

 **PulseLARSEN**
Antennas

PORTABLES



YOUR INTRODUCTION TO PULSELARSEN PORTABLE ANTENNAS.

Want to learn more? Visit our website at pulselarsenantennas.com

The following chart summarizes performance, size and cost parameters for various antenna types.

ANTENNA PERFORMANCE CHART						
Type	Bandwidth	Performance	Length	Connector	Frequency	Pricing
Helical Short	6%	Poor (**)	Short	All	VHF/UHF	\$\$
Helical	8%	Average (***)	Shorter	All	Low/Mid/VHF/UHF	\$\$
Helical Quarter Wave	12%	Good (***)	Longer	All except SMA	VHF	\$\$
Whip	12%	Good (***)	Mid	All	UHF	\$
End Fed Half Wave	10%	Better (****)	Longer	Coaxial	800	\$\$\$
Half Wave Dipole	10%	Best (*****)	Longer	Coaxial	800	\$\$\$\$
Wide Band	25%	Good (***)	Longer	Coaxial	All	\$\$\$\$\$
Dual Band	2x8%	Average (***)	Mid	Coaxial	VHF/UHF	\$\$

Due to the high variability of use, measurements are difficult to make on portable antennas. All Larsen portable antenna designs are tested for gain and VSWR using a standard fixture for portable antennas. Gain measurements are determined based on range or chamber measurements. Performance ratings are determined using a VSWR standard of less than 2.0:1.

KULDUCKIE® FREQUENCY COLOR CODE			
VHF Frequency	Color	UHF Frequency	Color
136 - 140 MHz	Blue	406 - 420 MHz	Black
142 - 149 MHz	Green	450 - 469 MHz	Black
150 - 160 MHz	Yellow	470 - 512 MHz	Black
162 - 174 MHz	Red	150 / 450 MHz	Blue

KuL DUCKIES®

All factory tuned KuL DUCKIES® are ExacTuned to your specified frequency. To order, replace the FREQ, UHF or VHF designation with your desired center frequency.



1/4-32X3/16

Male stud type mount with skirt (MX type) KD2/12

1/4-32X3/16			
Part Number	Electrical Type	Frequency Band	Approx. Length
KD2FREQHQ1	HQ Helical 1/4 λ	136 - 140 MHz	9 1/2"
KD2FREQHQ2	HQ Helical 1/4 λ	142 - 149 MHz	9 1/2"
KD2FREQHQ3	HQ Helical 1/4 λ	150 - 161 MHz	9 1/2"
KD2FREQHQ4	HQ Helical 1/4 λ	162 - 174 MHz	9 1/2"



TNC

TNC Male coaxial connector unskirted (TN type) KD3/13

TNC MALE			
Part Number	Electrical Type	Frequency Band	Approx. Length
KD3FREQHQ1	HQ Helical 1/4 λ	136 - 140 MHz	9 1/2"
KD3FREQHQ2	HQ Helical 1/4 λ	142 - 149 MHz	9 1/2"
KD3FREQHQ3	HQ Helical 1/4 λ	150 - 161 MHz	9 1/2"
KD3FREQHQ4	HQ Helical 1/4 λ	162 - 174 MHz	9 1/2"
KD3FREQHQ5	HQ Helical 1/4 λ	220 - 222 MHz	9 1/2"
KD13(freq)	1/4 λ	406 - 960 MHz	6"
TNCQ	1/4 λ	136 - 512 MHz	Varies by freq



BNC

BNC Male coaxial connector unskirted KD4/14

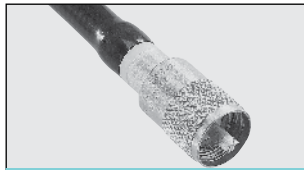
BNC MALE			
Part Number	Electrical Type	Frequency Band	Approx. Length
KD4UHF	Helical 1/4 λ	406 - 512 MHz	3"
KD4VHF1	Helical 1/4 λ	136 - 141 MHz	8"
KD4VHF2	Helical 1/4 λ	142 - 149 MHz	8"
KD4VHF3	Helical 1/4 λ	150 - 161 MHz	8"
KD4VHF4	Helical 1/4 λ	162 - 174 MHz	8"
KD4FREQHQ1	HQ Helical 1/4 λ	136 - 140 MHz	9 1/2"
KD4FREQHQ2	HQ Helical 1/4 λ	142 - 149 MHz	9 1/2"
KD4FREQHQ3	HQ Helical 1/4 λ	150 - 161 MHz	9 1/2"
KD4FREQHQ4	HQ Helical 1/4 λ	162 - 174 MHz	9 1/2"
KD4150T	Helical 1/4 λ	130 - 180 MHz	Varies by freq
KD14(freq)	1/4 λ	406 - 960 MHz	6"
KD14FREQHW1	HW UHF 1/2 λ	315 - 409 MHz	16 1/2"
KD14FREQHW2	HW UHF 1/2 λ	416 - 504 MHz	16 1/2"
BNCQ	1/4 λ	136 - 512 MHz	Varies by freq



5/16-32X3/8

Male stud type mount
(KR type)
KD7

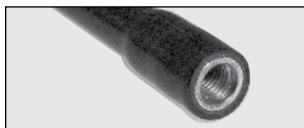
5/16-32X3/8			
Part Number	Electrical Type	Frequency Band	Approx. Length
KD7FREQHQ1	HQ Helical 1/4 λ	136 - 140 MHz	9 1/2"
KD7FREQHQ2	HQ Helical 1/4 λ	142 - 149 MHz	9 1/2"
KD7FREQHQ3	HQ Helical 1/4 λ	150 - 161 MHz	9 1/2"
KD7FREQHQ4	HQ Helical 1/4 λ	162 - 174 MHz	9 1/2"



PL-259

Standard UHF Connector Male
KD9/19

PL-259			
Part Number	Electrical Type	Frequency Band	Approx. Length
KD9FREQHQ1	HQ Helical 1/4 λ	136 - 140 MHz	9 1/2"
KD9FREQHQ2	HQ Helical 1/4 λ	142 - 149 MHz	9 1/2"
KD9FREQHQ3	HQ Helical 1/4 λ	150 - 161 MHz	9 1/2"
KD9FREQHQ4	HQ Helical 1/4 λ	162 - 174 MHz	9 1/2"
KD19(freq)	1/4 λ	406 - 512 MHz	6"
PQ	1/4 λ	144 - 512 MHz	Varies by freq



516-24THDS Female

Female threaded
KD22

5/16-24 THDS Female			
Part Number	Electrical Type	Frequency Band	Approx. Length
KD22VHF1	Helical 1/4 λ	136 - 141 MHz	8"
KD22VHF2	Helical 1/4 λ	142 - 149 MHz	8"
KD22VHF3	Helical 1/4 λ	150 - 161 MHz	8"
KD22VHF4	Helical 1/4 λ	162 - 174 MHz	8"
KD22FREQHQ1	HQ Helical 1/4 λ	136 - 140 MHz	9 1/2"
KD22FREQHQ2	HQ Helical 1/4 λ	142 - 149 MHz	9 1/2"
KD22FREQHQ3	HQ vv 1/4 λ	150 - 161 MHz	9 1/2"
KD22FREQHQ4	HQ Helical 1/4 λ	162 - 174 MHz	9 1/2"

SPOTS!

FREQUENCY COLOR CODE (SEE COLOR SPOT ON ANTENNA TOP)

VHF		
VHF	Center Frequency	Color
144	138 - 150 MHz	Gray
156	150 - 162 MHz	Orange
60	154 - 166 MHz	Green
167	160 - 174 MHz	Red

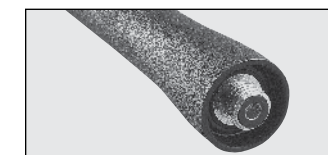
UHF		
UHF	Center Frequency	Color
420	403 - 437 MHz	Blue
450	432 - 468 MHz	Yellow
470	450 - 490 MHz	Red
490	470 - 510 MHz	Green

800 / 900		
800 / 900	Center Frequency	Color
832	795 - 870 MHz	Blue
918	872 - 964 MHz	Red
1800	1710 - 1850 MHz	Black
1900	1850 - 1990 MHz	Black
2400	2400 - 2500 MHz	Black



CODE ANTENNA SELECTION GUIDE BY CONNECTOR TYPE

Determine connector type on the following pages and select the proper antenna based on frequency and type below. Field tunable antennas come with a cutting chart and cap to allow for tuning to exact frequency.



1/4-32X3/16

Male stud type mount with skirt
(MX type)

Popular Brands Supported

Motorola, Kenwood, Maxon,
Midland, Wilson, G.E., Vertex

** This antenna is designed
with a longer "skirt" for use with
ICOM radios.

1/4-32X3/16 - MALE STUD CONNECTOR (MX TYPE)			
Part Number	Frequency Band (MHz)	Antenna Type	Approx. Length
SPHL10156	150 - 162	Helical Standard 1/4 λ	8"
SPHS10156	152 - 160	Helical Short 1/4 λ	4"
SPHL10160	154 - 166	Helical Standard - 1/4 λ	8"
SPHL10160IC**	CC to 157	Helical Standard 1/4 λ	8"
SPHL10167	160 - 174	Helical Standard 1/4 λ	8"
SPHL10167IC**	CC to 167	Helical Standard 1/4 λ	8"
SPWH10420	395 - 445	Whip Standard 1/4 λ	6"
SPHS10420	403 - 437	Helical Short 1/4 λ	3"
SPWH10450	425 - 475	Whip Standard 1/4 λ	6"
SPHS10450	432 - 468	Helical Short 1/4 λ	3"
SPWH10470	450 - 490	Whip Standard 1/4 λ	6"
SPHS10470	452 - 488	Helical Short 1/4 λ	3"
SPHL10FT	Field Tunable 136 - 221	Helical Standard 1/4 λ	8"
SPWH10FT	Field Tunable 400 - 512	Whip Standard 1/4 λ	6"

Interested in learning more? Call us at **+1.800.ANTENNA.**



M7.0X1.0

Male stud type connector unskirted (MD type)

Popular Brands Supported

G.E., Ericsson

M7 X 1.00 METRIC CONNECTOR (MD TYPE)			
Part Number	Electrical Type	Frequency Band	Approx. Length
SPEN14832	806 - 866	Whip - 1/2 – End Fed	7"
SPWH14832	782 - 882	Whip - Standard - 1/4 λ	3"
SPHS14832	800 - 865	Helical - Short - 1/4 λ	2.75 "
SPEN14918	890 - 960	Half – End Fed	6"
SPHL14FT	Field Tunable 136 - 221	Helical - Standard - 1/4 λ	7"



BNC

BNC Male coaxial connector unskirted

Popular Brands Supported

G.E., Kenwood, Motorola, Maxon, Johnson

BNC CONNECTOR (BN TYPE)			
Part Number	Electrical Type	Frequency Band	Approx. Length
PHS15450	432 - 468	Helical - Short - 1/4 λ	3"
SPHL15FT	Field Tunable 136 - 221	Helical - Standard - 1/4 λ	8"
SPWH15FT	Field Tunable 400 - 512	Whip - Standard - 1/4 λ	6"



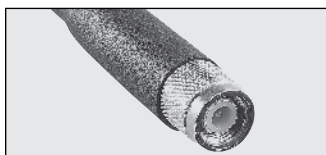
BNC-S

BNC Male coaxial connector fully skirted (BNX type)

Popular Brands Supported

Ericsson

BNC CONNECTOR COVERED TYPE (BNX TYPE)			
Part Number	Electrical Type	Frequency Band	Approx. Length
SPHL16FT	Field Tunable 136 - 221	Helical - Standard - 1/4 λ	8"
SPWH16FT	Field Tunable 400 - 512	Whip - Standard - 1/4 λ	6"



TNC

TNC Male coaxial connector unskirted (TN type)

Popular Brands Supported

Icom, Standard

TNC CONNECTOR - STANDARD (TN TYPE) - EXPOSED BRIGHT FINISH			
Part Number	Electrical Type	Frequency Band	Approx. Length
SPDA17806/2170LAR	806 - 960 / 1710 - 2170	Center Fed Dipole	8"
SPDA17832	824 - 894	Center Fed Dipole	8"
SPDA17850/1900	824 - 894 / 1850 - 1990	Center Fed Dipole	7.5"
SPDA17918	890 - 960	Center Fed Dipole	8"
SPDA171800	1710 - 1850	Center Fed Dipole	6.5"
SPDA171900	1850 - 1990	Center Fed Dipole	6.5"
SPDA172400	2400 - 2500	Center Fed Dipole	6"
SPDA17RP2400	2400 - 2500 / 4900 - 5900	Center Fed Dipole	6"
SPDA17RP2400	6"	Center Fed Dipole	6"
SPDA17RP918	890 - 960	Center Fed Dipole	8"
SPHL17FT	Field Tunable 136 - 221	Helical - Standard - 1/4 λ	8"
SPWH17FT	Field Tunable 400 - 512	Whip - Standard - 1/4 λ	6"
ICEBLADELT	698-960/1710-2170/2500-2700	Multiband	9"
ICEBLADEWT	698-960/1710-2170/2500-2700	Multiband	9"

SPOTS!



TNC-S

TNC Coaxial connector fully skirted (TNX type)

Popular Brands Supported

Vertex



SMA MALE T1

SMA Male extended base (SMS Type)

Popular Brands Supported

Standard

TNC CONNECTOR - COVERED (TNX TYPE)			
Part Number	Frequency Band	Antenna Type	Approx. Length
PHL18FT	Field Tunable 136 - 221	Helical - Standard - 1/4	8"
SPWH18FT	Field Tunable 400 - 512	Whip - Standard - 1/4	6"

SMA MALE STANDARD - EXTENDED BASE - T1 (SMS TYPE)			
Part Number	Frequency Band	Antenna Type	Approx. Length
SPWH20832	782 - 882	Whip - Standard - 1/4	3"
SPHS20832	800 - 864	Helical - Short - 1/4	2.75"
SPWH20918	863 - 973	Whip - Standard - 1/4	3"
SPHS20918	872 - 954	Helical - Short - 1/4	2.75"
SPHL20FT	Field Tunable 136 - 221	Helical - Standard - 1/4	8"
SPWH20FT	Field Tunable 400 - 512	Whip - Standard - 1/4	6"



SMA F T1

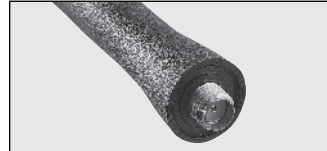
SMA Female flush insulator & partial skirt (SF Type)

Popular Brands Supported

Motorola

SMA FEMALE - NON STANDARD MOTOROLA TYPE (SF TYPE)			
Part Number	Frequency Band	Antenna Type	Approx. Length
SPWB21150	136 - 174	Helical - Standard - 1/4	6.75"
SPHL21156	150 - 162	Helical - Standard - 1/4	8"
SPHS21156	152 - 160	Helical - Short - 1/4	4"
SPHL21167	160 - 174	Helical - Standard - 1/4	8"
SPHS21167	162 - 172	Helical - Short - 1/4	4"
SPWH21450	425 - 475	Whip - Standard - 1/4	6"
SPHS21450	432 - 468	Helical - Short - 1/4	3"
SPHS21490	475 - 512	Helical - Short - 1/4	3"
SPWH21832	782 - 882	Whip - Standard - 1/4	3"
SPHS21832	800 - 864	Helical - Short - 1/4	2.75"
SPWH21918	863 - 973	Whip - Standard - 1/4	3"
SPHS21918	872 - 954	Helical - Short - 1/4	2.75"
SPHL21FT	Field Tunable 136 - 221	Helical - Standard - 1/4	8"
SPWH21FT	Field Tunable 400 - 512	Whip - Standard - 1/4	6"

SPOTS!



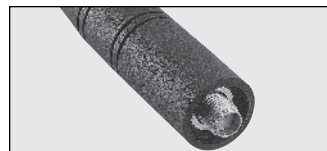
SMA F T2

SMA Female recessed insulator & partial (short) skirt (SFJ type)

Popular Brands Supported

EF Johnson, Kenwood

SMA FEMALE STANDARD - FLUSH BASE - T2 (SFJ TYPE)			
Part Number	Frequency Band (MHz)	Antenna Type	Approx. Length
SPWB22150	136 - 174	Helical - Standard - 1/4 λ	6.75"
SPHL22156	150 - 162	Helical - Standard - 1/4 λ	8"
SPHL22167	160 - 174	Helical - Standard - 1/4 λ	8"
SPWH22450	425 - 475	Whip - Standard - 1/4 λ	6"
SPHS22450	432 - 468	Helical - Short - 1/4 λ	3"
SPWH22470	450 - 490	Whip - Standard - 1/4 λ	6"
SPHS22470	452 - 468	Helical - Short - 1/4 λ	3"
SPHS22490	475 - 512	Helical - Short - 1/4 λ	3"
SPWH22832	782 - 882	Whip - Standard - 1/4 λ	3"
SPHS22832	800 - 864	Helical - Short - 1/4 λ	2.75"
SPWH22918	863 - 973	Whip - Standard - 1/4 λ	3"
SPHS22918	872 - 954	Helical - Short - 1/4 λ	2.75"
SPHL22FT	Field Tunable 136 - 221	Helical - Standard - 1/4 λ	8"
SPWH22FT	Field Tunable 400 - 512	Whip - Standard - 1/4 λ	6"



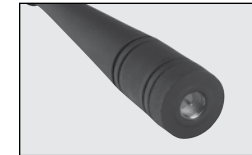
SMA F T3

SMA Female recessed insulator & partial (long) skirt (SFU type)

Popular Brands Supported

Kenwood (2005 and newer models), Uniden, King

SMA FEMALE STANDARD - HALF SKIRT BASE - T3 (SFU TYPE)			
Part Number	Frequency Band (MHz)	Antenna Type	Approx. Length
SPWB23150	136 - 174	Helical - Standard - 1/4 λ	6.75"
SPHL23167	160 - 174	Helical - Standard - 1/4 λ	8"
SPWH23450	425 - 475	Whip - Standard - 1/4 λ	6"
SPHS23450	432 - 468	Helical - Short - 1/4 λ	3"
SPWH23470	450 - 490	Whip - Standard - 1/4 λ	6"
SPHS23470	452 - 488	Helical - Short - 1/4 λ	3"
SPWH23490	470 - 512	Whip - Standard - 1/4 λ	6"
SPHS23490	475 - 512	Helical - Short - 1/4 λ	3"
SPWH23832	782 - 882	Whip - Standard - 1/4 λ	3"
SPWH23918	863 - 973	Whip - Standard - 1/4 λ	3"
SPHS23918	872 - 954	Helical - Short - 1/4 λ	2.75"
SPHL23FT	Field Tunable 136 - 221	Helical - Standard - 1/4 λ	8"
SPWH23FT	Field Tunable 400 - 512	Whip - Standard - 1/4 λ	6"



SMA MALE T2

SMA Male flush base (SM Type)

Popular Brands

G.E., Technophone, Relm

SMA MALE - FLUSH BASE - T2 (SM TYPE)				
Part Number	Connector	Frequency Band (MHz)	Antenna Type	Approx. Length
SPDA24700/2700	SMA Male	698-960/1710-2170/2500-2700	Multiband	9"
SPDA24832	SMA	824 - 894	Center Fed Dipole	9"
SPDA24850/1900	SMA	824 - 894 / 1850 - 1990	Center Fed Dipole	7.5"
SPDA24918	SMA M T2	890 - 960	Center Fed Dipole	8"
SPDA241800	SMA M T2	1710 - 1880	Center Fed Dipole	6.5"
SPDA241900	SMA M T2	1850 - 1990	Center Fed Dipole	6.5"
SPDA242400	SMA	2400 - 2500	Center Fed Dipole	6"
SPDA24RP918	SMA M T2 RP	890 - 960	Center Fed Dipole	8"
SPDA24RP 2400	SMA M T2 RP	2400 - 2500	Center Fed Dipole	6"
SPDP24832	SMA M T2	824 - 894	Center Fed Dipole	8"
SPDP24918	SMA M T2	890 - 960	Center Fed Dipole	
SPDP242400	SMA M T2	2400 - 2500	Center Fed Dipole	3.5"
SPEN24815	SMA M T2	760 - 870	Whip - End Fed - 1/2 λ	7"
SPHS24832	SMA M T2	800 - 864	Helical - Short - 1/4 λ	2.75"
SPHS24918	SMA M T2	872 - 954	Helical - Short - 1/4 λ	2.75"
SPWB24150	SMA M T2	136 - 174	Wideband	7.5"
SPWB24425	SMA M T2	380 - 470	Wideband	6.5"
SPWB24480	SMA M T2	440 - 520	Wideband	6"
SPWH24815	SMA M T2	760 - 870	Whip - Short - 1/4 Wave	3.5"
SPWH24918	SMA M T2	863 - 973	Whip - Standard - 1/4 λ	3"
SPHL24FT	SMA M T2	Field Tunable 136 - 221	Helical - Standard - 1/4 λ	8"
SPWH24FT	SMA M T2	Field Tunable 400 - 512	Whip - Standard - 1/4 λ	6"
ICEBLADELT	SMA Male	698-960/1710-2170/2500-2700	Multiband	9"
ICEBLADEWS	SMA Male	2400-2500/4900-5900	Multiband	9"



SPDA

SPDP

SPEN

SPHS

SPWB

SPWH

SPHL

ICE



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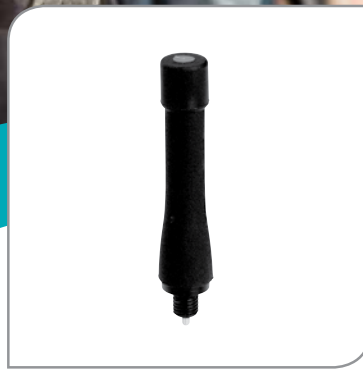
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