## **Log Periodic Antennas**

Wide Band, High Gain, Low VSWR Small Size, Light Weight, Easy Assembly



CD model CLP5130-x series is a high gain, wide band VHF and UHF log periodic type beam antenna. As a standard, the antenna is designed for horizontally polarized base station use but by means of an adapter, vertical polarization is also possible. The antenna is usable in the amateur bands from 50 thru 1300 MHz and is also suitable for FM broadcasting, scanning, VHF/UHF television air band communications, government applications, and business band use. Forward gain of the CLP5130-1 from 50 to 1300 MHz is 10 to 12 dBi (this is 10 to 16 times the gain compared to a non-directional discone type antenna). The VSWR of the antenna is less than 2.0 :1 across the band. Mechanically, the log periodic uses a specially shaped high quality aluminum boom that allows for movement of the phasing line. In addition, distortions in the vertical and horizontal planes have been minimized, and adjustment of the element alignment is not necessary. The assembly of the antenna is easy. The boom to mast bracket is made of a lightweight and rugged magnesium alloy. Model CLP5130-2 is very compact and high performance log periodic antenna which covers from 105 thru 1300 MHz while model CLP5130-3 covers from 90 thru 220 MHz.

Model	CLP5130-1 (*CLP5130-1D)	CLP5130-2 (*CLP5130-2D)	CLP5130-3 (for Air, TV)	CLP5130-1X	CLP3100
Frequency (MHz)	50 ~ 1300	105 ~ 1300	90 ~ 220 (Receiver: 80 ~ 250)	50 ~ 500	30 ~ 1000
No. of Element	21	17	10	16 × 2	27
Forward Gain (dBi)	10.0 ~ 12.0	11.0 ~ 13.0	12.0 ~ 13.0	10.0 ~ 12.0	10.0 ~ 12.0
F / B Ratio (dB)	15	15	15	15	15
Impedance (Ω)	50	50	50 <b>~</b> 75	50	50
Power Capability (PEP/kW)	0.5	0.5	0.5	0.5	0.5
Boom Length (m)	2.0 (3.4)	1.4 (1.9)	1.7	3.2	4.7
V S W R	Less than 2.0	Less than 2.0	Less than 2.0	Less than 2.5	Less than 2.0
Element Length (m)	3.0	1.3	1.6	3.0	5.3
Rotational Radius (m)	1.8 (2.4)	1.0 (1.6)	1.2	2.3	3.2
Mast Diameter (mm)	48 ~ 61	42 ~ 50	42 ~ 50	48 ~ 61	48 ~ 61
Wind Surface Area (m²)	0.2 (0.33)	0.08 (0.13)	0.13	0.52	0.37
Weight (kg)	5.0 (8.5)	3.0 (4.0)	3.5	16.0	15.5
Recommended Rotator	RC5-x	RC5-x	RC5-x	RC5-x	RC5-x

## ANTENNA MOUNT KIT FOR VERTICAL POLARIZATION, AM401-x For Log-Periodic Antenna CLP5130-x Series

This AM401-x is an antenna mount kit that makes it possible to mount a horizontally mounted antenna CLP5130-x series vertically which consists of side-sticking boom and fitting fixtures.



- Installation sample-

- \* AM401A (for CLP5130-1)
- \* AM401B (for CLP5130-2/3)

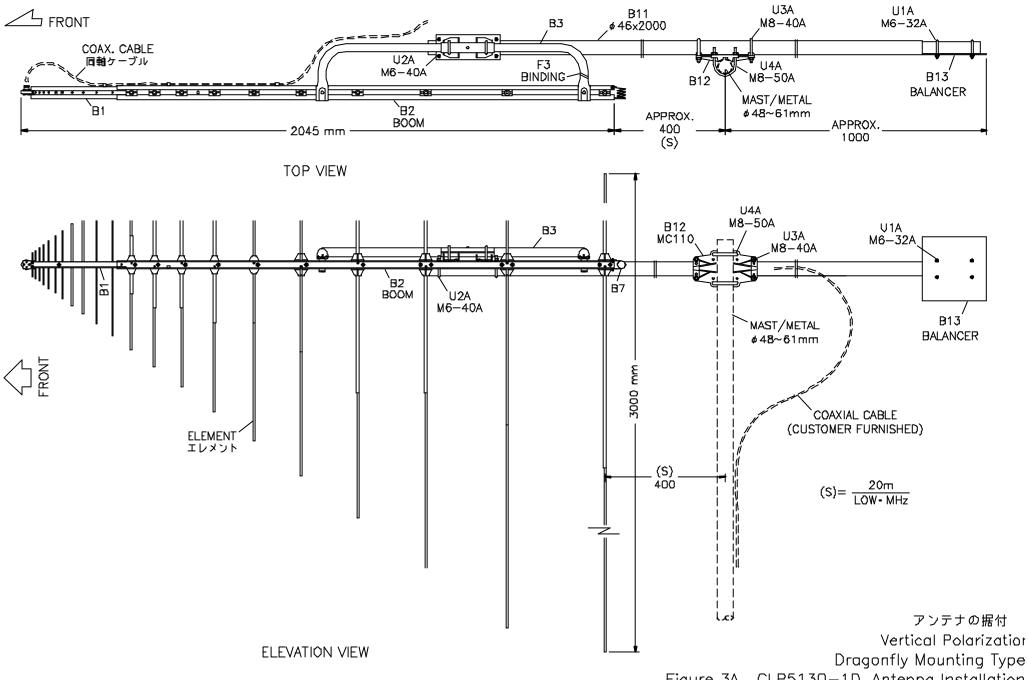


Figure 3A. CLP5130-1D, Antenna Installation
50~1300MC CMN-0811 DWGA.035G-1

