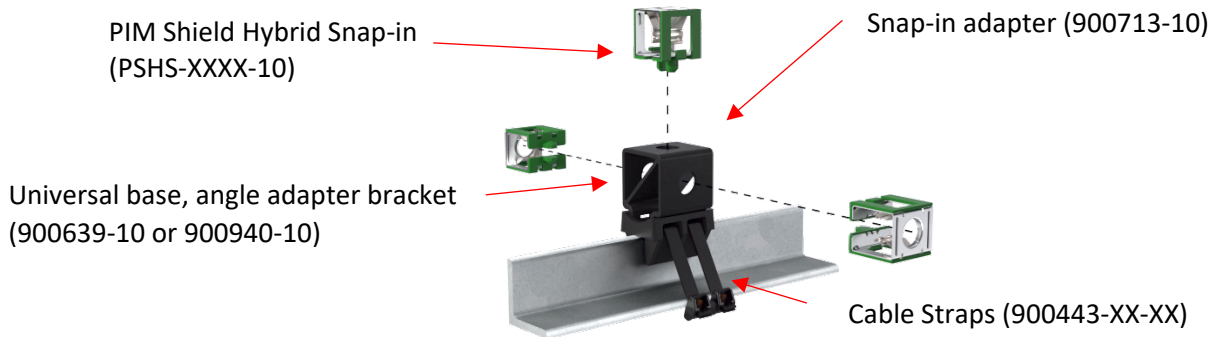


**Part number(s):** 900639-10, 900940-10, 900713-10, 900714-10, 900443-XX-XX, PSHS

**Description:** Low PIM cable support mount designed to secure snap-in style cable hangers to angle members at a cell sit using PIM Shield Cable Straps. The Snap-in cable hangers are installed onto a plastic Snap-in Adapter Block which is inserted into a Universal Angle Member Saddle Bracket. The combined assembly is secured to the steel angle using two plastic straps to prevent metal-to-metal contact between the snap-ins, the support bracket and the site structural member.



**Test conditions:**

Tested in accordance with proposed IEC 62037-8 specification under the following test conditions:

- Object type: Non-flat
- Test type: Near Field
- Dynamic stimulus: Tap DUT with fiberglass rod while PIM testing
- Test power: 2x 43 dBm test tones
- IM product measured: IM3
- Pass/Fail level: -97 dBm (-140 dBc)
- Frequency bands: 700 MHz band (F1 = 728 MHz, F2 = 754 MHz, IM3 = 780 MHz)  
1900 MHz band (F1 = 1930 MHz, F2 = 1990 MHz, IM3 = 1870 MHz)

**Test distance calculations:**

5.1.4.1.2	Lowest test frequency	(MHz)	<b>728</b>	<b>1930</b>		
	Wavelength	(in)	16.2	6.1		
	Galtronics D5778i	D (in)	13.8	13.8		
5.1.1	Antenna Gain (dBi)	10 dBi ± 3 dB	8.8 dBi	8.6 dBi		
	Antenna beamwidth (deg)		60	60		
			<b>5.1.4.2</b>		<b>5.1.4.2</b>	
		Tolerance	Distance (in)	Test zone width (in)	Distance (in)	Test zone width (in)
5.1.4.1.1	FarField min (in)	0.25	19.4	22.4	60.8	70.2
	FarField nom (in)		23.5	27.1	62.3	71.9
	FarField max (in)	0.25	27.5	31.8	63.8	73.7
5.1.4.1.2	NearField min (in)	0.1	14.6	30.6	5.5	20.2
	NearField nom (in)		16.2	32.5	6.1	20.9
	NearField max (in)	0.1	17.8	34.4	6.7	21.6

Test Results Summary:

		IM3 @ 2x +43 dBm Test Power (dBm)					
Specification (dBm)	-97	Port / Band	Residual PIM	Front	R-Side	L-Side	Back
Result	PASS	M45 / 700	-128.1	-120.9	-116.0	-113.4	-122.2
		P45 / 700	-116.8	-121.6	-107.2	-114.4	-115.0
		M45 / 1900	-111.2	-113.5	-102.7	-104.0	-110.8
		P45 / 1900	-116.6	-124.8	-110.9	-102.0	-116.6
		M45 Return Loss Verification (dB)					
Specification (dB)	10	Frequency	Front	R-Side	L-Side	Back	
Result	PASS	F1	728 MHz	17.0	17.2	17.5	17.1
		F2	754 MHz	17.4	16.8	16.6	17.5
		IM3	780 MHz	16.9	18.1	17.9	16.6
		IM3	1870 MHz	24.7	23.8	29.3	29.1
		F2	1930 MHz	29.2	30.4	25.4	24.7
		F1	1990 MHz	28.4	25.9	30.2	32.3
		P45 Return Loss Verification (dB)					
Specification (dB)	10	Frequency	Front	R-Side	L-Side	Back	
Result	PASS	F1	728 MHz	21.9	20.4	20.8	22.5
		F2	754 MHz	19.5	19.4	19.8	19.2
		IM3	780 MHz	20.7	22.4	22.5	19.7
		IM3	1870 MHz	30.8	25.8	28.9	26.4
		F2	1930 MHz	18.9	16.9	18.4	17.1
		F1	1990 MHz	23.0	24.4	27.1	23.1

PIM Test Data: 700 MHz

## Site Test Report

### | SITE DETAILS

Site	Sector	Feeder	Operator
900639	NA	NA	T BELL

### | TEST PARAMETERS

Tone 1 Frequency	Tone 2 Frequency	IM3 Frequency
728.0 MHz	757.0 MHz	786.0 MHz

### | TEST RESULTS

Test Point	Time	P1 P2	PIM Threshold	PIM	Peak PIM	Result
700 RES P45	2019-11-14 12:04	43.0 dBm 43.0 dBm	-100.0 dBm	-116.9 dBm	-116.8 dBm	Pass
700 R SIDE P45	2019-11-14 12:05	43.0 dBm 43.0 dBm	-100.0 dBm	-110.8 dBm	-107.2 dBm	Pass
700 L SIDE P45	2019-11-14 12:06	43.0 dBm 43.0 dBm	-100.0 dBm	-115.0 dBm	-114.4 dBm	Pass
700 FRONT P45	2019-11-14 12:07	43.0 dBm 43.0 dBm	-100.0 dBm	-122.0 dBm	-121.6 dBm	Pass
700 BACK P45	2019-11-14 12:07	43.0 dBm 43.0 dBm	-100.0 dBm	-115.9 dBm	-115.0 dBm	Pass
700 RES M45	2019-11-14 12:10	43.0 dBm 43.0 dBm	-100.0 dBm	-129.0 dBm	-128.1 dBm	Pass
700 R SIDE M45	2019-11-14 12:11	43.0 dBm 43.0 dBm	-100.0 dBm	-116.7 dBm	-116.0 dBm	Pass
700 L SIDE M45	2019-11-14 12:11	43.0 dBm 43.0 dBm	-100.0 dBm	-114.9 dBm	-113.4 dBm	Pass
700 FRONT M45	2019-11-14 12:12	43.0 dBm 43.0 dBm	-100.0 dBm	-122.1 dBm	-120.9 dBm	Pass
700 BACK M45	2019-11-14 12:13	43.0 dBm 43.0 dBm	-100.0 dBm	-124.7 dBm	-122.2 dBm	Pass

PIM Test Data: 1900 MHz

## Site Test Report

### | SITE DETAILS

Site	Sector	Feeder	Operator
900639	NA	NA	T BELL

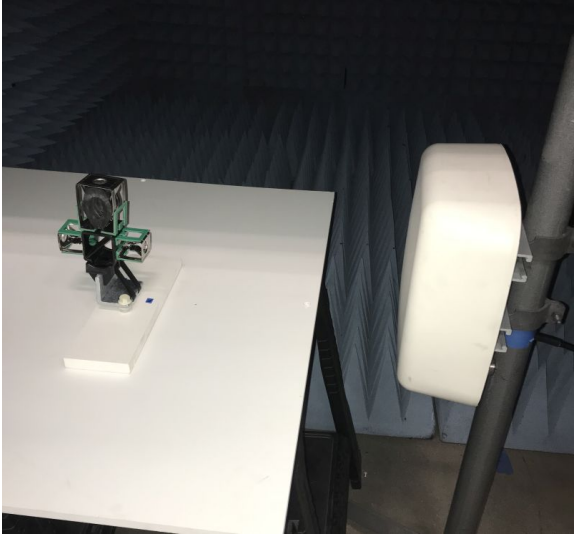
### | TEST PARAMETERS

Tone 1 Frequency	Tone 2 Frequency	IM3 Frequency
1930.0 MHz	1960.0 MHz	1900.0 MHz

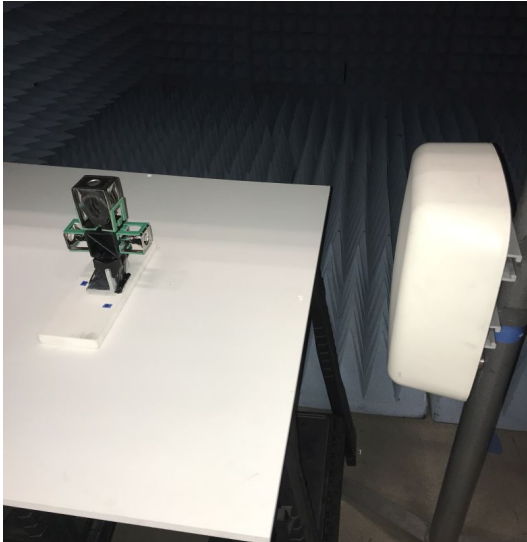
### | TEST RESULTS

Test Point	Time	P1 P2	PIM Threshold	PIM	Peak PIM	Result
1900 RES M45	2019-11-15 19:01	43.0 dBm 43.0 dBm	-100.0 dBm	-111.8 dBm	-111.2 dBm	Pass
1900 R SIDE M45	2019-11-15 19:02	43.0 dBm 43.0 dBm	-100.0 dBm	-102.8 dBm	-102.7 dBm	Pass
1900 L SIDE M45	2019-11-15 19:03	43.0 dBm 43.0 dBm	-100.0 dBm	-104.4 dBm	-104.0 dBm	Pass
1900 FRONT M45	2019-11-15 19:03	43.0 dBm 43.0 dBm	-100.0 dBm	-114.4 dBm	-113.5 dBm	Pass
1900 BACK M45	2019-11-15 19:04	43.0 dBm 43.0 dBm	-100.0 dBm	-111.1 dBm	-110.8 dBm	Pass
1900 RES P45	2019-11-15 19:06	43.0 dBm 43.0 dBm	-100.0 dBm	-117.3 dBm	-116.6 dBm	Pass
1900 R SIDE P45	2019-11-15 19:07	43.0 dBm 43.0 dBm	-100.0 dBm	-110.9 dBm	-110.9 dBm	Pass
1900 L SIDE P45	2019-11-15 19:08	43.0 dBm 43.0 dBm	-100.0 dBm	-102.3 dBm	-102.0 dBm	Pass
1900 FRONT P45	2019-11-15 19:09	43.0 dBm 43.0 dBm	-100.0 dBm	-125.7 dBm	-124.8 dBm	Pass
1900 BACK P45	2019-11-15 19:09	43.0 dBm 43.0 dBm	-100.0 dBm	-117.1 dBm	-116.6 dBm	Pass

Test set-up photos 700 MHz:



FRONT



BACK



RIGHT SIDE



LEFT SIDE

Test set-up photos 1900 MHz:



FRONT



BACK



RIGHT SIDE



LEFT SIDE