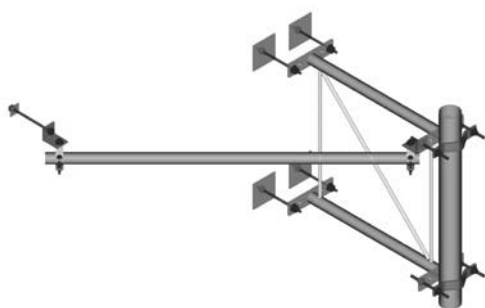


Roof-Top Mounts

Mounting Components

Stand-off Wall Mount

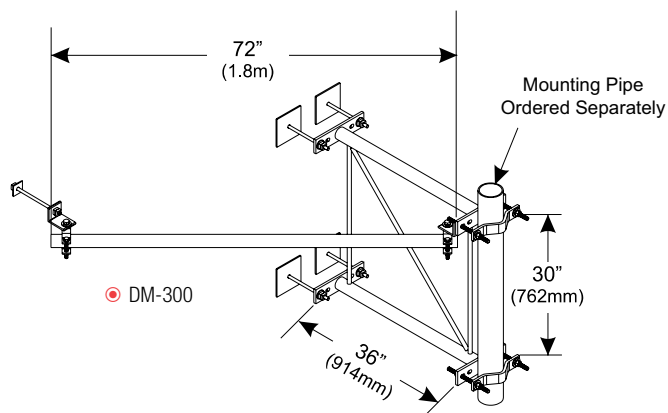
Application:	Roof-top
Size:	36" (914.4 mm) stand-off
Design:	Welded stand-off mount
Feature:	Heavy duty for microwave antennas
Mounts to:	Walls
Material:	Hot dip galvanized steel
Includes:	Bracket, stiff-arm, and wall mount hardware
Order Separately:	3-1/2" (88.9 mm) or 4-1/2" (114.3 mm) OD pipe



Part Number	Description	Weight, lb (kg)
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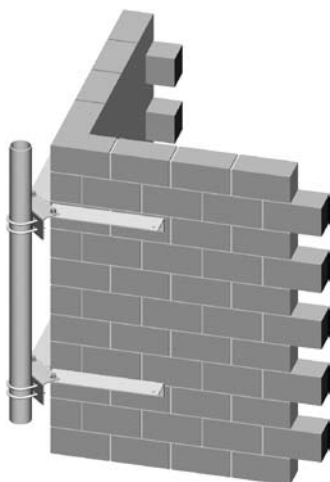
Stand-off Wall Mount

DM-300	Stand-off Wall Mount, 36" (914 mm), for Solid and Hollow Walls, Includes 72" (1.8 m) Stiff Arm	151 (68.4)
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Corner Wall Mounts

Application:	Roof-top
Design:	V-shaped corner mount
Feature:	Adjustable clamp spacing
Mounts to:	Wall corners
Material:	Hot dip galvanized steel
Includes:	Two brackets, pipe mount, and wall mount hardware



Part Number	Description	Weight, lb (kg)
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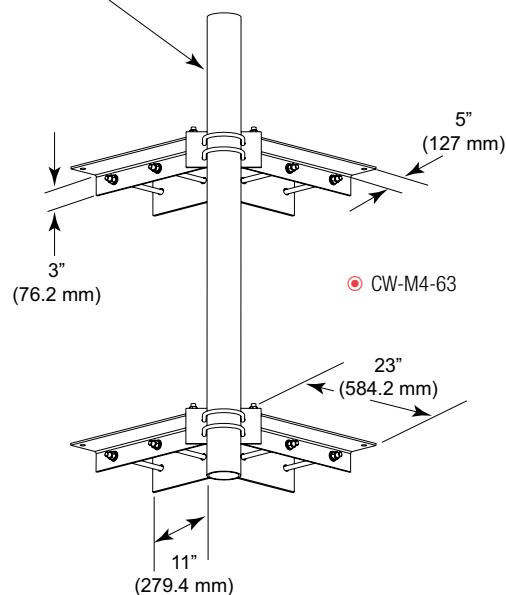
Corner Wall Mount With 2-3/8" (60.3 mm) OD Antenna Pipe

CW-M2-63	63" (1.6 m) Pipe	123.7 (56.1)
CW-M2-96	96" (2.4 m) Pipe	133.6 (60.6)

Corner Wall Mount With 4-1/2" (114.3 mm) OD Antenna Pipe

CW-M4-63	63" (1.6 m) Pipe	161.5 (73.3)
CW-M4-96	96" (2.4 m) Pipe	191.2 (86.7)

2-3/8" or 4-1/2" OD Pipe
(60.3 mm or 114.3 mm)



Roof-Top Mounts

Mounting Components

Adjustable Wall Mounts

Application:	Roof-top
Size:	12" (304.8 mm) square plate, 6-1/4" (158.75 mm) or 12" (304.8 mm) Deep
Design:	Welded dual brackets
Feature:	Variable spacing flexibility
Mounts to:	Versions for hollow or solid walls
Material:	Hot dip galvanized steel
Includes:	Two wall brackets and backing plates or anchors
Order Separately:	U-bolts and 2-3/8" through 4-1/2" OD (60.3 mm through 114.3 mm) pipe



Part Number	Description	Weight, lb (kg)
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Adjustable Wall Mounts, 6" (152.4 mm) Stand-off

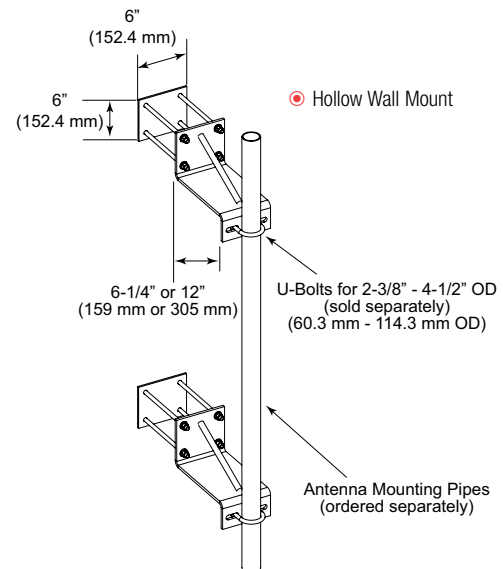
MT-221	For Hollow Walls, Includes Backing Plates, Kit of 2	68.6 (31.1)
MT-222	For Solid Walls, Includes Wall Anchors, Kit of 2	45.5 (20.6)

Adjustable Wall Mounts, 12" (304.8 mm) Stand-off

MT-221L	For Hollow Walls, Includes Backing Plates, Kit of 2	75.3 (34.2)
MT-222L	For Solid Walls, Includes Wall Anchors, Kit of 2	50.7 (23.0)

Optional Backing Plate

MT-223	Backing Plate Kit	23.1 (10.5)
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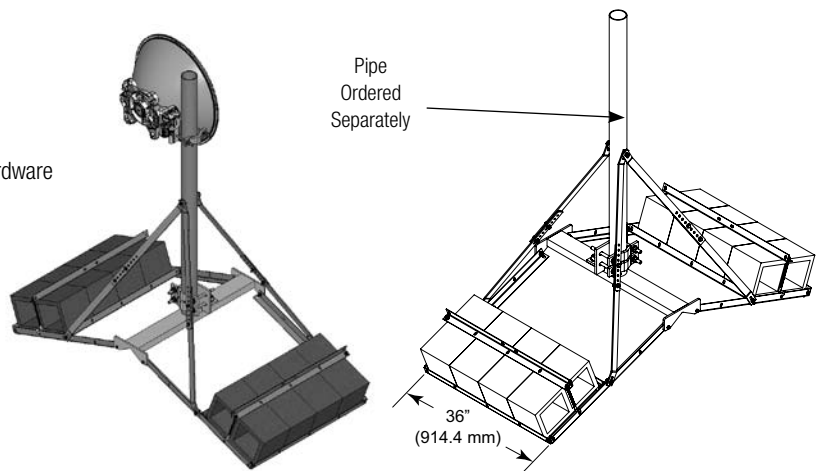
Non-penetrating Roof-top Peak Frames

Application:	Roof-top
Size:	36" (914.4 mm) wide ballast trays
Design:	Non-penetrating design
Feature:	Accepts 2-3/8" to 4-1/2" OD (60.3 mm to 114.3 mm) antenna mounting pipes
Mounts to:	Peaked roofs
Material:	Hot dip galvanized steel
Includes:	Ballast tray, tie down angles, mount, hardware
Order Separately:	Antenna mounting pipes

Part Number	Description	Weight, lb (kg)
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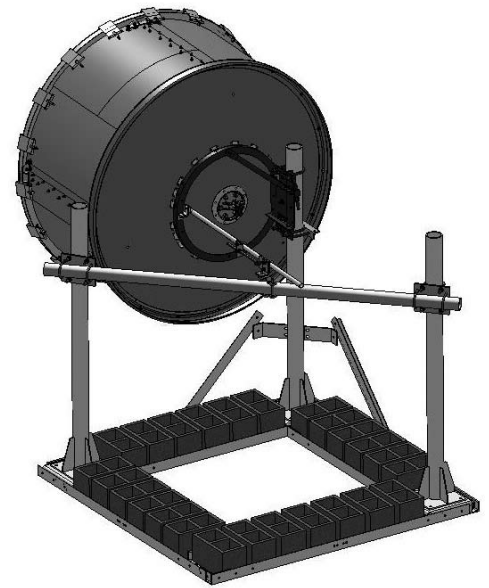
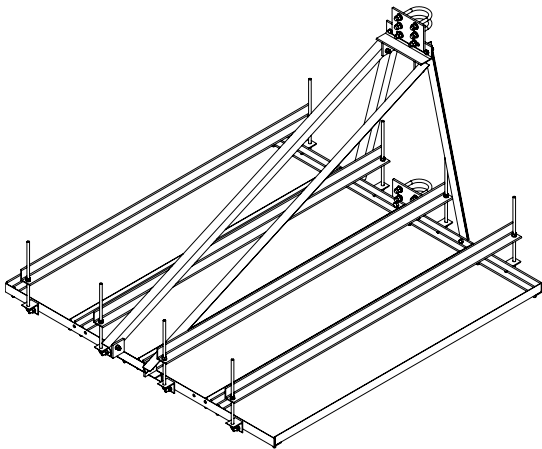
Non-penetrating Roof-top Peak Frames

RT-PM-B	Non-penetrating Roof-top Peak Frame, Base Kit. 2-3/8" to 4-1/2" OD (60.3 mm x 114.3 mm OD) Pipe Ordered Separately	105 (47.6)
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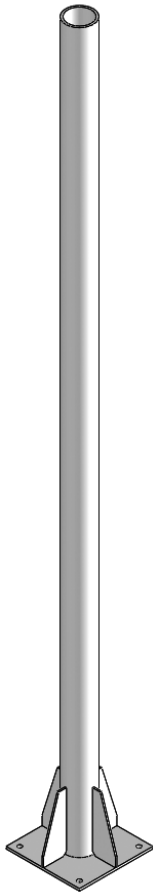


Roof-Top Mounts

Customs



Custom Mounts for Specific Applications





- ◉ Coaxial Support Components
- ◉ Waveguide Bridge Kits
- ◉ Cable Ladder Kits

Coaxial Support Components

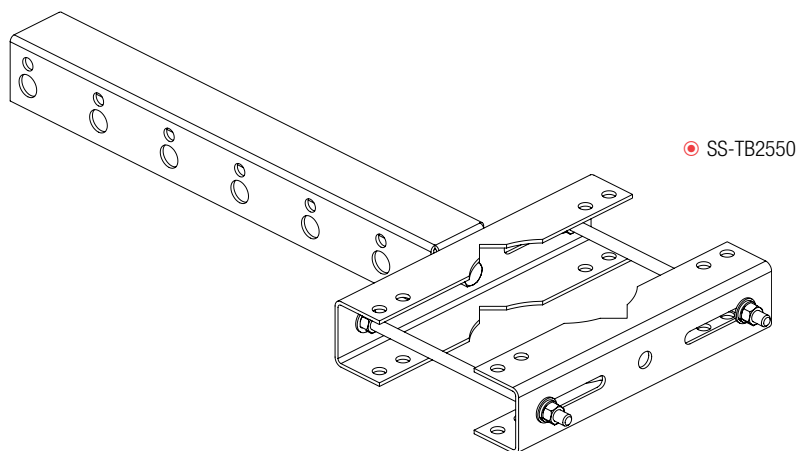
Star Support Brackets

Application:	Lattice towers
Size:	3/4" (19.1 mm) and 7/16" (11.1 mm) holes
Design:	Bolt together stand-off mount
Feature:	Six or twelve hole solution
Mounts to:	Round and angle members
Material:	Hot dip galvanized steel
Includes:	Bracket

Part Number	Description	Weight, lb (kg)
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Star Support Tee Bracket

SS-TB2550	1-1/2" to 5-9/16" OD (38.1 mm to 141.3 mm OD) Round Members and 2-1/2" to 5" (50.8 mm to 127 mm) Angle Members	8 (3.6)
SS-TB6080	4" to 10-3/4" OD (101.6 mm to 273.1 mm OD) Round Members and 4" to 8" (101.6 mm to 203.2 mm) Angle Members	10 (4.5)



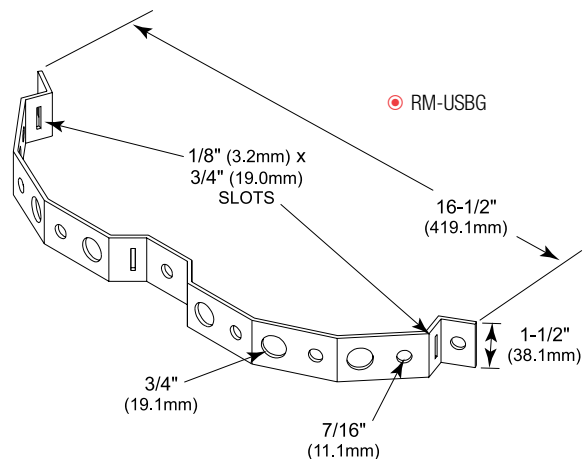
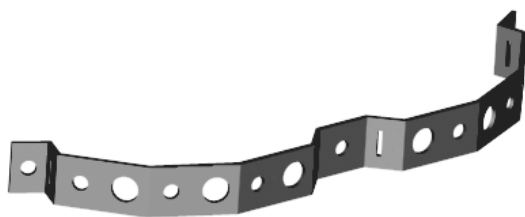
Universal Round Member Support Bracket

Application:	Monopoles
Size:	3/4" (19.1 mm) and 7/16" (11.1 mm) holes
Design:	Coaxial cable support for round members
Feature:	Ideal for co-location
Mounts to:	Round members
Material:	Hot dip galvanized steel
Includes:	Bracket
Order Separately:	Banding

Part Number	Description	Weight, lb (kg)
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Universal Round Member Support Bracket

RM-USBG	Universal Round Member Support Bracket for 6 Runs, Kit of 10	9.0 (4.1)
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Waveguide

Waveguide Bridge Kits

12" or 24" Two-post Waveguide Bridge Kits

Application: Waveguide bridge

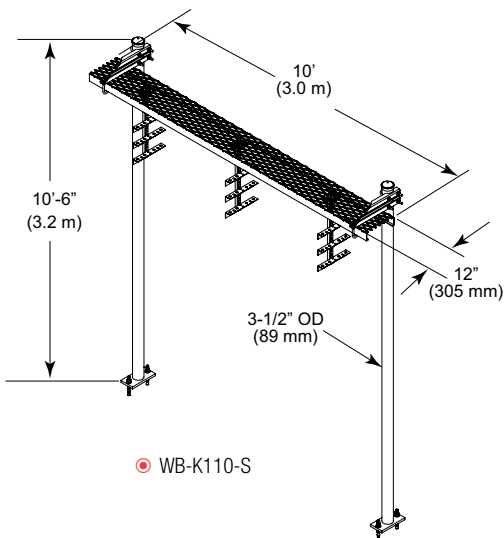
Design: Two-post, 10' (3.0 m) safety grating

Feature: Complete kit for coaxial cable support

Material: Hot dip galvanized steel

Includes: Channel, posts, support brackets, caps, trapeze, and hardware

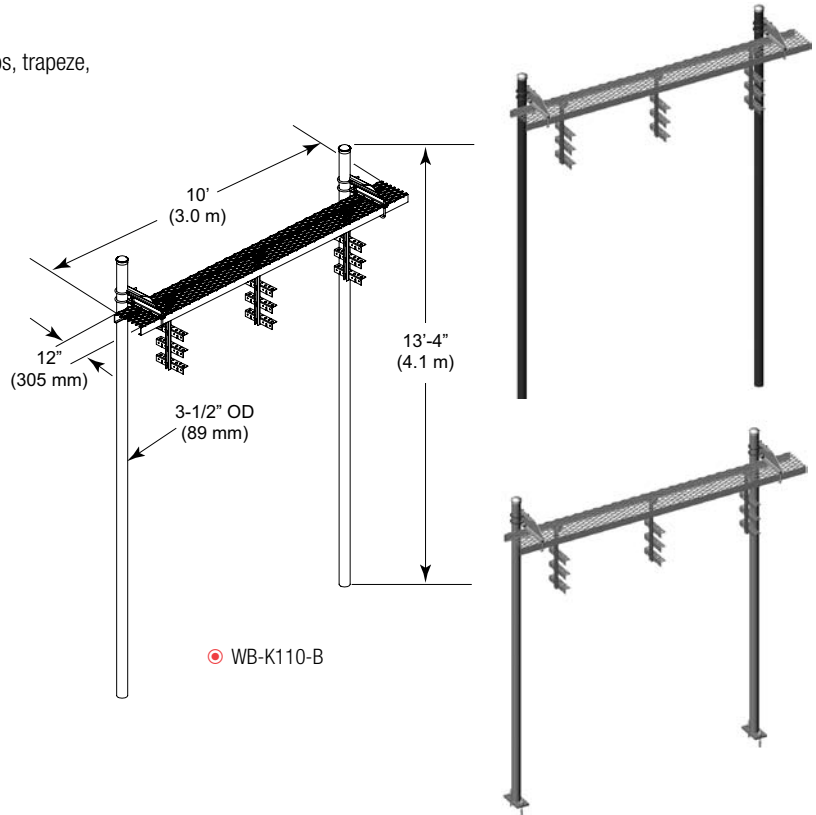
Order Separately: Additional accessories



Part Number	Description	Weight, lb (kg)
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12" (0.3 m) Wide Two-post Safety Grated Waveguide Bridge Kit

WB-K110-B	Two 13'-4" (4.1 m) Direct Burial Posts	325.0 (147.4)
WB-K110-S	Two 10'-6" (3.2 m) Base Shoe Posts	308.0 (139.7)



GPS Antenna Wall Mount

Application: Roof-top

Size: 3/4" OD x 48" (19.1 mm OD x 1.2 m)

Design: Welded mount with 6" (152.4 mm) stand-off

Feature: Threaded end for GPS antennas

Mounts to: Walls

Material: Hot dip galvanized steel

Includes: Mount

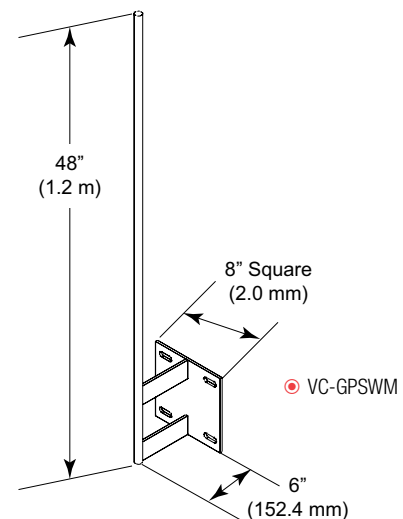
Order Separately: Anchoring hardware



Part Number	Description	Wt lb (kg)
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GPS Antenna Wall Mount

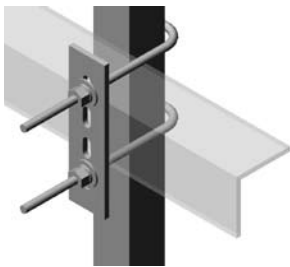
VC-GPSWM	3/4" OD x 48" (19.1 mm x 1.2 m)	10.5 (4.8)
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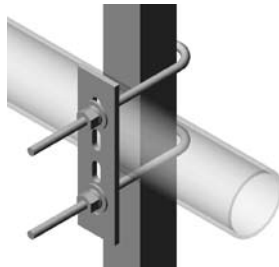
Cable Ladder Kits

Universal Cable Ladder Kits

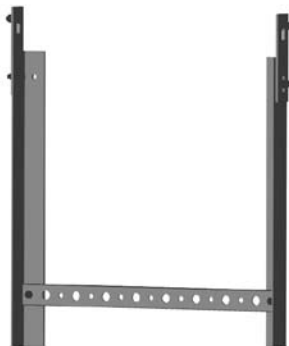
Application:	Lattice towers
Size:	10' (3 m) and 20' (6 m) in three widths
Design:	Angle rails with bolt-on channel rungs
Feature:	Complete ladder kit
Mounts to:	Round and angle legs
Material:	Hot dip galvanized steel
Includes:	Ladder, splice plates, and attachment kits



Angled Member Attachment



Round Member Attachment



Part Number	Description	Weight, lb (kg)
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10' (3 m) Universal Cable Ladder Kits

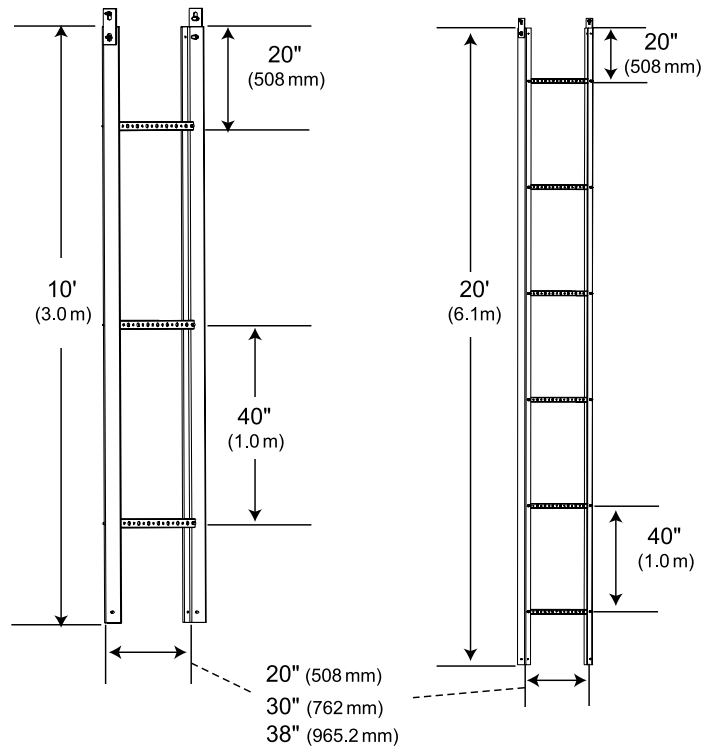
Includes Universal Hardware Kit for Round and Angle Members

CL-0610-U	20" Wide (355.6 mm), 6-Hole Rung	57 (25.9)
CL-0910-U	30" Wide (762 mm), 9-Hole Rung	59 (27.0)
CL-1210-U	38" Wide (1 m), 12-Hole Rung	62 (28.0)

20' (6 m) Universal Cable Ladder Kits

Includes Universal Hardware Kit for Round and Angle Members

CL-0620-U	20" Wide (355.6 mm), 6-Hole Rung	112 (50.8)
CL-0920-U	30" Wide (762 mm), 9-Hole Rung	117 (52.9)
CL-1220-U	38" Wide (1 m), 12-Hole Rung	121 (55.1)



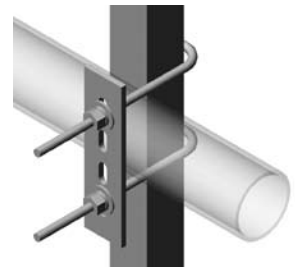
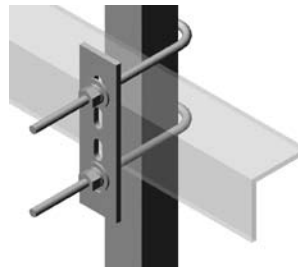
Universal Cable Ladder Hardware Kit

Application:	Lattice towers
Size:	1" to 4-1/2" (25.4 mm to 114.3 mm) round or angle members
Design:	One piece plate
Feature:	Universal attachment plate
Mounts to:	1" to 4-1/2" (25.4 mm to 114.3 mm) round and angle legs
Material:	Hot dip galvanized steel
Includes:	Plate and J-bolts
Order Separately:	Cable ladder

Part Number	Description	Wt. lb (kg)
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Universal Cable Ladder Hardware Kit

HK-CL-U	1" to 4-1/2" (25.4 mm to 114.3 mm) Round or Angle Members	4 (1.7)
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- Microwave Ice Shields
- Power Telco Rack
- Equipment Platforms

Site Related Components

Microwave Ice Shields

Microwave Antenna Ice Shield

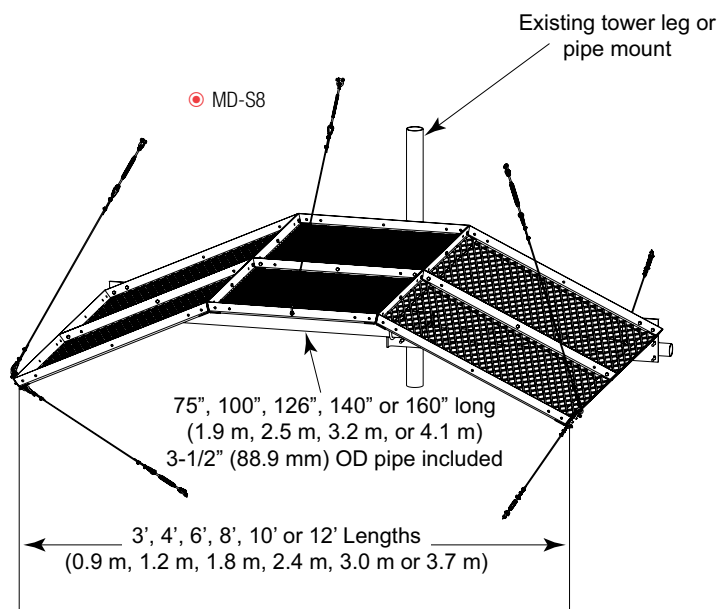
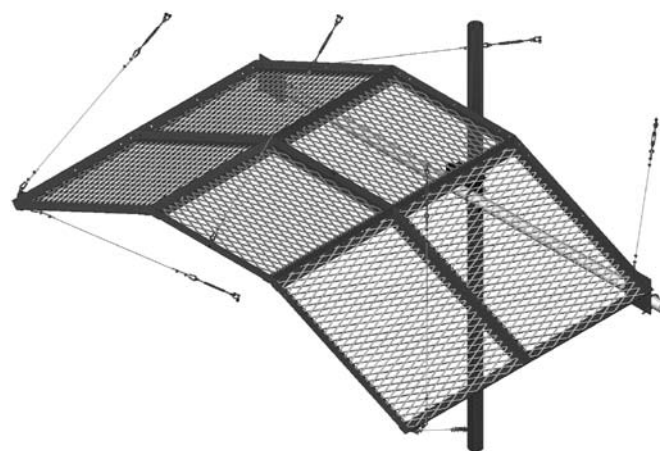
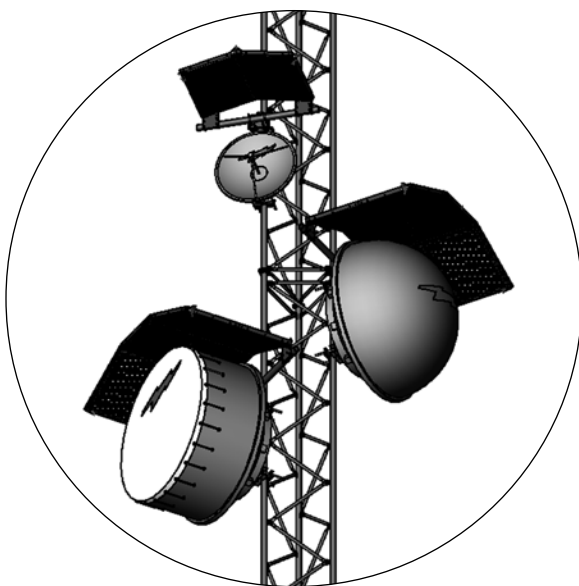
Application:	Lattice tower
Design:	Heavy duty
Feature:	Bolt together, light weight panels
Mounts to:	4-1/2" (114.3 mm) OD pipe
Material:	Hot dip galvanized steel
Includes:	Ice shield and all attachment hardware
Order Separately:	Pipe mount

Part Number	Description	Weight, lb (kg)
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Microwave Antenna Shields

MD-S3	Microwave Antenna Shield, 3' (914.4 mm) Antenna	260 (117.9)
MD-S4	Microwave Antenna Shield, 4' (1.21 m) Antenna	290 (131.6)
MD-S6	Microwave Antenna Shield, 6' (1.8 m) Antenna	443 (200.9)
MD-S8	Microwave Antenna Shield, 8' (2.4 m) Antenna	571 (259.1)
MD-S10	Microwave Antenna Shield, 10' (3 m) Antenna	649 (294.4)
MD-S12	Microwave Antenna Shield, 12' (3.6 m) Antenna	763 (346.1)

Custom lightweight or additional sizes available.
Contact our Customer Support Center for details.



Site Related Components

Microwave Ice Shields

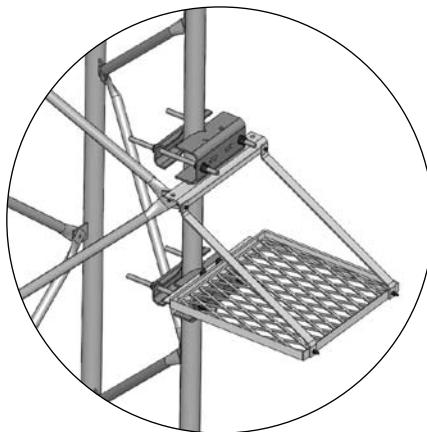
Square Antenna Ice Shields

Application:	Lattice towers
Design:	Heavy duty
Feature:	Protects antenna from falling ice
Mounts to:	4-1/2" (114.3 mm) OD pipe
Material:	Hot dip galvanized steel
Includes:	Ice shield, mounting hardware
Order Separately:	4-1/2" (114.3 mm) OD pipe mount

Part Number	Description	Weight, lb (kg)
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Square Antenna Ice Shields

MD-SQ2	Square Antenna Ice Shield, 2' (609.5 mm) Square	125 (56.7)
MD-SQ3	Square Antenna Ice Shield, 3' (914.4 mm) Square	150 (68.0)
MD-SQ4	Square Antenna Ice Shield, 4' (1.21 m) Square	190 (86.2)



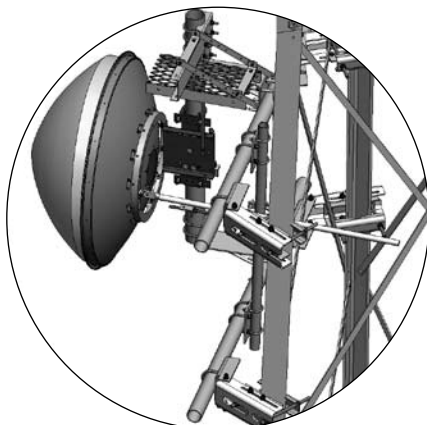
Microwave Dish Waveguide Shields

Application:	Lattice towers
Size:	Three versions (see table)
Design:	Support and protection for waveguide
Feature:	Protects waveguide from falling debris
Mounts to:	4-1/2" (114.3 mm) OD pipe
Material:	Hot dip galvanized steel
Includes:	Ice shield and all attachment hardware
Order Separately:	Pipe mount

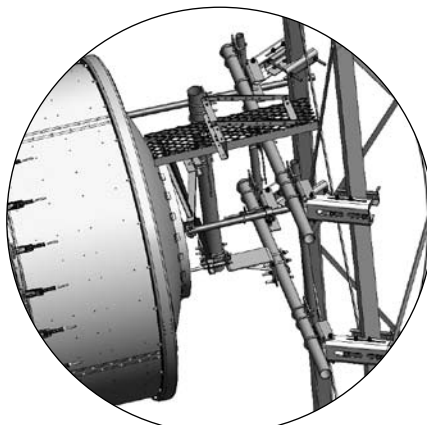
Part Number	Description	Weight, lb (kg)
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Microwave Dish Waveguide Shields

MD-IS2	Microwave Dish Waveguide Shield, 12" x 24" Shield	42 (19.1)
MD-IS4	Microwave Dish Waveguide Shield, 12" x 48" Shield	61 (27.7)
MD-WS	Microwave Dish Waveguide Shield, 24" Angle	12 (5.4)



● MD-IS2



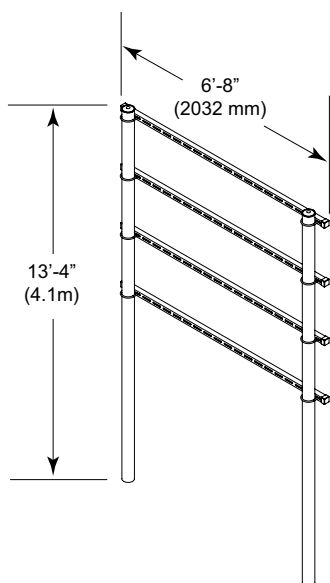
● MD-IS4

Site Related Components

Components

Power Telco Racks

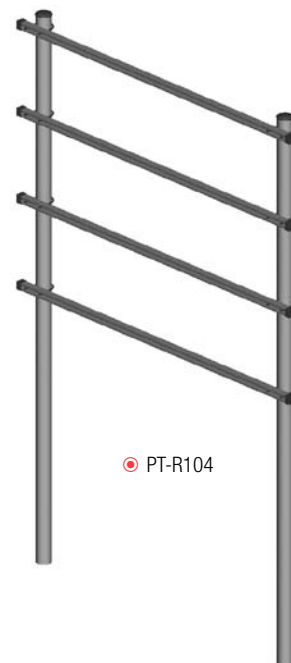
Application: Site related
Size: 13'-4" (4.1 m) Posts
Design: Two posts, unistrut
Feature: Burial posts
Material: Hot dip galvanized steel
Includes: Posts, horizontal struts, mounting hardware



Part Number	Description	Weight, lb (kg)
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Telco Racks With 13'-4" (4.1 m) Burial Posts and 80" (2 m) Horizontal Rails

PT-R102	Power Telco Rack, Two 80" Rungs, 13'-4" Burial Posts	135 (62.0)
PT-R103	Power Telco Rack, Three 80" Rungs, 13'-4" Burial Posts	150 (68.0)
PT-R104	Power Telco Rack, Four 80" Rungs, 13'-4" Burial Posts	165 (75.0)



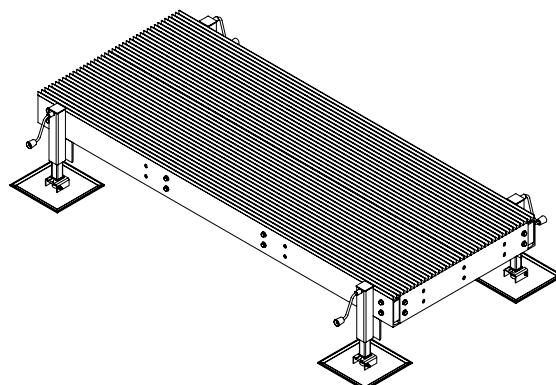
4" Channel Equipment Platforms

Application: Equipment support
Design: Platforms with or without jackable legs
Feature: Easy-to-assemble, bolt together design
Material: Hot dip galvanized steel
Includes: Frame, grating, hardware
Order Separately: Adjustable legs for base platforms

Part Number	Description
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Equipment Platform Bases, 4" (101.6 mm) Channel, Light Duty, for Up to 3500 lb (1587 kg) Loading

EQ-P4C0404-B	4' x 4' (1.2 m x 1.2 m) Base Only
EQ-P4C0404-AL	4' x 4' (1.2 m x 1.2 m) Base With Four Adjustable Legs
EQ-P4C0406-B	4' x 6' (1.2 m x 1.8 m) Base Only
EQ-P4C0406-AL	4' x 6' (1.2 m x 1.8 m) Base With Four Adjustable Legs
EQ-P4C0408-B	4' x 8' (1.2 m x 2.4 m) Base Only
EQ-P4C0408-AL	4' x 8' (1.2 m x 2.4 m) Base With Four Adjustable Legs





Pipe Dimensions

Pipe Size	OD (Inches)	OD (mm)
1/2"	0.84	21.34
3/4"	1.05	26.67
1"	1.32	33.40
1-1/4"	1.66	42.16
1-1/2"	1.90	48.26
2"	2.38	60.33
2-1/2"	2.88	73.03
3"	3.50	88.90
3-1/2"	4.00	101.60
4"	4.50	114.30
5"	5.56	141.30
6"	6.63	168.30
8"	8.63	219.08



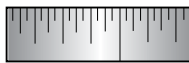
Steel Thicknesses

Gage	Thickness (Inches)	Thickness (mm)
10	0.1345	3.416
11	0.1196	3.038
12	0.1046	2.657
13	0.0897	2.278
14	0.0747	1.897
15	0.0673	1.709
16	0.0598	1.519



AWG Wire Sizes

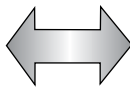
AWG Size	Stranded, OD (overall)		Solid, OD	
	Inch	Millimeter	Inch	Millimeter
4/0	0.528	13.41	0.460	11.68
2/0	0.419	10.64	0.409	10.39
1/0	0.373	9.47	0.324	8.23
2	0.292	7.42	0.257	6.53
4	0.232	5.88	0.204	5.18
6	0.184	4.66	0.162	4.11
8	0.146	3.70	0.128	3.25
10	0.116	2.94	0.102	2.59



Fraction/Decimal/Metric Chart

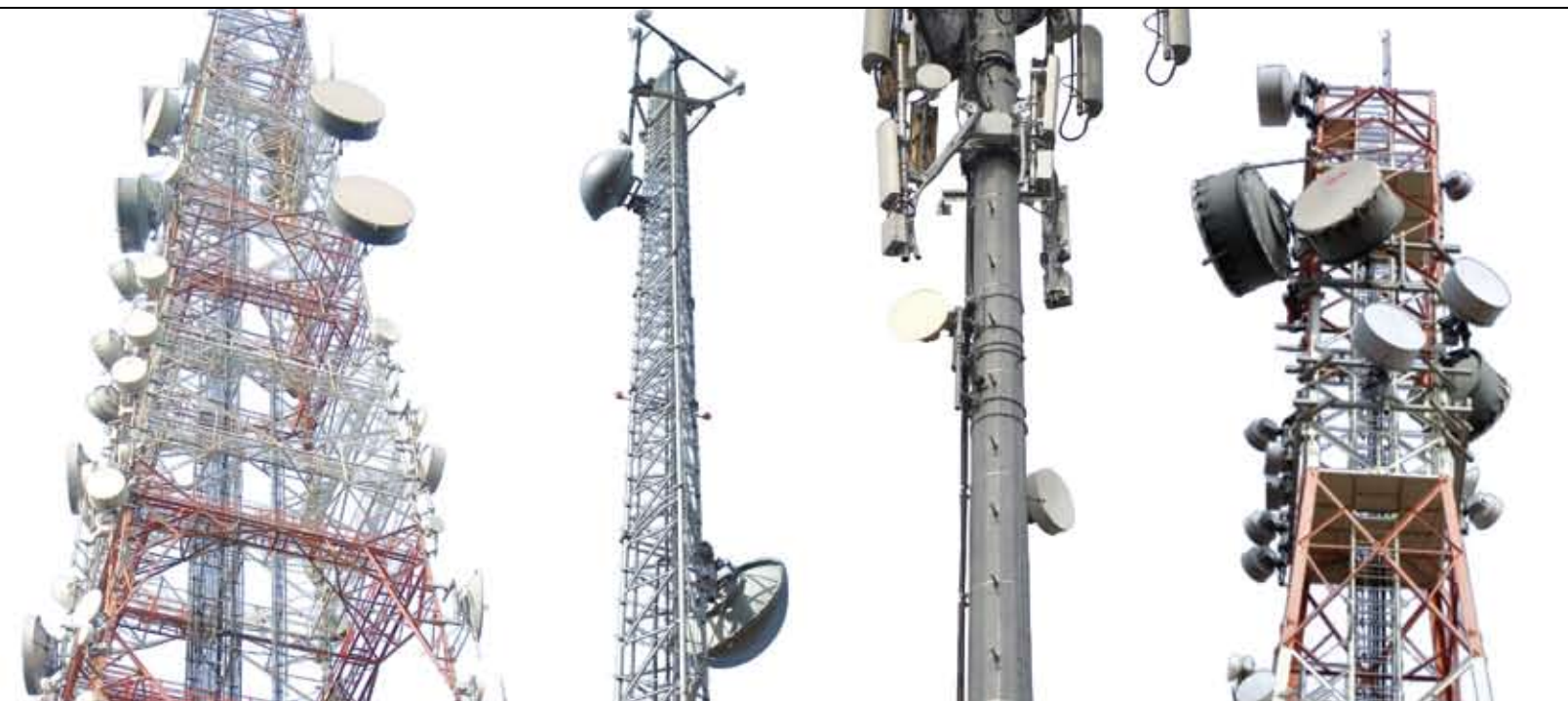
Inches Fraction	Inches Decimal	Millimeters
1/16	0.0625	1.6
1/8	0.1250	3.2
3/16	0.1875	4.8
1/4	0.2500	6.4
5/16	0.3125	7.9
3/8	0.3750	9.5
7/16	0.4375	11.1
1/2	0.5000	12.7
9/16	0.5625	14.3
5/8	0.6250	15.9
11/16	0.6875	17.5
3/4	0.7500	19.1
13/16	0.8125	20.6
7/8	0.8750	22.2
15/16	0.9375	23.8
1	1.0000	25.4

NOTE: Not applicable to coaxial cables



Conversion Factors

Convert From	Convert To	Multiply By
Length		
foot (ft)	meter (m)	0.3048
inch (in)	meter (m)	0.0254
inch (in)	centimeter (cm)	2.5400
meter (m)	foot (ft)	3.2808
meter (m)	inch (in)	39.3700
centimeter (cm)	inch (in)	0.3937
millimeter (mm)	inch (in)	0.0393
Area		
square foot (ft²)	square meter (m²)	0.0929
square meter (m²)	square foot (ft²)	10.7639
Circle		
radius	diameter	2.0000
diameter	radius	0.5000
diameter	circumference	3.1416
radius	circumference	6.2832
Weight		
pound (lb)	kilogram (kg)	0.4536
kilogram (kg)	pound (lb)	2.2046



Call our Customer Support Center to receive our Andrew Steel Products Catalog and look for all the new design changes we've made.