PIM Blocker™ Solutions
2022

PASSIVE INTERMODULATION (PIM)
MITIGATION SOLUTIONS


$$SINR\ (X) = \frac{P}{I + N}$$

WANHO Manufacturing's OEM PIM Blocker™ products are a collection of innovative and tested accessories proven to reduce or eliminate external PIM (Passive Intermodulation) on or around the communication site.

All PIM Blocker™ products are exhaustively laboratory and field tested to ensure long-term performance. PIM Blocker™ products meet or exceed the IEC62037-8 standard for PIM and are specially designed to protect network integrity.

Passive InterModulation (PIM)
Mitigation Solutions

Passive Intermodulation or PIM is a disturbance or interference signal created due to nonlinear components in the system. When two or more signals pass through a passive device they are mixed together unintentionally creating PIM.
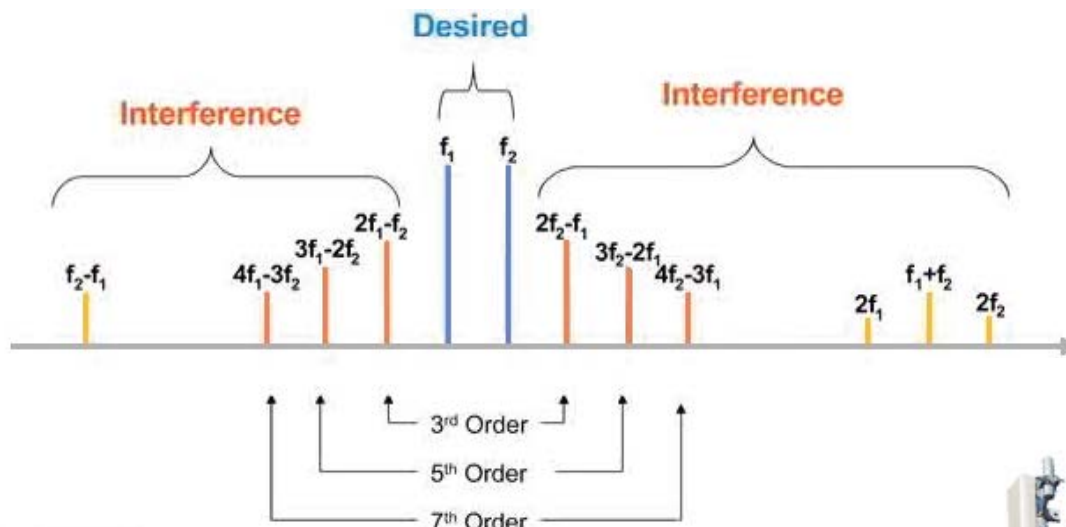
The intermodulation signals generated as a result of interference between two or more signals can be the sum and the difference of those individual signals. When modulation is applied to the two original signals, they will occupy a wider bandwidth than the unmodulated original signals. As modulation orders increase, the modulation will spread across a wider bandwidth, causing background noise to increase and carrier performance to degrade.

Although PIM affects almost every wireless system, it is most noticeable with cell phone applications (CDMA, HSPA, and LTE) due to the close proximity of its frequency bands. With 2G or 3G networks, PIM losses were not as critical, but with 5G, PIM losses accumulated. Mitigating PIM becomes even more important in today's evolving network environment. PIM Blocker™ accessories are designed to reduce signal loss and improve network quality by reducing PIM.

SnapTak Adjustable Hanger

Application:	Cable Support
Size:	4mm to 16.0mm
Design:	Molded Polymer
Feature:	Self Adjusting and Varible Diameter
Mounts from:	3/4" Holes
Material:	Engineered Plastic
Includes:	Hangers
Order Separately:	Adapters

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
SSH47	SnapTak Adjustable Hanger, Polymer Snap In, 4.0mm to 7.0mm	Kit of 10	0.16 (0.07)
SSH710	SnapTak Adjustable Hanger, Polymer Snap In, 7.1mm to 10.0mm	Kit of 10	0.1 (0.04)
SSH1014	SnapTak Adjustable Hanger, Polymer Snap In, 10.1mm to 14.0mm	Kit of 10	0.13 (0.06)
SSH1416	SnapTak Adjustable Hanger, Polymer Snap In, (14.1mm to 16.0mm) 1/2" Jumpers	Kit of 10	0.15 (0.07)

*Patented Product

SnapWrap

Application:	Cable Support
Size:	Universal
Design:	Molded Polymer
Feature:	Universal Cable Support for Multiple Cables
Mounts from:	3/4" Hole
Material:	Engineered Plastic
Includes:	SnapWrap Hangers
Order Separately:	Adapters

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
SWH20010	SnapWrap Cable Management Strap	Kit of 10	0.33(0.148)
SWH200100	SnapWrap Cable Management Strap	Kit of 100	3.2 (1.45)

*Patent Pending

SnapTak Multifunction Adapter

Application:	Cable Support
Design:	Molded Polymer
Feature:	360° Rotation, Universal Mounting
Mounts from:	3/4" Holes, 3/8" or 1/2" Bolts
Material:	Engineered Plastic
Includes:	Multifunction Adapter
Order Separately:	SnapTak Plus Hanger

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
SA1TR	PIM-free Multifunction Polymer Adapter for SnapTak Hangers	Kit of 10	0.15 (0.07)

*Patented Product

Snap-in Hanger Adapter

|	
Application:	Cable Support
Design:	Molded Polymer
Feature:	Dual Banding Attachment
Material:	Engineered Plastic
Includes:	Adapter
Order Separately:	Acetal Banding, SnapTak Adjustable Hangers

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
SA1C	Polymer Snap-in Hanger Adapter, 3/4" Hole	Kit of 10	0.27 (0.12)

*Patented Product

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Universal 3-Way Standoff Adapter

Application:	Cable Support
Design:	Molded Polymer
Feature:	U-Bolt or Acetal Banding Attachment
Material:	Engineered Plastic
Includes:	Adapter
Order Separately:	Acetal Banding, U-Bolts
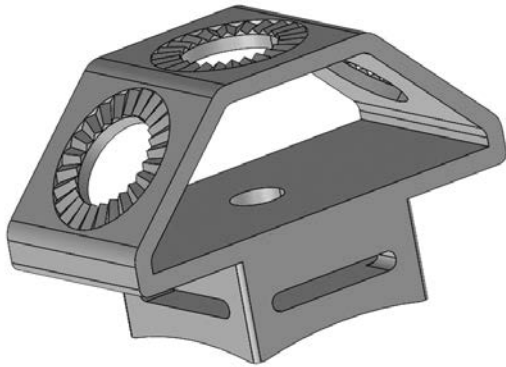
Universal 3-Way Standoff Adapter with U-bolt Attachment
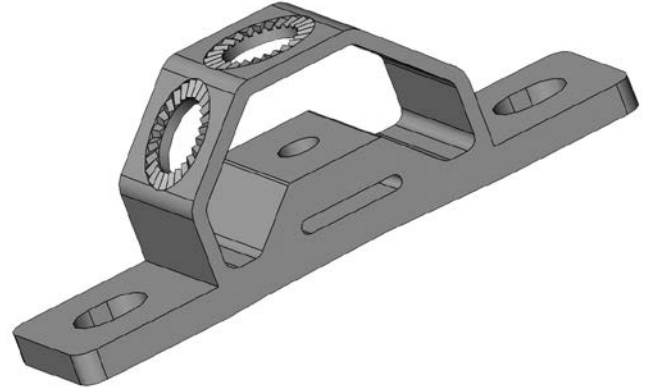
Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
SA38UP	Universal 3-Way Standoff Adapter	Kit of 10	1.31 (0.59)

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
SA38UMP	Universal 3-Way Standoff Adapter with U-bolt Mounting Capability	Kit of 1	2.19 (0.99)

3-Way Hanger Adapter

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
SA3C	PIM-free, Composite Snap-in Hanger Adapter	Kit of 10	0.6 (0.27)

*Patented Product

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2

Acetal Bands

Application:	Cable Support
Size:	Universal
Design:	Meets Performance Requirements of Telecordia TR-TSY-00789
Mounts to:	Round Members
Material:	Acetal (Delrin®)
Includes:	Bands and Locking Heads
Order Separately:	Hangers and Adapters

Acetal Band Locking Heads

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
TWAG16	Acetal Band with Pre-Attached Locking Heads, 1/2" x 16"	Kit of 50	1.38 (0.63)
TWAG27	Acetal Band with Pre-Attached Locking Heads, 1/2" x 27"	Kit of 25	1.12 (0.51)

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
BNDLH-25	Acetal Banding, Locking Head	Kit of 25	0.2 (0.09)
BNDLH-100	Acetal Banding, Locking Head	Kit of 100	0.79 (0.36)

Acetal Banding

Acetal Band Tensioning Tool

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
BNDA12-50	Acetal Banding, 1/2" x 50' Reel	Kit of 1	0.94 (0.43)

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
TWITXR	Acetal Banding, Tensioning Tool	Kit of 1	0.54 (0.24)

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Polymer Round Member Adapters

Application:	Cable Support
Size:	1/2" (12.7mm) Wide, Adjustable Diameter
Feature:	Adapts to Round Members
Mounts to:	Versions from 1" to 6"
Material:	Nylon
Includes:	Polymer Round Member Adapter
Order Separately:	Hangers and Adapters

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
RMA100P	Round Member Adapter Nylon Hose Clamp 1" -2" (25.4mm - 50.8mm)	Kit of 10	0.31 (0.14)
RMA200P	Round Member Adapter Nylon Hose Clamp 2" -3" (50.8mm - 76.2mm)	Kit of 10	0.33 (0.15)
RMA300P	Round Member Adapter Nylon Hose Clamp 3" -4" (76.2mm - 101.6mm)	Kit of 10	0.37 (0.17)
RMA400P	Round Member Adapter Nylon Hose Clamp 4" -5" (101.6mm - 127.0mm)	Kit of 10	0.4 (0.18)
RMA500P	Round Member Adapter Nylon Hose Clamp 5" -6" (127.0mm - 152.4mm)	Kit of 10	0.42 (0.19)

Angle Adapters

Application:	Cable Support
Size:	3/4" Holes or 3/8" Tapped Holes
Feature:	Accepts Snap-In's, 3/8" Hardware
Mounts to:	Angle Members or Round Members
Material:	Hot Dip Galvanized Steel
Includes:	Adapters, Set Bolt, Hanger Hardware Kit
Order Separately:	Hangers

AAGL   UAG3
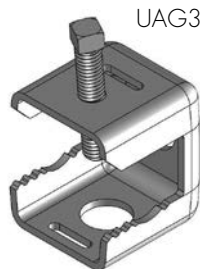
Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
UA3G	Galvanized Snap-In Angle Adapter with 3/4" Holes	Kit of 10	5.01 (2.27)
AAGL	Galvanized Angle Adapter with 3/8" Tapped Holes	Kit of 10	4.87 (2.21)

PIM Free Polymer Angle Adapter

Application:	Cable Support
Size:	3/4" Holes
Design:	Molded Polymer
Feature:	Accepts Snap-Ins
Mounts from:	Up to 7/8" Angle Members
Material:	Engineered Plastic
Includes:	Adapter and Torque Screw
Order Separately:	SnapTak Adjustable Hangers

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
UA3CP	PIM Free Polymer Angle Adapter	Kit of 10	1.06 (0.48)

*Patent Pending

Universal Angle Adapters

Application:	Cable Support
Size:	3/4" Holes with 3/8" Tapped Insert
Design:	Universal
Feature:	Accepts Snap-In's or 3/8" Hardware
Mounts to:	Up to 7/8" (22mm) Angle Members
Material:	Hot Dip Galvanized Steel
Includes:	Adapters, Set Bolt, Hanger Hardware Kit, Insert
Order Separately:	Hangers

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
AAGU	Galvanized Universal Angle Adapter	Kit of 10	4.9 (2.2)

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Large Cable Support Blocks

Application:	Cable Support
Size:	1/4" to 1-5/8" Cable
Design:	Molded Polymer
Feature:	Compact, Multi-Run Hanger
Mounts from:	8mm up to 3/8" Threaded Rod
Material:	Engineered Plastic
Includes:	Cable Support Blocks
Order Separately:	Mounting Hardware Kits, Barrel Cushions
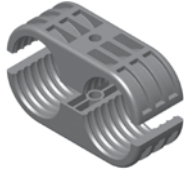
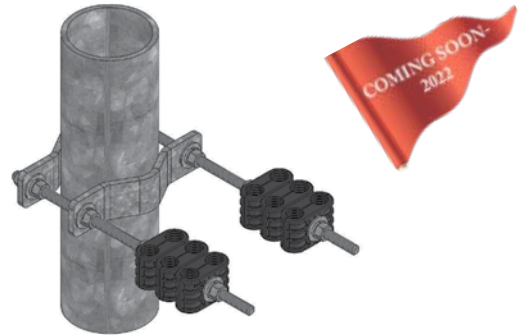| Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
CBA4	Cable Block for for 4mm x 6mm Fiber Kit	Kit of 10	1.26 (0.57)
CBA14	Cable Block for 1/4" Cable (6-8mm)	Kit of 10	0.98 (0.44)
CBA38	Cable Block for 3/8" Cables (10-12mm)	Kit of 10	1.19 (0.54)
CBA12	Cable Block for 1/2" Cables (15.5-17.5mm)	Kit of 10	1.43 (0.65)
CBA58	Cable Block for 5/8" Cables (19-21mm)	Kit of 10	1.65 (0.75)
CBA78	Cable Block for 7/8" Cables (27-29mm)	Kit of 10	1.8 (0.82)
CBA114	Cable Block for 1-1/4" Cables (39-42mm)	Kit of 10	2.5 (1.13)
CBA158	Cable Block for 1-5/8" Cables (50-54mm)	Kit of 10	3.06 (1.39)

Cable Block Assembly Clamps

Application:	Cable Support
Size:	1/4" to 1-5/8" Cable
Design:	Molded Polymer
Feature:	Single-Run Hanger
Mounts from:	8mm Up to 3/8" Threaded Rod
Material:	Engineered Plastic
Includes:	Block Assembly Clamps
Order Separately:	Mounting Hardware Kits, Barrel Cushions
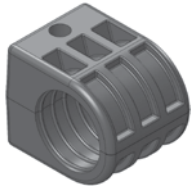
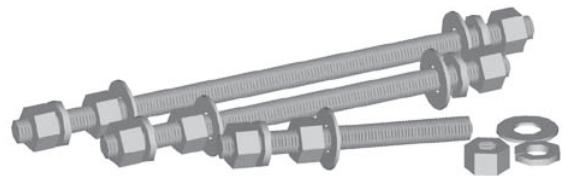| Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
CBAH14	Hanger Half Clamps, 1/4"(6-8mm)	Kit of 10	0.89 (0.4)
CBAH38	Hanger Half Clamps, 3/8" (10-12mm)	Kit of 10	1.02 (0.46)
CBAH12	Hanger Half Clamps, 1/2" (15.5-17.5mm)	Kit of 10	1.19 (0.54)
CBAH58	Hanger Half Clamps, 5/8" (17.5-19.5mm)	Kit of 10	1.36 (0.62)
CBAH78	Hanger Half Clamps, 7/8" (27-29mm)	Kit of 10	1.53 (0.69)
CBAH114	Hanger Half Clamps, 1-1/4" (39-42mm)	Kit of 10	1.89 (0.86)
CBAH158	Hanger Half Clamps, 1-5/8" (50-54mm)	Kit of 10	2.25 (1.02)

Cable Block Pipe Adapter

Application:	Cable Support
Size:	3/8"
Design:	Formed Steel
Feature:	Supports Multiple Cable Blocks
Mounts from:	1-1/2" to 3-1/2" OD Round Members
Material:	Hot Dip Galvanized Steel
Includes:	Half Clamps, Threaded Rod Kits
Order Separately:	Cable Support Blocks

COMING SOON- 2022

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
PBCBA	Cable Block Pipe Adapter	Kit of 1	3.5 (1.59)

Mounting Hardware Kits for Cable Support Blocks

Application:	Cable Support
Size:	3/8"
Design:	Hardware Kit for Cable Block Hangers
Material:	Hot Dip Galvanized Steel
Includes:	Threaded rods, Hex Nuts, Lock and Flat Washers
Order Separately:	Hangers

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
HKSSCB	3/8" x 3-3/4" Galvanized Hardware Kit for One Cable Block	Kit of 10	1.83 (0.83)
HKDSCB	3/8" x 6-1/4" Galvanized Hardware Kit for Two Cable Blocks	Kit of 10	2.47 (1.12)
HKTSCB	3/8" x 8" Galvanized Hardware Kit for Three Cable Blocks	Kit of 10	2.89 (1.31)
HKSSCB158	3/8" x 4-1/4" Galvanized Hardware Kit for One 1-5/8" Cable Block	Kit of 10	2.01 (0.91)
HKDSCB158	3/8" x 7" Galvanized Hardware Kit for Two 1-5/8" Cable Blocks	Kit or 10	2.64 (1.2)
HKTSCB158	3/8" x 9-1/2" Galvanized Hardware Kit for Three 1-5/8" Cable Blocks	Kit of 10	3.32 (1.51)

*Metric or Stainless Steel Hardware. Available Upon Request

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SnapStak® Hanger

Application:	Cable Support
Size:	1/2" to 1-5/8" Cable
Design:	Formed Stainless Steel
Feature:	Stackable
Mounts From:	3/4" Holes
Material:	Stainless Steel
Includes:	Hangers
Order Separately:	Adapters

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
SHS12	SnapStak® Snap-In Hanger for 1/2" Cable	Kit of 10	0.68 (0.31)
SHS78	SnapStak® Snap-In Hanger for 7/8" Cable	Kit of 10	0.8 (0.36)
SHS114	SnapStak® Snap-In Hanger for 1-1/4" Cable	Kit of 10	0.96 (0.43)
SHS158	SnapStak® Snap-In Hanger for 1-5/8" Cable	Kit of 10	1.13 (0.51)

*Patented Product

SnapStak® PIM Isolator

Application:	Cable Support
Design:	Molded Polymer
Feature:	Eliminates Metal to Metal Contact
Mounts from:	3/4" Holes
Material:	Engineered Plastic
Includes:	Isolator
Order Separately:	Snap-In Hangers

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
SAISO	SnapStak® PIM Isolator	Kit of 10	0.15 (0.07)

*Patent Pending

SnapStak® Plus Adjustable Hanger

Application:	Cable Support
Size:	14mm to 51mm Cable
Design:	Formed Stainless Steel
Feature:	Universal Fit Without Cushions
Mounts to:	3/4" Holes
Material:	Stainless Steel
Includes:	Hangers
Order Separately:	Adapters

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
SSHM	SnapStak® Plus Hanger Kit, Medium (14-25mm)	Kit of 10	0.67 (0.3)
SSHL	SnapStak® Plus Hanger Kit, Large (25-36mm)	Kit of 10	0.69 (0.31)
SSHXL	SnapStak® Plus Hanger Kit, Extra Large (36-51mm)	Kit of 10	1.1 (0.5)

*Patented Product

PIM Isolator with SnapStak® Hanger

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Universal Barrel Cushions

Universal Barrel Cushions provide versatility in all applications reducing material and installation costs by mounting a wide range of cable sizes in a single cushion with a single attachment point.

The unique design allows Barrel Cushions to be individually installed utilizing Butterfly, Snap-in Hangers, or Cable Blocks. Barrel Cushions are constructed from UV-resistant, EPDM rubber which is durable in extreme temperatures and harsh environmental conditions.

Universal Barrel Cushions are available to fit all standard cable hanger sizes and can accommodate a wide range of cable diameters.

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
BCU12	Universal Barrel Cushion, 1/2" Hanger (4mm to 10mm)	Kit of 10	0.26 (0.12)
BCU78	Universal Barrel Cushion, 7/8" Hanger (4mmto 14mm)	Kit of 10	0.57 (0.26)
BCU114	Universal Barrel Cushion, 1-1/4" Hanger (14mm to 25mm)	Kit of 10	1.1 (0.5)
BCU158	Universal Barrel Cushion, 1-5/8" Hanger (14mm to 36mm)	Kit of 10	1.3 (0.59)
BCU158M7	Universal Barrel Cushion with 7 Holes, 1-5/8" Hanger (7 x 4mm to 10mm)	Kit of 10	1.79 (0.81)
BCU214	Universal Barrel Cushion, 2-1/4" Hanger (14mm to 43mm)	Kit of 10	2.36 (1.07)

*Patented Product

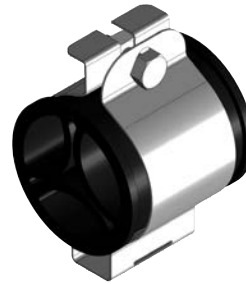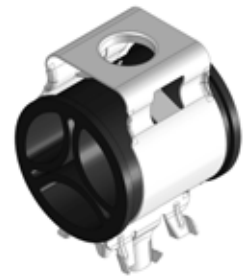|	
Application:	Cable Support
Size:	1/2" to 2-1/4" Cable
Design:	Molded Rubber
Feature:	Universal Cable Fit
Mounts From:	Snap-in, Butterfly or Block Hangers
Material:	EPDM Rubber
Includes:	Barrel Cushions
Order Separately:	Hanger and Adapters

Our materials are:
- U.S. Engineered
- Designed from a global patent
- ROHS compliant
- Quality tested for durability and strength surpassing all industry standards
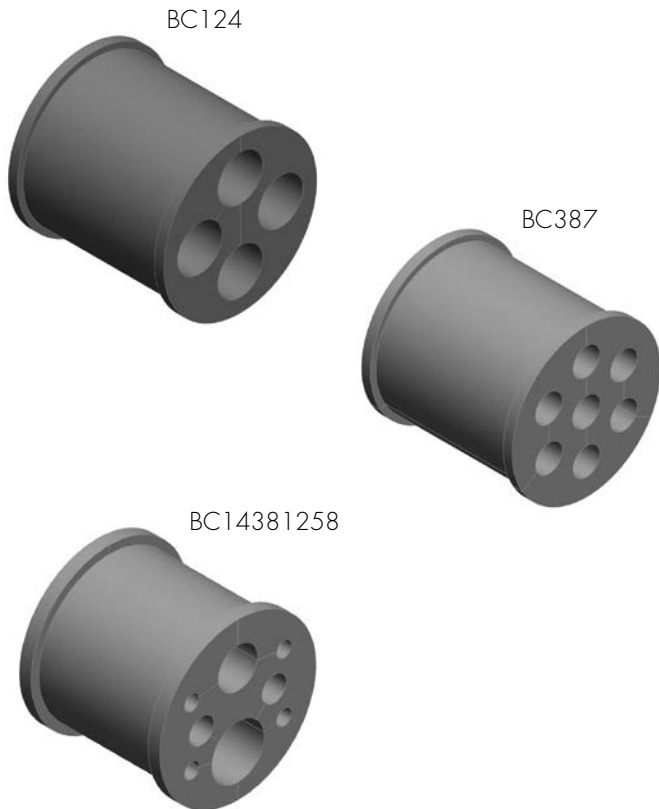
Mounting Options

Butterfly Hanger

Snap-in Hanger

Cable Blocks

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Barrel Cushions

Application:	Cable Support
Size:	1/4" to 2-1/4" Cable
Design:	Molded Rubber
Feature:	Multi Run Cushions
Mounts From:	Snap-in, Butterfly or Cable Block Hangers
Material:	EPDM Rubber
Includes:	Barrel Cushions
Order Separately:	Hangers and Adapters

BC124

BC387

BC14381258

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
BC2478	Barrel Cushion with 1 Hole, 7/8" Hanger (24mm)	Kit of 10	2.16 (0.98)
BC138158	Barrel Cushion with 1 Hole, 1-5/8" Hanger (35mm)	Kit of 10	1.62 (0.73)
BC134158	Barrel Cushionwith 1 Hole, 1-5/8" Hanger (44mm)	Kit of 10	0.75 (0.34)

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
BC1023158	Barrel Cushion with 2 Holes, 1-5/8" Hanger (1 x 10mm, 1 x 23mm)	Kit of 10	2.4 (1.09)
BC582	Barrel Cushion with 2 Holes, 1-5/8" Hanger (2 x 21mm)	Kit of 10	2.2 (1)
BC1028158	Barrel Cushion with 2 Holes, 1-5/8" Hanger (1 x 10mm, 1 x 28mm)	Kit of 10	2.4 (1.09)
BC10202158	Barrel Cushion with 3 Holes, 1-5/8" Hanger (1 x 10mm, 2 x 20mm)	Kit of 10	2.04 (0.92)
BC10232158	Barrel Cushion with 3 Holes, 1-5/8" Hanger (1 x 10mm, 2 x 23mm)	Kit of 10	1.84 (0.83)
BC3819163	Barrel Cushion with 4 Holes, 1-5/8" Hanger (1 x 10mm, 3 x 14.5mm)	Kit of 10	2.7 (1.22)
BC124	Barrel Cushion with 4 Holes, 1-5/8" Hanger (4 x 16mm)	Kit of 10	1.8 (0.82)
BC053383	Barrel Cushion with 6 Holes, 1-5/8" Hanger (3 x 5mm, 3 x 10mm)	Kit of 10	2.91 (1.32)
BC144122	Barrel Cushion with 6 Holes, 1-5/8" Hanger (4 x 6mm, 2 x 16mm)	Kit of 10	2.2 (1)
BC144384	Barrel Cushion with 6 Holes, 1-5/8" Hanger (4 x 6mm, 2 x 10mm)	Kit of 10	2.37 (1.07)
BC384122	Barrel Cushion with 6 Holes, 1-5/8" Hanger (4 x 10mm, 2 x 16mm)	Kit of 10	1.92 (0.87)
BC144582	Barrel Cushion with 6 Holes, 1-5/8" Hanger (4 x 6mm, 2 x 21mm)	Kit of 10	1.79 (0.81)
BC1439163	Barrel Cushion with 6 Holes, 1-5/8" Hanger (3 x 6.1mm, 3 x 14.5mm)	Kit of 10	2.56 (1.16)
BC6810121425	Barrel Cushion with 6 Holes, 1-5/8" Hanger (6mm, 8mm, 10mm, 12mm,14mm and 25mm)	Kit of 10	1.61 (0.73)
BC387	Barrel Cushion with 7 Holes, 1-5/8" Hanger (7 x 10mm)	Kit of 10	2.14 (0.97)
BC567121530	Barrel Cushion with 9 Holes, 1-5/8" Hanger (2 x 5mm, 2 x 6mm, 2 x 7mm, 1 x 12mm, 1 x 15mm and 1 x 30mm)	Kit of 10	1.1 (0.5)
BC1410	Barrel Cushion with 10 Holes, 1-5/8" Hanger (10 x 6mm)	Kit of 10	2.58 (1.17)
BC384582	Barrel Cushion with 6 Holes, 2-1/4" Hanger (4 x 10mm, 2 x 21mm)	Kit of 10	2.44 (1.1)
BC064124	Barrel Cushion with 8 Holes, 1-5/8" Hanger (4 x 6mm, 4 x 12mm)	Kit of 10	1.7 (0.77)
BC14381258	Barrel Cushion with 8 Holes, 2-1/4" Hanger (4 x 6mm, 2 x 9.9mm, 1 x 16mm, 1 x 21.3mm)	Kit of 10	3.31 (1.5)

*Additional Sizes Available Upon Request

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PIM Blocker™ Alpha Bracket

PIM Blocker™ Alpha Brackets can be assembled in multiple configurations to support cabling between tower top radios and antennas. The primary support bracket mounts to 2-3/8" – 3-1/2" OD pipes via a U-bolt connection. The bracket extenders can be attached in any location allowing optimum flexibility to meet tower top configuration requirements. Each primary or extender bracket is 2" x 2" x 14" and is pre-punched with 7/16" and 3/4" hanger mounting holes to accommodate all styles of cable hangers.

The Alpha Bracket is the most installer friendly and flexible support bracket available in today's market with limitless configurations to meet your installation requirements.
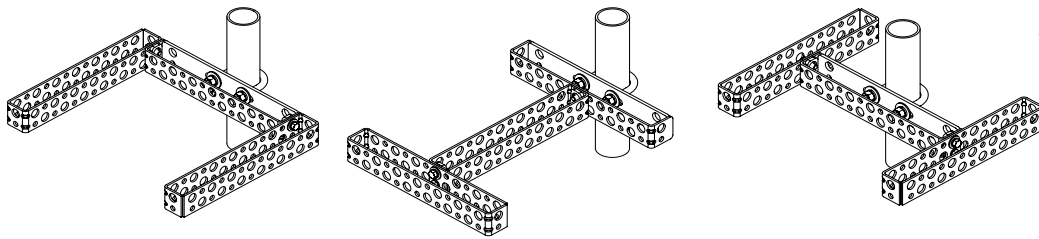
The Alpha Bracket is available in 3 or 4 module kits. Additional extensions may be purchased separately to create larger configurations up to 7 modules total. This unique design provides maximum versatility while protecting from PIM.

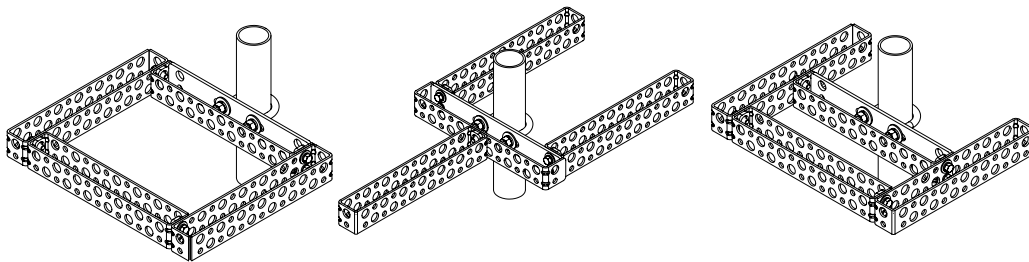|	
Application:	Cable Support
Size:	2" x 2" x 14" Modules
Design:	Formed Steel
Feature:	Configurable
Mounts to:	2-3/8", 2-7/8" and 3-1/2" OD Round Members
Material:	Hot Dip Galvanized Steel
Includes:	Bracket, 2-3/8" and 2-7/8" U-Bolts
Order Separately:	3-1/2" OD U-Bolt

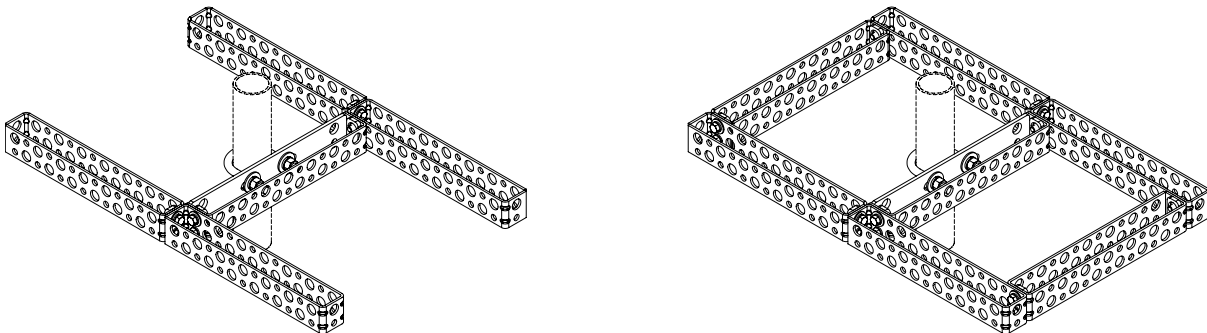| Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
PBAB143	PIM Blocker™ Alpha Bracket 14", 3-Piece configuration	Kit of 1	8.4 (3.8)
PBAB144	PIM Blocker™ Alpha Bracket 14", 4-Piece configuration	Kit of 1	9.9 (4.5)
PBAB14K01	PIM Blocker™ Extender Bracket 14"	Kit of 1	2.2 (1)
PBAB14K10	PIM Blocker™ Extender Bracket 14", Kit of 10	Kit of 10	22 (10)

*Patent Pending

PBAB143 Common Configurations:

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PBAB144 Common Configurations:
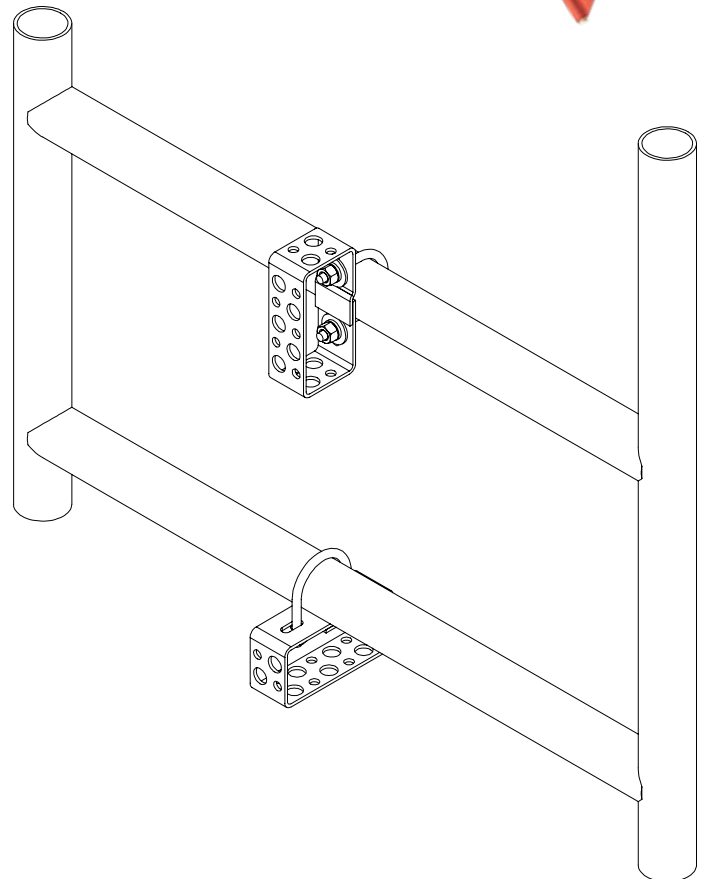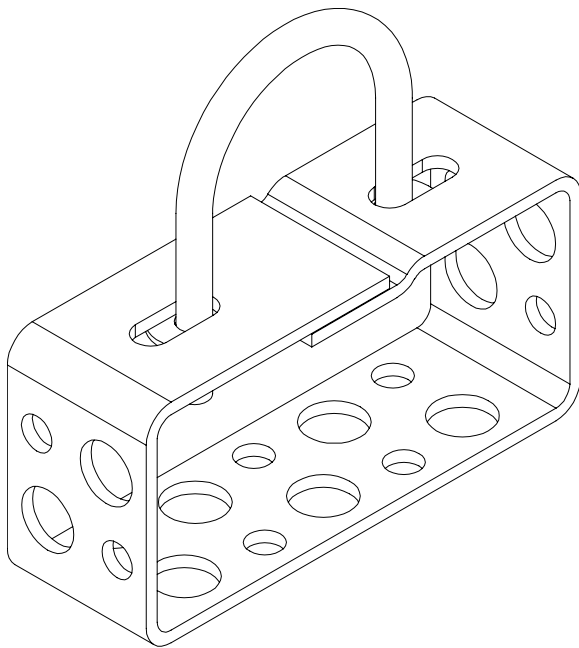
PBAB143 with Extension Bracket Configurations:

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The PIM Blocker™ 9-position bracket provides for user friendly tower top cable management. This versatile design allows for cable to be positioned both inside and outside of the bracket while creating a uniform cable bundle. The bracket is attached via a U-bolt connection ensuring maximum strength and PIM Performance. The design of the 9-position bracket allows the cable bundle to be oriented away from climber access points minimizing tower top obstrutions. Pre-punched 7/16" and 3/4" mounting holes accommodate all cable hanger styles. This user-friendly design provides simplified installation while protecting the system from PIM.
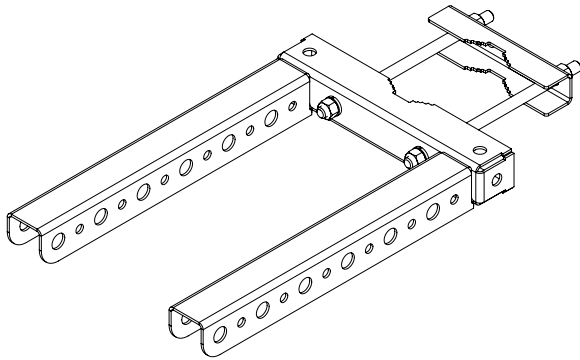
Application:	Cable Support
Size:	3" x 6 -1/4" x 2"
Design:	Formed Steel
Feature:	Configurable
Mounts to:	2-3/8" to 3-1/2" OD Round Members
Material:	Hot Dip Galvanized Steel
Includes:	Bracket, 2-3/8" and 2-7/8" U-Bolts
Order Separately:	3-1/2" OD U-Bolt

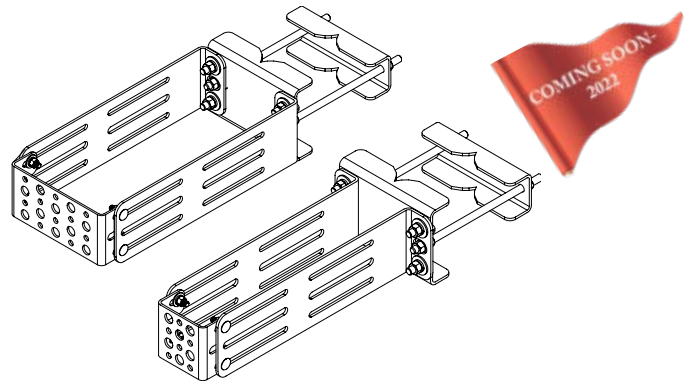| Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
PBPM09	PIM Blocker™ 9-Position Bracket	Kit of 1	1.65 (0.75)
PBPM09K10	PIM Blocker™ 9-Position Bracket, Kit of 10	Kit of 10	16.5 (7.5)

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Cable Support Bracket

Application:	Cable Support
Size:	16" Standoff
Design:	Formed Steel
Feature:	Robust Cable Support
Mounts From:	1.9" - 4.5" OD Round Members
Material:	Hot Dip Galvanized Steel
Includes:	Mounting Brackets and Attachment Hardware

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
ACSD24	Cable Support Bracket, Fits 1.9" - 4.5" OD Pipes	Kit of 1	15.65 (7.1)

High Speed RRU Mount

Application:	Radio Mounts
Size:	18" Standoff
Design:	Formed Steel
Feature:	Adjustable Width
Mounts From:	Angled and Round Member up to 5" OD
Material:	Hot Dip Galvanized Steel
Includes:	Mounting Brackets and Attachment Hardware

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Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
RRUMBL	High Speed RRU Mount	Kit of 2	36 (16.3)
RRUMBL3	High Speed RRU Mount	Kit of 3	54 (24.5)

RRU Dual Swivel Mount

Application:	Radio Mounts
Size:	21" Standoff
Design:	Formed Steel
Feature:	Dual Pivot Points
Mounts From:	Angled and Round Member up to 5" OD
Material:	Hot Dip Galvanized Steel
Includes:	Mounting Brackets and Attachment Hardware
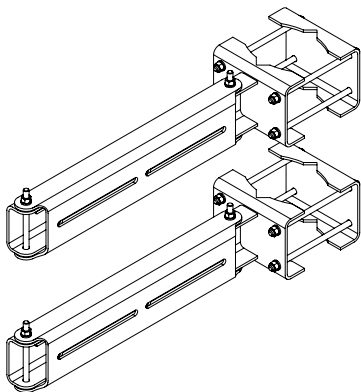
Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
RRUDSM	RRU Dual Swivel Mount	Kit of 2	40 (18.14)

Dual RRU Pivoting Tower Mount

Application:	Radio Mounts
Size:	21" Standoff
Design:	Formed Steel
Feature:	Dual Pivot Points
Mounts From:	Angled and Round Member up to 5" OD
Material:	Hot Dip Galvanized Steel
Includes:	Mounting Brackets and Attachment Hardware
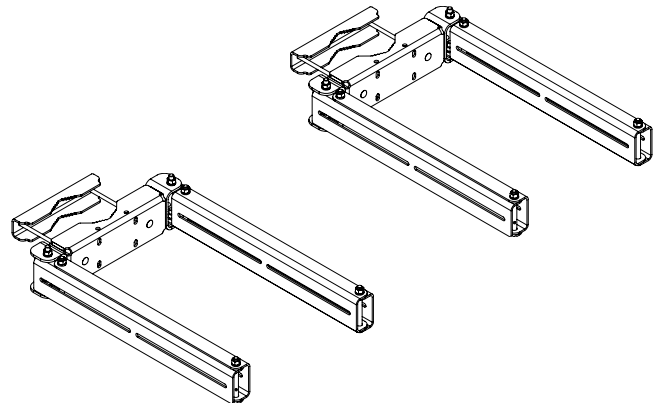
Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
RRUDPM	Dual RRU Pivoting Tower Mount	Kit of 2	36 (16.33)

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PIM Blocker™ Hoisting Grips

Application:	Cable Support
Size:	1/4" to 5/8" Cable
Design:	Mesh Grip with Single Eye Support
Feature:	Lace-Up/Pre-Laced
Mounts to:	Shackle or Beam Clamp
Material:	Engineered Plastic
Includes:	Hoisting Grip and Tape

PIM Blocker™ Tape

Application:	PIM Mitigation
Size:	2-1/2" x 25' or 10" x 25'
Feature:	PIM Mitigation
Includes:	25' Roll of Reflective Tape, (2) 25' Rolls of Self-amalgamating Tape

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
HGC14P	PIM Blocker™ Pre-Laced Polymer Hoisting Grip for 1/4" (6mm to 10mm) Cable	Kit of 1	0.22 (0.09)
HGC12P	PIM Blocker™ Pre-Laced Polymer Hoisting Grip for 1/2" (11mm to 16mm) Cable	Kit of 1	0.23 (0.1)
HGO12P	PIM Blocker™ Pre-Laced Polymer Hoisting Grip for 1/2" (10mm to 16mm) Cable	Kit of 1	0.25 (0.11)

Part #	Description	Kit Qty	Wt. Lbs (Wt. Kg)
PT2525	PIM Blocker™ Tape, 2.5" x 25' Roll	Kit of 1	1.9 (0.86)
PT1025	PIM Blocker™ Tape, 10" x 25' Roll	Kit of 1	7.12 (3.23)

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Key
★ = Headquarters
★ = Manufacturing & Assembly Operations
★ = Value-Added Logistics Centers

Corporate Headquarters
WANHO Manufacturing LLC
154 Knotter Drive
Cheshire, CT 06410
+1.203.759.3744 tel
+1.203.759.3748 fax

European Headquarters
WANHO Manufacturing B.V.
Regoort Logistics Center
Gildenweg 16
3334 KC Zwijndrecht
The Netherlands
+31 (0) 88.00.73.987 tel
+31 (0) 88.00.73.955 fax

Asian Headquarters
WANHO T Manufacturing Co. Ltd.
No. 29 Meizhou 2nd Rd
Yilan City, Yilan County 260
Taiwan
+65.6899.9282 tel
+65.6566.7913 fax

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