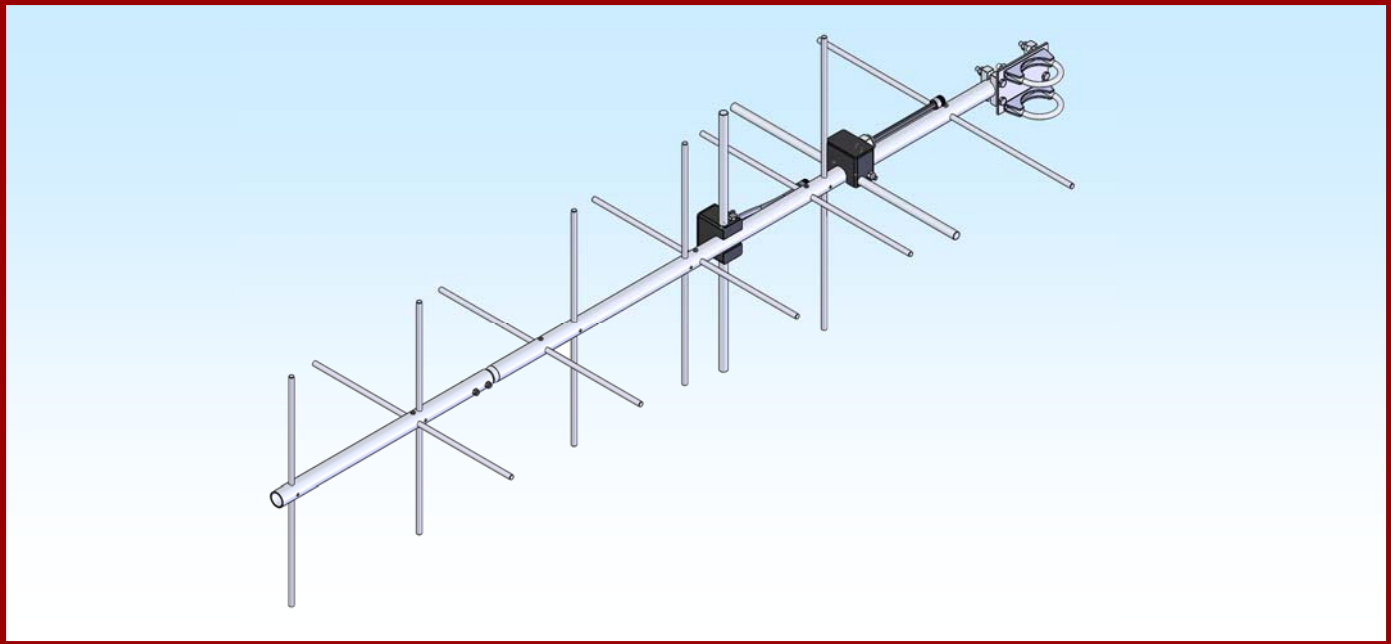




M2 Antenna Systems, Inc. Model No: 300XP12



SPECIFICATIONS:

Model	300XP12	Power Handling	1.5 kW
Frequency Range.....	280 To 320 mHz	Boom Length / Dia.....	62" / 1"
*Gain	10.8 dBi	Maximum Element Length.....	21-.312"
Front to back	18.9 dB Typical	Turning Radius:	59"
Beamwidth	26° Typical	Stacking Distance.....	39"
Feed type	Folded Dipole	Mast Size.....	2" Nom.
Feed Impedance.	50 Ohms Unbalanced	Wind area / Survival	0.84 Sq. Ft. / 100MPH
Maximum VSWR.....	2:1	Weight / Ship Wt.....	8 Lbs. / 13 Lbs.
Input Connector.....	"N" Female		

***Subtract 2.14 from dBi for dBd**

FEATURES:

The 300XP12 is high performance circular polarized antenna with a remarkably clean pattern. The pattern is important in order to match the antenna's noise temperature with modern low noise preamps. This antenna is ideal for satellite work but is also excellent for terrestrial uses like ATV, repeater operation, and long haul tropo DX.

The CNC machined driven element module is O-ring sealed and weather tight for low maintenance and long-term peak performance. Internal connected are encapsulated in a space-age silicone gel that seals out moisture and improves power handling. The 1/2" 6061-T6 rod elements are centered to minimize interaction and maintain good ellipticity. Insulators are UV stabilized and locked in place with stainless keepers. Rugged construction, uncompromising performance for the boom length: that's the M² 300XP12!

300XP12 ASSEMBLY MANUAL

TOOL REQUIRED FOR ASSEMBLY: screwdriver, 11/32 nut driver or wrench, 7/16" and 1/2" socket or end wrenches, measuring tape.

1. Assemble the boom using 8-32 X 1-1/4 screws and locknuts to join sections. (SEE DIMENSION SHEET).
2. Install Horizontal & Vertical Driven Element Assembly on to boom using 1/4-20 X 3" Bolt and lock nuts. (SEE DIMENSION SHEET).

ASSEMBLING THE HORIZONTAL ELEMENTS

3. Layout the Horizontal elements by length and position as shown on the DIMENSION SHEET. Start with the reflector (longest) element, install using a Screw, 6-32 X 1",SS.

ASSEMBLING THE VERTICAL ELEMENTS

4. Layout the Vertical elements by length and position as shown on the DIMENSION SHEET. Start with the reflector (longest) element, install using a Screw, 6-32 X 1",SS. Note: The vertical element set is shifted forward on the boom by 1/4 wave lengths. This increases isolation between element planes, improving circularity and ease of phasing / matching the two element sets.
5. Install the boom to mast plate to the rear of the boom (SEE BOOM TO MAST DETAIL PAGE). Use two 1" U-bolts and the stainless nuts and lock washers provided. DO NOT OVER TIGHTEN. 2" U-bolts (and stainless steel nuts / lock washers) are provided for mounting the antenna to your NON-CONDUCTIVE mast or crossboom. Other size u-bolts and cradles are available upon request.

M² ANTENNA SYSTEMS, INC.

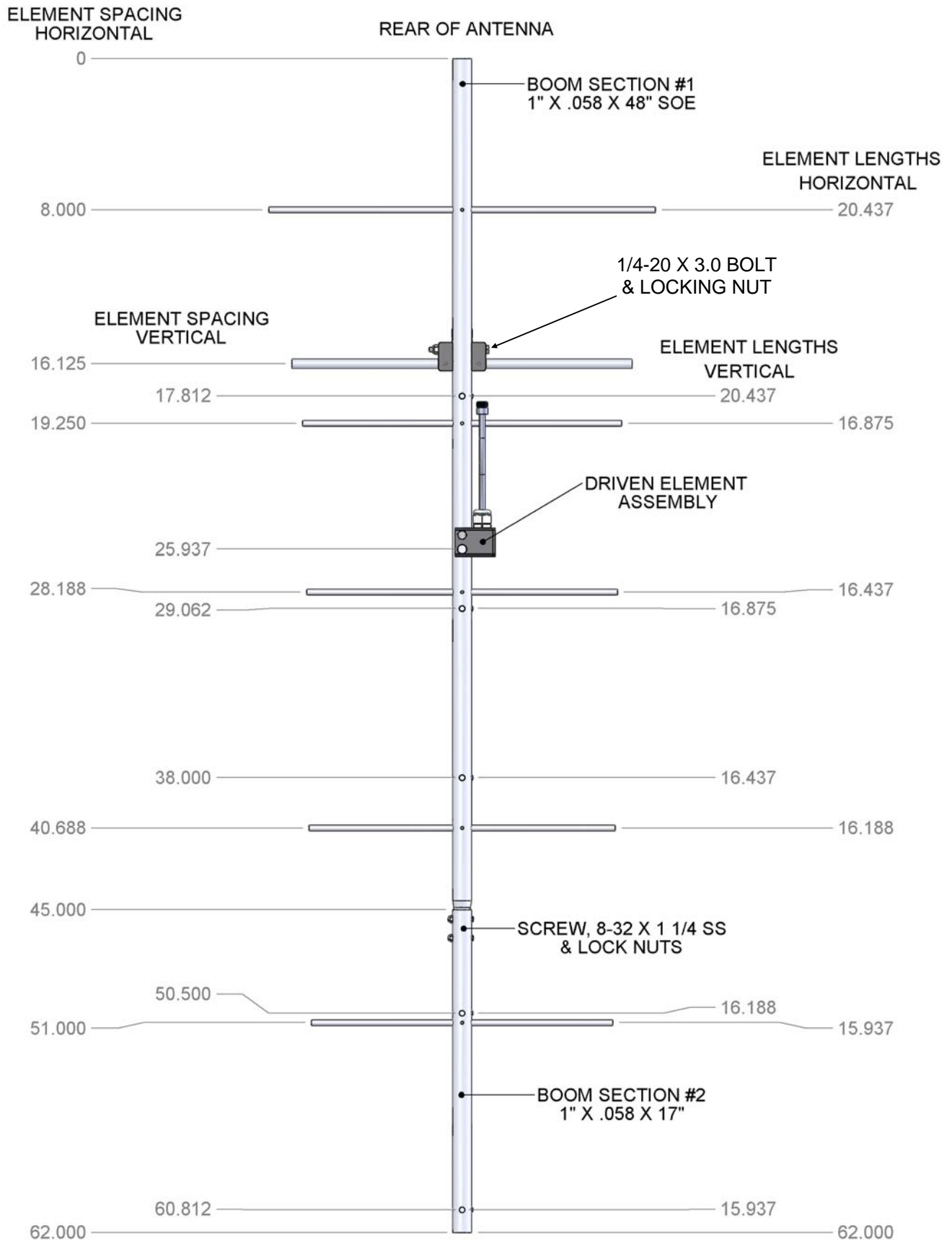
4402 N. SELLAND AVE.

FRESNO, CA 93722

(559) 432-8873 FAX: 432-3059

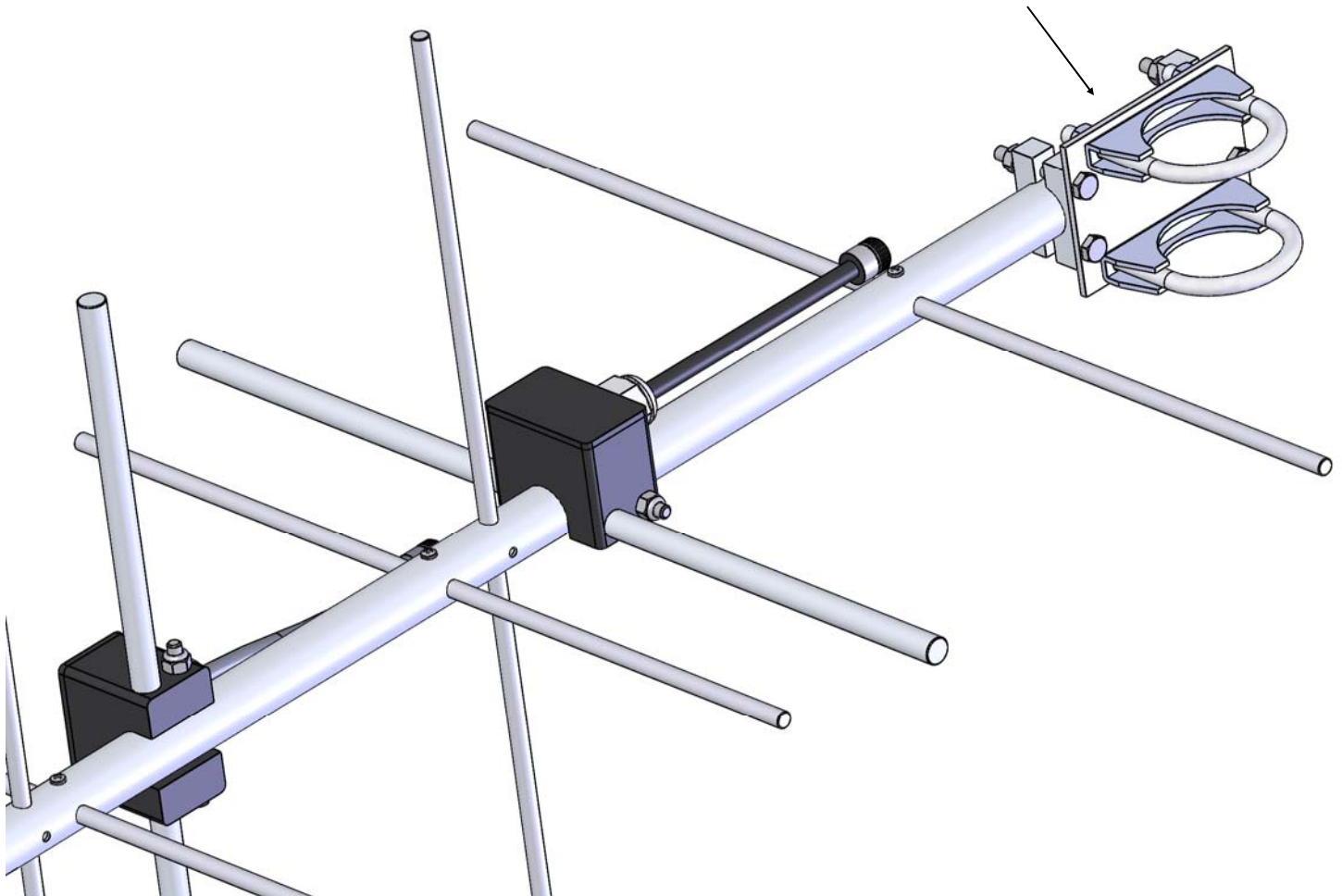
www.m2inc.com Email: sales@m2inc.com

300XP12 DIMENSION SHEET



300XP12 BOOM TO MAST PLATE DETAIL

BOOM TO MAST PLATE
3"X 4" 125" WITH
1" CRADDLES
BOLT, 1/4-20 X 2.0"
& 1/4-20 NUTS AND
LOCKWASHERS
2" U-BOLT & CRADDLES
& 5/16-18 NUTS AND
LOCKWASHERS



300XP12 PARTS & HARDWARE

DESCRIPTION	QTY
BOOM SECTION # 1 W/STIFFNER, 1" X .058 X 48" SOE.....	1
BOOM SECTION # 2, 1" X .058 X 17".....	1
ELEMENTS, 5/16" ROD x DIM SHEET.....	10
DRIVEN ELEMENT ASSEMBLY.....	2
BOOM-TO-MAST PLATE, 3 X 4 X 0.125" (M2APT0019).....	1
U-BOLT & CRADLE, 2".....	2
CRADLE 1.0", MACHINED (M2AMC0110).....	4
PENETROX / ZINC PASTE CUP.....	1
ASSEMBLY MANUAL.....	1

HARDWARE:

NUT, 5/16-18 SS.....	4
LOCKWASHER, 5/16 SS.....	4
NUT LOCKING, 1/4-20 SS.....	6
BOLT, 1/4-20 X 3.0 SS.....	2
BOLT, 1/4-20 X 2.0 SS.....	4
SCREW, 6-32 X 1.0 SS.....	12
LOCKWASHER, #6 SS.....	12
CABLE TIE, 8" NYLON.....	4

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