



## Client Side Antennas

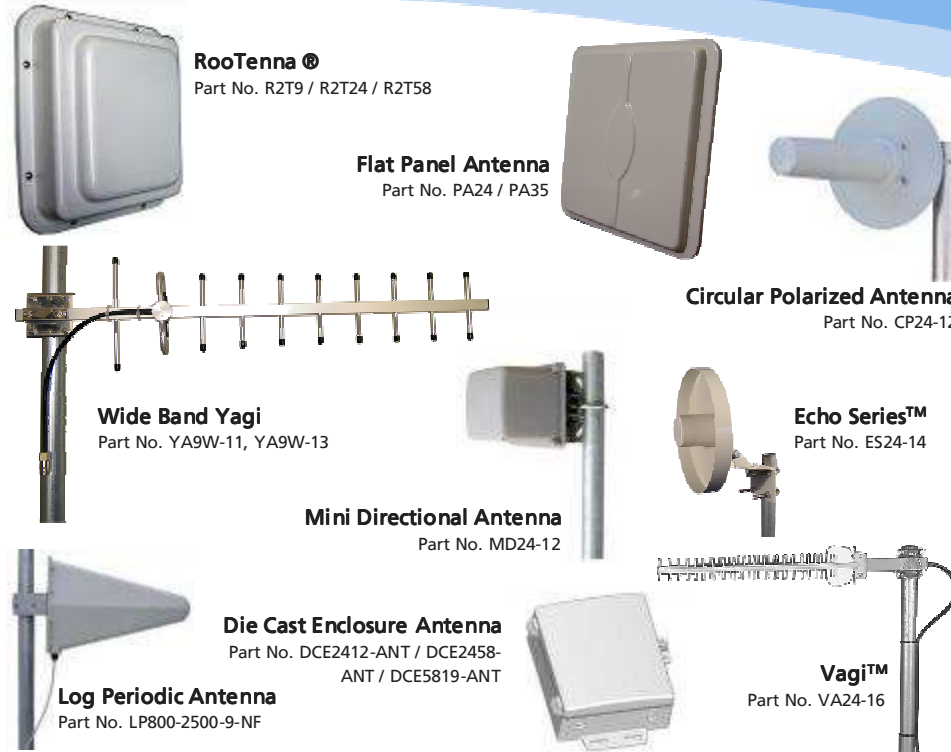
Pacific Wireless offers client antennas for 900MHz, 2.4, 3.5 and 5GHz applications. Antennas are compatible with 802.11a/b/g, WiMax, ETSI and various other international standards.

### 900—928MHz

Part #	Type	Gain (dBi)	BW (deg)	Front to Back	Polarity	Weight (lbs)	Dimensions (in.)
R2T9-12	RooTenna®	12	45	>21dB	Hor / Ver	9	16.5 x 15 x 1
LP800-2500-9-NF	Dual Band Yagi	9	55/90/75	>23dB	Hor/Ver	1.5	15.5 x 10.5 x 2.75
YA9-9	Yagi	9	53	>14dB	Hor / Ver	1.9Lbs	20
YA9W-11	Wide Band Yagi	11	50	>15dB	Hor / Ver	2.4Lbs	35
YA9W-13	Wide Band Yagi	13	30	>18dB	Hor / Ver	3.3Lbs	57
HDGD9-15	HD Series Grid	15	19	>19dB	Hor / Ver	11	34 x 28
GD9-15	Grid	15	19	>19dB	Hor / Ver	11	34 x 28
HDGD9-DC15	HD Series Die Cast Grid	15	19	>19dB	Hor / Ver	8.2	42 x 24
GD9-DC15	Die Cast Grid	15	19	>19dB	Hor / Ver	8.2	42 x 24

### 2400—2485MHz

Part #	Type	Gain (dBi)	BW (deg)	Front to Back	Polarity	Weight (lbs)	Dimensions (in.)
R2T24-15	RooTenna®	15	35	>18dB	Hor / Ver	1.8	9 x 9 x 2
RT24-18	RooTenna®	19	20	>30dB	Hor / Ver	9	16.5x15x1
R2T2458	Dual Band RooTenna®	12 15	43 22	>25dB	Hor/Ver	1.8	9 x 9 x 2
DCE-ANT2412-7x6x2	Die Cast Enclosure Antenna	12	35	>18dB	Ver	2.5	10 x 7.1 x 2.25
DCE-ANT2458-7x6x2	Dual Band Die Cast Enclosure Antenna	12 15	43 22	>30dB	Ver	2.5	10 x 7.1 x 2.25
LP800-2500-9-NF	Dual Band Yagi	9	55/90/ 75	>23dB	Hor/Ver	1.5	15.5 x 10.5 x 2.75
VA24-16	Vagi	16	25	>19dB	Hor / Ver	1.5	22 x 3
MD24-12	Mini-Directional	12	34	>25dB	Hor / Ver	1	4 x 4 x 4



**RooTenna**®  
Part No. R2T9 / R2T24 / R2T58

**Flat Panel Antenna**  
Part No. PA24 / PA35

**Circular Polarized Antenna**  
Part No. CP24-12

**Wide Band Yagi**  
Part No. YA9W-11, YA9W-13

**Echo Series™**  
Part No. ES24-14

**Mini Directional Antenna**  
Part No. MD24-12

**Die Cast Enclosure Antenna**  
Part No. DCE2412-ANT / DCE2458-ANT / DCE5819-ANT

**Log Periodic Antenna**  
Part No. LP800-2500-9-NF

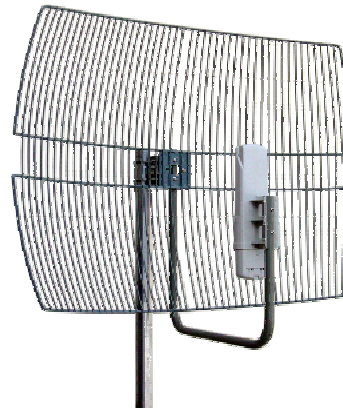
**Vagi™**  
Part No. VA24-16

Part #	Type	Gain (dBi)	BW (deg)	Front to Back	Polarity	Weight (lbs)	Dimensions (in.)
CP24-12	Circular	12	37	>20dB	Circular	1.1	8.5 x 8
ES24-14	Echo Series	14	26	>30dB	Hor / Ver	3	10.24 dia
PA 24 - 13	Flat Panel	13	35	>20dB	Hor / Ver	1.5	7.5 x 7.5 x .8
PA 24 - 16	Flat Panel	16	26	>27dB	Hor / Ver	2	11 x 11 x .8
PA 24 - 19	Flat Panel	19	17.5	>30dB	Hor / Ver	3.75	16 x 14 x .8
HDGD24-24	HD Series Grid	24	8	>24dB	Hor/Ver	11	34 x 28
HDDC24-24	HD Series Die Cast Grid	24	8	>24dB	Hor/Ver	8.2	42 x 24
GD24-15	Grid	15	19	>19dB	Hor / Ver	4	14 x 12
GD24-19	Grid	19	17	>22dB	Hor / Ver	6	24 x 17
GD24-24	Grid	24	8	>24dB	Hor / Ver	11	34 x 28
DC24	Die Cast Grid	24	8	>24dB	Hor / Ver	8.2	42 x 24
GD22-MT	2.4GHz Motorola™ Gain Booster	14	21 (v) 17(h)	>17dB	Hor / Ver	4	14 x 12
GD26-MT	2.4GHz Motorola™ Gain Booster	18	17(v) 11(h)	>22dB	Hor / Ver	6	24 x 17
GD29-MT	2.4GHz Motorola™ Gain Booster	22	8, 5	>25dB	Hor / Ver	11	34 x 28

## Client Side Antennas



**5.8GHz Echo Series™ Antenna**  
Part No. ES58-17



**Motorola™ Gain Booster**  
Part No. GDx-MT



**Die Cast Parabolic Grid Dish**  
Part No. DC24

### 2500—2700MHz

Part #	Type	Gain (dBi)	BW (deg)	Front to Back	Polarity	Weight (lbs)	Dimensions (in.)
VA25-16	Vagi	16	25	>19dB	Hor/Ver	1.5	22 x 3 x 4
GD25-15	Grid	15	17 / 21	>17dB	Hor/Ver	4	12 x 16
GD25-19	Grid	19	11 / 17	>17dB	Hor/Ver	6	16.5 x 24
GD25-24	Grid	24	8 / 10	>25dB	Hor/Ver	11	28.5 x 36
DC25-24	Die Cast Grid	24	8	>24dB	Hor/Ver	8.2	42 x 24

### 3400—3600MHz

Part #	Type	Gain (dBi)	BW (deg)	Front to Back	Polarity	Weight (lbs)	Dimensions (in.)
IN35-8DE	Indoor Directional	8	65		Hor / Ver	.5	4.25 x 3.5 x 1"
PA35-13	Flat Panel	13	35	>20dB	Hor / Ver	1.5	7.5 x 7.5 x .8
GD35-17	Grid	17	17	>14dB	Hor / Ver	4	14 x 12
GD35-20	Grid	20	11	>20dB	Hor / Ver	6	24 x 17
GD35-25	Grid	25	8	>20dB	Hor / Ver	11	34 x 28

## 4900—5850MHz

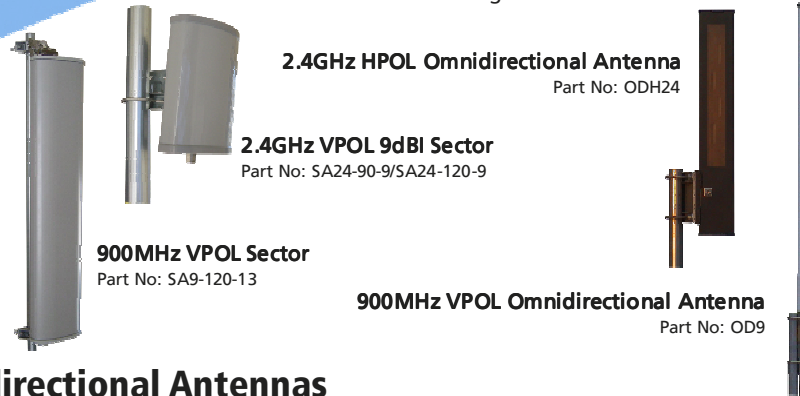
Part #	Type	Gain (dBi)	BW (h/v)	Front to Back	Polarity	Weight	Dimensions (in.)
R2T2458	Dual Band RooTenna®	15	22	>25dB	Hor/Ver	1.8	9 x 9 x 2
R2T58-19	RooTenna®	19	16	>30dB	Hor/Ver	1.8	9 x9 x 2
R2T58-24	RooTenna®	24	9	>30dB	Hor/Ver	6	16.25x14.75x1
DCE-ANT5819	Enclosure Antenna	19	22	>20dB	Ver.	2.5	10 x 7.1 x 2.25
GD5W-21P	Grid	21	11/10	>18dB	Hor/Ver	3	11.8 x 15.7
GD5W-25P	Grid	25	6 / 6	>20dB	Hor/Ver	6	16.8 x 24
GD5W-28P	Grid	28	5 / 4	>25dB	Hor/Ver	11	28.5 x 36

## 5150—5850MHz

Part #	Type	Gain (dBi)	BW (deg)	Front to Back	Polarity	Weight (lbs)	Dimensions (in.)
ES58-17	Echo Series	17	25	>30dB	Hor/Ver	1.3	10 x 2.5
PA 58 - 19	Flat Panel	19	16	>30dB	Hor/Ver	1.5	7.5 x 7.5 x.8
PA 58 - 24	Flat Panel	24	8	>40dB	Hor/Ver	3.75	16 x 11 x 8.8
GD22-MT	5.8GHz Motorola™ Gain Booster	19	12 / 8	>18dB	Hor/Ver	4	14 x 12
GD26-MT	5.8GHz Motorola™ Gain Booster	24	8 / 6	>22dB	Hor/Ver	6	24 x 17
GD29-MT	5.8GHz Motorola™ Gain Booster	27	5 / 4	>22dB	Hor/Ver	11	34 x 28
GD22-TR	2.4/5.8GHZ Trango™ Gain Booster	14, 19	12 / 8	>30dB	Hor/Ver	4	14 x 12
GD26-TR	2.4/5.8GHZ Trango™ Gain Booster	18, 24	8 / 6	>22dB	Hor/Ver	6	24 x 17
GD29-TR	2.4/5.8GHZ Trango™ Gain Booster	22, 27	5 / 4	>22dB	Hor/Ver	11	34 x 28
GD5x-22	Grid	22	11	>25dB	Hor/Ver	4	14 x 12
GD5x-26	Grid	26	6	>30dB	Hor/Ver	6	24 x 17
GD5x-29	Grid	29	4	>25dB	Hor/Ver	11	34 x 28
HDGD5x	Grid	29	4	>25dB	Hor/Ver	11	34 x 28

# Base Station Antennas

Base station antennas are designed for connection to a wireless access point to serve a large area with wireless access.



## Omnidirectional Antennas

Omnidirectional antennas communicate in 360 degrees while the sector antennas cover slices of 90 degrees, 120 degrees or 180 degrees. Generally Omni's are used in less densely populated areas and sectors are used in more heavily populated areas.

**Tech Note:** *Horizontally Polarized (HPOL) antennas are useful in areas where there is a lot of interference. The HPOL technology offers very good interference rejection of VPOL signals.*

Part #	Frequency	Gain (dB)	BW (deg)	Polarity	Downtilt	Dimensions	Weight (lbs)
OD9-5	900	5	36	Vert.	0	2'	1.3
OD9-6	900	6	16	Vert.	0	5.6'	5.4
OD9-8	900	8	10	Vert.	0	8.5'	6.7
OD9-11D1	900	11	7	Vert.	1	11'	9.4
ODH9-9	900	9	18	Horiz.	0	62"	22
FlagTenna	900 2400-2485	11 12	7	Vert.	1	Vary	Vary
OD24-7D5	2400-2485	7	18	Vert.	5	21"	1.1
OD24-9	2400-2485	9	14	Vert.	0	28"	1.1
OD24-9D7	2400-2485	9	14	Vert.	7	28"	1.1
OD24-12	2400-2485	12	7	Vert.	3	48"	1.9
ODH24-9	2400-2485	9	20	Horiz.	0	27"	6
ODH24-13	2400-2485	13	7	Horiz.	0	49"	9
OD24M	2400-2485	5,7,9,12	45,35,18,14	Vert.	0	Vary	Vary
OD49	4940-4990	6, 11	5	Vert.	Vary	Vary	Vary
OD58M	5470-5850	12	7	Vert.	0	21.25"	1.1
OD58-12	5470-5850	12	7	Vert.	0	21.25"	1.1

## Sector Antennas

<i>Part #</i>	<i>Freq.(MHz)</i>	<i>Gain</i>	<i>BW</i>	<i>Front/Back</i>	<i>Polarity</i>	<i>Downtilt</i>	<i>Weight/ Dims</i>
SAH9-120-12	902-928	12	120	>14dB	Horiz.	5-10deg	22Lb 62x 8x 2
SA9-120-13	902-928	13	120	>21dB	Vert.	10deg	31Lb 53x11x5
SA24-90-9	2400-2485	9	90 (H) 40 (V)	>25dB	Vert.	45deg	1.6Lb 10x6x2.5
SA24-120-9	2400-2485	9	120(H) 40(V)	>25dB	Vert.	45deg	1.6Lb. 10x6x2.5
SA24-180-12	2400-2485	12	180(H) 10(V)	>15dB	Vert.	10deg	3Lb. 40x3x3
SA24-180-14	2400-2485	14	180(H) 10(V)	>25dB	Vert.	10deg	11Lb. 40x10.25x7
SA24-45-20-WB	2300-2700	20	45	>25dB	Vert.	30deg.	8.4Lb 34x7x3.5
SA24-60-17-WB	2300-2700	17	60	>25dB	Vert.	30deg.	6.6Lb 33.5x6.5 x2.5
SA24-120-16-WB	2300-2700	16	120(H) 7(V)	>25dB	Vert.	10deg	9.9Lb. 38x6.5x2.5
SA24-90-17-WB	2300-2700	17	90(H) 7(V)	>25dB	Vert.	10deg	9.9Lb. 38x6.5x2.5
SAH24-12	2400-2485	12	95(H) 18(V)	>14dB	Horiz.	10deg	6Lb. 23x4x1
SAH24-16	2400-2485	16	95(H) 7(V)	>14dB	Horiz.	10deg	9Lb. 50x4x1
SO24-120x3-15	2400-2485	15	360(H) 6.5(V)	>15dB	Vert.	2deg	14Lb. 40x6.5
SAH35-90-16	3300-3600	17	90 (H) 6.5 (V)	>16dB	Horiz.	30deg	10Lb 35.5x4.7x2.4
SA49-90-16	4900-4990	16	90 (H) 9 (V)	>25dB	Vert.	10deg	5.7Lb. 20x6x2.4
SA58-90-17-WB	5470-5850	17	90(H) 7 (V)	>23dB	Vert.	15deg	2.6Lb
SA58-120-16-WB	5470-5850	16	120(H) 7 (V)	>21dB	Vert.	15deg	2.6Lb
SAH58-90-17-WB	5470-5850	17	90(H) 8(V)	>25dB	Horiz.	30deg	10Lb. 28.6.5x2.5
SAH58-120-16-WB	5470-5850	16	120(H) 8(V)	>25dB	Horiz.	30deg	10Lb. 28.6.5x2.5

## Point-to-Point Backhaul Antennas

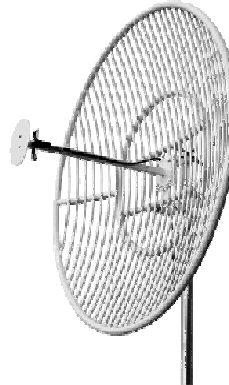
The Pacific Wireless Point-to-Point Backhaul antennas are specifically designed for high performance long distance applications. Backhaul antennas are offered in the 900MHz, 2.4, 3.5 and 5GHz frequencies.

The grid dish backhaul systems are lightweight and offer excellent windloading performance.

The solid parabolic dishes are constructed to withstand the harshest of environments. An optional radome cover is available.



**3.5GHz Solid Parabolic Dish**  
Part No: DA35-25, DA35-28



**900MHz Parabolic Grid Dish**  
Part No: GD9-18



**5GHz Solid Parabolic Dish**  
Part No: HDDA5W

## Point-to-Point Backhaul Antennas

<i>Part #</i>	<i>Frequency (MHz)</i>	<i>Gain (dBi)</i>	<i>BW (deg)</i>	<i>Front to Back</i>	<i>Polarity</i>	<i>Weight (lbs)</i>	<i>Dimensions (in)</i>
GD9-18	900-928	19	16.5	>30dB	Hor/Ver	27	4' dia
HDGD24-24	1700-2700	24	8	>24dB	Hor/Ver	5.5	42 x 24
HDDC24-24	1700-2700	24	8	>24dB	Hor/Ver	8.2	28.5 x 36
GD35-25	3400-3600	25	13	>20dB	Hor / Ver	8.2	28.5 x 36
DA35-25	3400-3600	25	10	>32dB	Hor / Ver	11	26 dia
DA35-28	3400-3600	28	7.5	>35dB	Hor / Ver	22	35.4 dia
HDDA5W-29	5150-5825	29	6	>30dB	Hor/Ver	11	26 dia
HDDA5W-32	5150-5825	32	4	>38dB	Hor/Ver	12	35.4 dia
HDDA5W-29-DP	5150-5825	29	4	>30dB	Dual Polarity	11	26 dia
HDDA5W-32-DP	5150-5825	32	4	>35dB	Dual Polarity	22	35.4 dia
GD5x-29	5150-5825	29	4	>25dB	Hor/Ver	11	28.5 x 36





**3dBi Ceiling Mount Omnidirectional**  
Part No: IN24-3 (a or b)



**Wall Mounted Indoor Sector Antenna**  
Part No: IN24-65-8,  
IN24-90-7



**Tri-Band Ceiling Mount Omnidirectional**  
Part No: IN800/2500

**Rubber Duck APXtender**  
Part No: IN24-5RD



**Rover Laptop Mount Antenna**  
Part No: RV24-5RD  
(laptop not included)



*Shown window mounted*

**9dBi Directional Antenna**  
Part No: IN24-9DE

## Indoor Antennas

Part #	Freq. (GHz)	Gain (dBi)	BW (Deg)	Type	Connectors	Dimensions (inches)	Weight (lbs)
IN800/2500	800MHz-2.5	2.2-5	90	Ceiling Mount	N Female	7 x 4	0.8
IN24-3	2.4-2.5	3	90	Ceiling Mount	N Female	7 x 4	1
IN 24 - 90 - 7	2.4-2.5	7	90	Wall Mount	N Female	4 x 4	0.4
IN 24 - 65 - 8	2.4-2.5	8	65	Wall Mount	N Female	4 x 4	0.4
TR24-3-6	2.4-2.5	3/6	120	Transformer	RPSMA, RPTNC	5 x 1	1.4
MM24-5RD	2.4-2.5	5.5	45	Mag Mount	RPSMA, RPTNC, MC-Card, MMCX, RPMMCX, U.FL	8	.9
RV24-5RD	2.4-2.5	5.5	45	Laptop Mount	RPSMA, RPTNC, MC-Card, MMCX, RPMMCX, U.FL	8	.15
IN24-5RD	2.4-2.5	5.5	45	Rubber Duck	SMA, RPSMA, RPTNC, N Male	8	.06
RD2458-5	2.4-5.8	3-5	45	Rubber Duck	SMA, RPSMA, RPTNC, N Male	6.1	.8
IN24-9DE	2.4-2.5	9	70	Directional	RPSMA, RPTNC, MC-Card, MMCX, RPMMCX, U.FL	4.25 x 3.5 x 1"	.4

### Mobile Antennas

Part #	Frequency (GHz)	Gain (dBi)	Dimensions (inch)	Weight (Lbs)
MA9-5N	900MHz	5	16	0.24
MA9-7N	900MHz	7	20	0.36
MA24-7N	2.4-2.5	7	12	0.4

**900MHz 7dB Mobile**  
Part No. MA9-7N



**900MHz 5dB Mobile**  
Part No. MA9-5N

**2.4GHz 7dB Mobile**  
Part No. MA24-7N  
*(shown w/MM-110N mag mount)*



**Mobile Mounting Options**

Magnetic, Trunk Lid & Surface Mounting

Part No. MM-90N, MM-110N, MM-TMN, MM-SMN, MM-SM-LPN 10' LMR195 cable terminated with N Female

### Wireless Accessories

Part #	Description	Dimensions
POE-48i5s-afi	Power Over Ethernet 90-264VAC Input, 5VDC 2.4A Output	Two units (each) 3.25x3x1.5
POE-48i12-afi	Power Over Ethernet 90-264VAC Input, 12VDC 1A Output	Two units (each) 3.25x3x1.5
POE-48i	POE Inserter, 48VDC output, 16.8W	3.25x3x1.5
POE-48i-CI	POE Inserter, 48VDC output, 16.8W, Current Detection Indicator	3.25x3x1.5
POE-48iD	Power Over Ethernet Midspan Power Supply / Splitter	3.25x3x1.5
POE-24i	POE Power Supply/Inserter, 24VDC output, 1A(24W)	3.25x3x1.5
POE-24iR	POE Power Supply/Inserter, 24VDC output, .8A(19W)	3.25x3x1.5
POE-24iR-CI	POE Power Supply/Inserter, 24VDC output, .8A(19W), Current Detection Indicator	3.25x3x1.5
POE-18i	POE Power Supply/Inserter, 18VDC output	3.25x3x1.5
POE-12i	POE Power Supply/Inserter, 12VDC output, 12W	3.25x3x1.5
POE-5s-afi	POE Active Splitter With Isolation, 5VDC 2.4A , 12" Ethernet and DC Power cable.	3.25x3x1.5
POE-9s-afi	POE Active Splitter With Isolation, 9VDC 1A , 12" Ethernet and DC Power cable.	3.25x3x1.5
POE-12s-afi	POE Active Splitter With Isolation, 12VDC .67A , 12" Ethernet and DC Power cable.	3.25x3x1.5
POE-24s-afi	POE Active Splitter With Isolation, 24VDC .5A , 12" Ethernet and DC Power cable.	3.25x3x1.5
Connector Adapters	Various connector adapters are available to adapt between different connector types. Please contact us for more information.	Vary



**Universal Wall Mount Bracket**  
Part No. WMB8



**Power Over Ethernet Injectors & Splitters**  
Part No. POE-XXi . POE-XXs-afi



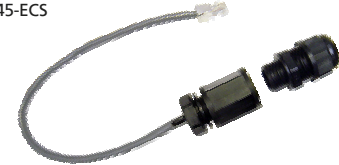
**Adapter Connectors**



**Die Cast Aluminum Enclosure**  
Part No. DCE-7x6x2



**Cable Assemblies**  
Contact us for more info!



**RJ45 Ethernet Connector System**  
Part No. RJ45-ECS



**Lightning Arrestors**  
Part No. SP3 / SP6



**Universal Mounts**  
Part No. UM / UML

Part #	Description	Dimensions	Weight (lbs)
RJ45-FT	RJ45 Feed-Thru Cable Gland	3.75 x 1.18	2oz.
RJ45-ECS	RJ45 Ethernet Connector System w/12" RJ45 pigtail	15.75 x 1.18	5oz.
DCE-7x6x2	Die Cast Aluminum Nema 6 Rated Weatherproof Enclosure with 7"x6"x2" usable space	10 x 7.1 x 2.75	2.5
DCE-H-7x6x2	Die Cast Aluminum Nema 6 Rated Weatherproof Enclosure w/Hinged Cover—7"x6"x3" usable space	10 x 7.1 x 3.75	3
SP3-90-6-BFF	Bulkhead Surge Protector, Bulkhead N Fem to N Female, 6KA Discharge, .4dB IL, 3GHz	2.75 x 1.25 x 1.75	4.5oz
SP3-90-6-BFM	Bulkhead Surge Protector, Bulkhead N Fem to N Male, 6KA Discharge, .4dB IL, 3GHz	2.75 x 1.25 x 1.75	4.5oz
SP6-230-BFF	DC-6GHz Bulkhead Surge Protector, Bulkhead N Fem to N Fem	2.4 x 1.2 x 0.9	4.5oz
SP6-230-BFM	DC-6GHz Bulkhead Surge Protector, Bulkhead N Fem to N Male	2.4x1.2x0.9	4.5oz
WMB8	Wall Mount Bracket, Welded Plated Steel, 8" standoff, 1.25" diameter mount	8x6	3
UM / UML	Universal Mount, 1.5" Pipe, regular and long lengths	7.5x10x15 (UM) 7.5x14x23 (UML)	5 (UM) 7(UML)
Cable Assemblies	Various cable assemblies are available or can be custom made. Contact us for more information.	Vary	Vary

global solutions :  
local support..

## About Pacific Wireless

Pacific Wireless— a unit of Laird Technologies designs and manufactures state of the art wireless communications solutions targeted at the 900 MHz to 5.8 GHz markets for both fixed and mobile applications.

In addition to our line of standard products, we also specialize in custom antenna products for OEM customers.

We ship antennas internationally from single unit quantities up to container quantities.

### *New products are always in development!*

Watch [www.pacwireless.com](http://www.pacwireless.com) for updates to our product line.

For more information about Laird Technologies, please visit [www.lairdtech.com](http://www.lairdtech.com).



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