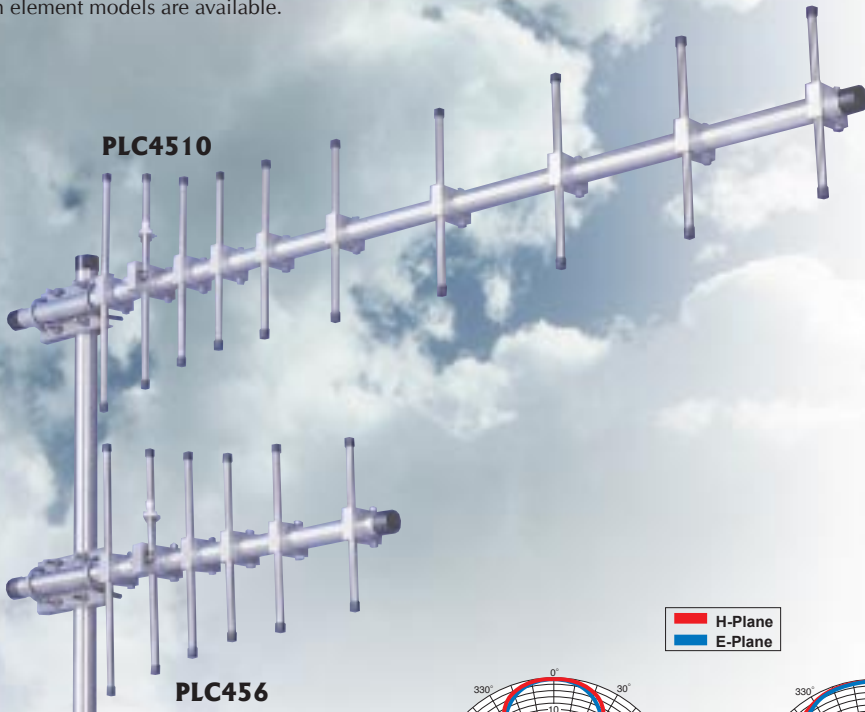


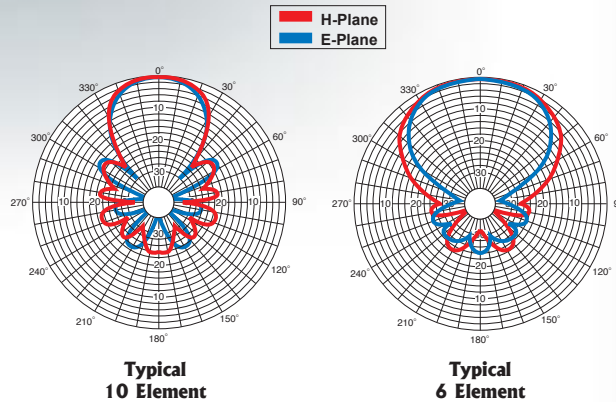
Heavy-Duty PLC Series

Our PLC series heavy-duty Yagis are factory assembled and adjusted for easy installation. They feature heavy-wall tubing elements and large rugged machined aluminum blocks for the boom-to-element junctions. Six and ten element models are available.



HEAVY-DUTY PLC SERIES

- Broadband
- Factory assembled
- Stainless steel hardware
- Heavy duty construction
- Stackable



UHF HEAVY-DUTY YAGI SELECTOR GUIDE

Model	Freq. MHz	Gain dBd	No. Elem	F to B	-3dB Beamwidth		Conn. Type	W/ surf. Area ft ² (m ²)	W/ surv. mph (kph)	W/ 1/2" Ice	Length in (cm)	Wt. lb (kg)
					E-Plane ^o	H-Plane ^o						
PLC336	300-410*	7.5	6	25	53	74	UHF			Contact Factory		
PLC3310	300-410*	11.5	10	25	37	42	UHF			Contact Factory		
PLC366N	300-410*	7.5	6	25	53	74	N			Contact Factory		
PLC3310N	300-410*	11.5	10	25	37	42	N			Contact Factory		
PLC406	406-420	7.5	6	25	53	74	UHF	0.41 (0.038)	125 (200)	100 (161)	31-1/4 (79.4)	3.7 (1.7)
PLC406N	406-420	7.5	6	25	53	74	N	0.41 (0.038)	125 (200)	100 (161)	31-1/4 (79.4)	3.7 (1.7)
PLC456	450-470	7.5	6	25	53	74	UHF	0.41 (0.038)	125 (200)	100 (161)	31-1/4 (79.4)	3.7 (1.7)
PLC456N	450-470	7.5	6	25	53	74	N	0.41 (0.038)	125 (200)	100 (161)	31-1/4 (79.4)	3.7 (1.7)
PLC476	470-490	7.5	6	25	53	74	UHF	0.41 (0.038)	125 (200)	100 (161)	31-1/4 (79.4)	3.7 (1.7)
PLC476N	470-490	7.5	6	25	53	74	N	0.41 (0.038)	125 (200)	100 (161)	31-1/4 (79.4)	3.7 (1.7)
PLC496	490-512	7.5	6	25	53	74	UHF	0.41 (0.038)	125 (200)	100 (161)	31-1/4 (79.4)	3.7 (1.7)
PLC496N	490-512	7.5	6	25	53	74	N	0.41 (0.038)	125 (200)	100 (161)	31-1/4 (79.4)	3.7 (1.7)
PLC4010	406-420	11.5	10	25	37	42	UHF	0.68 (0.063)	125 (200)	85 (137)	66 (167)	5.25 (2.38)
PLC4010N	406-420	11.5	10	25	37	42	N	0.68 (0.063)	125 (200)	85 (137)	66 (167)	5.25 (2.38)
PLC4510	450-470	11.5	10	25	37	42	UHF	0.68 (0.063)	125 (200)	85 (137)	66 (167)	5.25 (2.38)
PLC4510N	450-470	11.5	10	25	37	42	N	0.68 (0.063)	125 (200)	85 (137)	66 (167)	5.25 (2.38)
PLC4710	470-490	11.5	10	25	37	42	UHF	0.68 (0.063)	125 (200)	85 (137)	66 (167)	5.25 (2.38)
PLC4710N	470-490	11.5	10	25	37	42	N	0.68 (0.063)	125 (200)	85 (137)	66 (167)	5.25 (2.38)
PLC4910	490-512	11.5	10	25	37	42	UHF	0.68 (0.063)	125 (200)	85 (137)	66 (167)	5.25 (2.38)
PLC4910N	490-512	11.5	10	25	37	42	N	0.68 (0.063)	125 (200)	85 (137)	66 (167)	5.25 (2.38)

Common specifications: Power handling-250 Watts; Element material-1/2 in.(1.3 cm) 6063-T832 Aluminum; Boom material-1-1/8 in. (2.9 cm) 6063-T832 Aluminum. All PLC models can mount to 2-1/8 in. (5.4 cm) diameter pipe with U-bolts and plates supplied.

* Specific frequency in band.

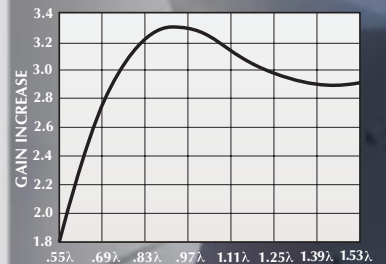
F Y I

Increase Your Gain

You can increase your antenna system gain by doubling the number of identical antennas used.

For example, if you designed a system that required more gain than is available with one of our 450 MHz antennas (the PLC-4510 with 11.1 dBd gain), you could use two of them fed in parallel. With proper spacing between antennas, the result would be almost double the gain (a 3 dBd increase to 14 dBd).

You do have a choice when implementing this technique. If the antennas are placed (stacked) beside each other in the horizontal plane, the beamwidth in the horizontal plane would be reduced. If the antennas are stacked one above the other in the vertical plane, the beamwidth in the vertical plane would be reduced. It is simpler to stack antennas one above the other because it eliminates the need for additional support tubing and mounting brackets. Therefore, it is less expensive.



SPACING BETWEEN ANTENNAS

The distance between antennas is critical. Various spacings create different results. The chart above shows the gain increase as a function of antenna spacing when using two identical antennas. Remember, when you combine antennas, some signal is lost in the added cables and connectors.

As a rule of thumb, optimum gain increase in a vertically stacked array occurs at a spacing of approximately 0.95 wavelengths. For specific help, please contact our Tech Support Department.