



PIM-guard Solutions Ordering Guide

Rev. 11/20 | Second Edition

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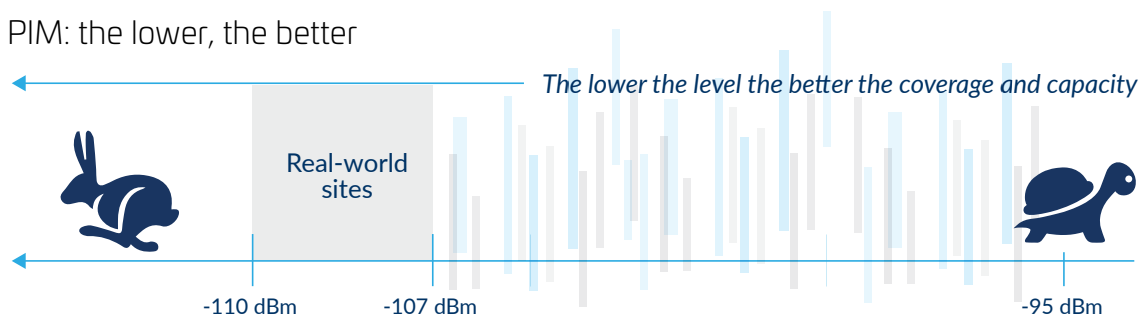
External Passive Intermodulation (PIM)

PIM occurs when two or more wireless signals mix together and create additional frequencies that cause interference and deteriorate network performance.

Common Causes:

- Loose metal-to-metal contacts
- Poor quality components that rust or corrode
- Metal shavings or other site contamination
- Nearby frequency sources (power lines/equipment)
- Obstacles in the RF path including supports for stealth enclosures

PIM: the lower, the better

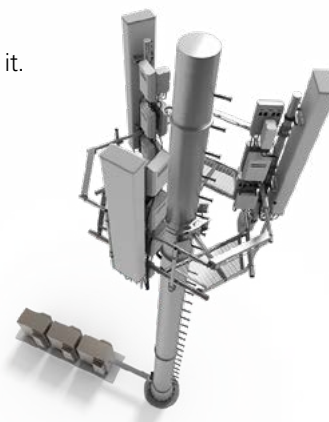


Hi-Risk PIM Zone

The Hi-Risk PIM zone exists in close proximity to the antenna; in front, above, below, and even behind it. The zone is defined as:

- Ten feet directly above or below the antenna
- Five feet behind the antenna
- One hundred feet in front of the antenna

Standard installation practices and products must be modified within the Hi-Risk zone to avoid PIM. Many traditional installation products including metal cable hangers, hose clamps, poor quality components with rust or corrosion and loose hardware or brackets have been identified as being PIM generators and must be eliminated.



PIM-guard Solutions

To guard against the effects of PIM, CommScope offers the PIM-guard family of products specifically designed and tested to protect your network.

- Substitute composite for metal where possible
- Minimum number of parts and junctions
- Hot dipped galvanized steel for corrosion resistance
- High contact pressure junctions
- Rounded corners



Visit our website for additional information. [PIM-guard Solutions](#)

SnapTak PIM-guard Adjustable Hangers

Features:

- PIM free cable attachment
- Eliminates grommet
- Reduces installation time by 2/3
- Reduces material and handling costs



Ordering Information

Description	Cable Size Range (mm)	Example Cable Type	Part Number
SnapTak PIM-guard Adjustable Hangers Self adjusting, variable diameter, stackable up to 3 deep	4.0 to 7.0	FJ-2SM fiber jumpers	SSH-47
	7.1 to 10.0	RET Cables	SSH-710
	10.1 to 14.0	2-conductor power cables	SSH-1014
	14.1 to 16.0	½" LDF4 jumpers	SSH-1416



SSH-47



SSH-710



SSH-1014



SSH-1416



Hangers Installed with SA-1C

SnapTak Hanger Removal Tool

Ordering Information

Description	Part Number
SnapTak Hanger Removal Tool Pliers type tool makes SnapTak hanger removal easy. Black oxide finish with rubber grips.	STRT-1



STRT-1

SnapStak Plus Adjustable Hangers



Ordering Information

Description	Cable Size Range (mm)	Typical Cable Use	Part Number
SnapStak Plus Adjustable Hangers Self adjusting hangers, no grommets required, stackable	14.0 to 25.0 mm	Power trunk cables, hybrid jumpers	SSH-M
	25.1 to 36.0 mm	Large power cables, medium hybrid cables	SSH-L
	36.1 to 51.0 mm	Large hybrid cables, 1-5/8 coax	SSH-XL
PIM Isolator Snaps in under any snap-in hanger to eliminate external PIM from metal-to-metal contact		Any Snap-in Hanger	SA-ISO

PIM-guard Cable Support Brackets

Ordering Information

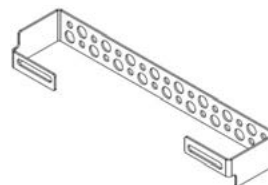
Description	Part Number
PIM-guard Cable Support Brackets Mount to 1.9" - 4.5" OD pipes	
8-Port antenna cable support bracket	PG-CS08
23-Port antenna cable support bracket	PG-CS23
17-Port Cable Support Expansion Bracket Expands PG-CS8 (8-port) to 23 ports	PG-CSEB17
RRU Cable Support Bracket 24-Port RRU and Antenna cable support bracket Includes new mounting feature to enable changing orientation of brackets for mounting under antennas	ACS-D24



Cable Support Bracket
8-Port (PG-CS08)



Cable Support Bracket
23-Port (PG-CS23)



Cable Support Expansion
(PG-CSEB17)



RRU Cable Support Bracket (ACS-D24)

PIM-guard Tower Adapters

Ordering Information

Description	Part Number
PIM-guard Tower Adapters 6-Port Adapter Brackets, Mount SnapTak hangers to round members 2-3/8" to 3-1/2" OD	PG-RM06
PIM Free Polymer Angle Adapter Use to attach SnapTak and snap-in type cable hangers to angle member towers	UA-3C
Polymer Round Member Adapter Use with cable ties or cable banding system to mount SnapTak hangers to round members	SA-1C
Multifunction Polymer Adapter Snaps into tower, provides 1-inch standoff, Threads onto 3/8" and 1/2" bolts to attach SnapTak hangers, Snaps between SnapTak hangers to provide full hanger rotation	SA-1TR



6-Port Adapter Bracket
(PG-RM06)



PIM Free Angle Adapter
(UA-3C)



Polymer Round Member Adapter
(SA-1C)

SA-1TR Multifunction Adapter Applications



Multifunction Adapter
(SA-1TR)



SA-1TR on Threaded Rod
with SnapTak



SA-1TR Between SnapTaks
for Full Rotation

PIM-guard RRU Mounting

RR-FA2 Fast Access RRU Mount

Features:

- Fast-Access Design
- Removable brackets allow mounting to RRU then insertion into clamps for ease of installation
- Round legs up to 5-5/8" OD
- 60 Degree Angle legs up to 6"
- 90 Degree Angle legs up to 4 1/2"



RR-FA2

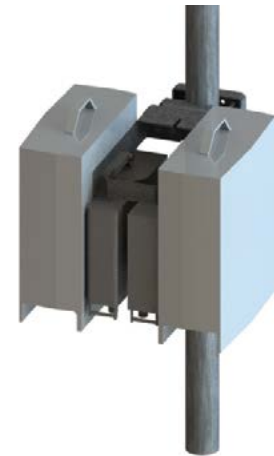
Ordering Information

Description	Part Number
Fast Access RRU Mount	RR-FA2

RR-B2B-AR Access Ready RRU Mount

Features:

- Fits 2 Radios + A2 Modules within the mount envelope minimizing footprint
- Suitable for Assembly right behind antenna – Minimizes radio wind-load
- Round legs 2 3/8" to 4 1/2" OD



RR-B2B-AR

Ordering Information

Description	Part Number
Access Ready RRU Mount	RR-B2B-AR

PIM-guard Roof-Top Cable Support

Ordering Information

Description	Part Number
PIM-guard Roof-Top Cable Support PVC roof sleeper	
For 4 coaxial cable runs	MT-F1598
For 8 coaxial cable runs	MT-F1599
For 12 coaxial cable runs	MT-F1600



Roof-Top Cable Support

PIM-guard Cable Banding and Cable Ties

Ordering Information

Description	Part Number
Cable Banding System	
Bulk Banding; 1/2" x 50' reel	CB-12-50
Locking Heads; for cable banding (CB-12-50), qty. 25	CB-LH-25
Cable Banding Installation Tool; for cable banding (CB-12-50)	CB-IT
Cable Ties Heat stabilized, weather resistant nylon, 460 mm length, 100 pcs	CT-460-100



Cable Banding
(CB-12-50)



Locking Head
(CB-LH-25)



Cable Banding Installation Tool
(CB-IT)



Cable Ties
(CT-460-100)

CommScope Contact Information

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