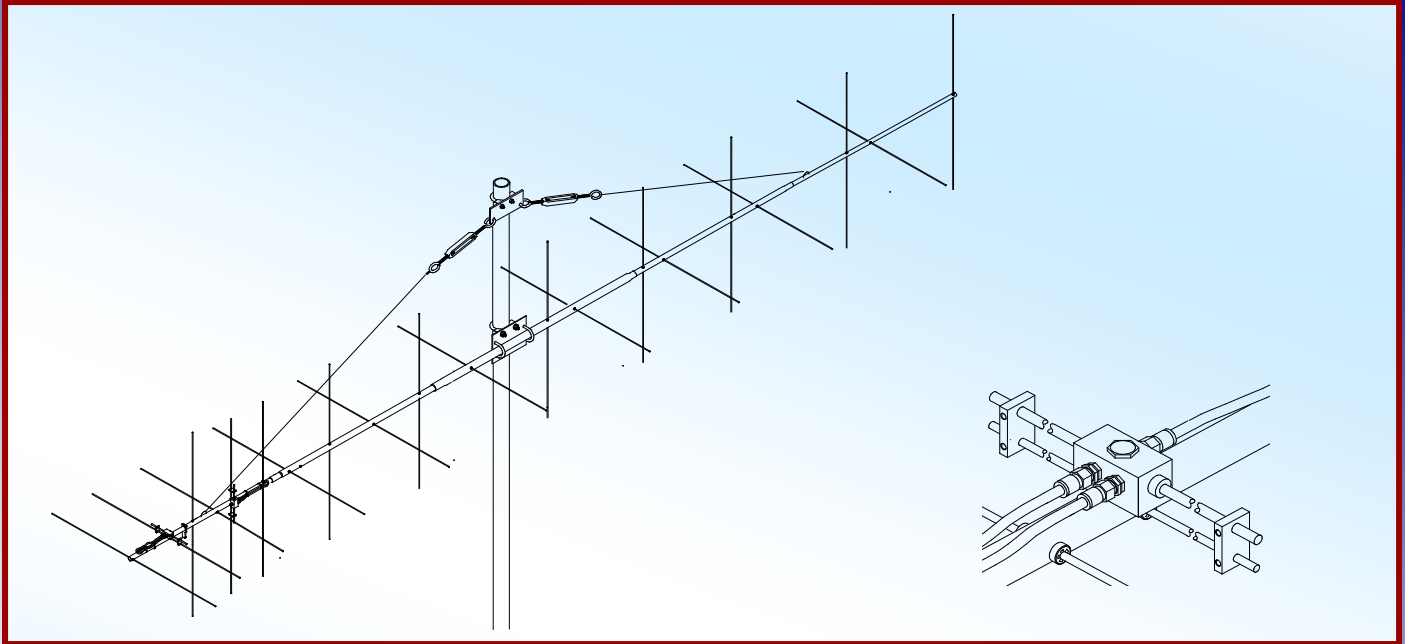




# M2 Antenna Systems, Inc.

## Model No: 128XP20



### SPECIFICATIONS:

Model .....	128XP20	Power Handling .....	1.5 kW
Frequency Range.....	121.95 To 136 MHz	Boom Length / Dia.....	228" / 1-1/2" To 1"
*Gain .....	13.91 dBi	Maximum Element Length.....	43"
Front to Back.....	21 dB Typical	Turning Radius:.....	Call
Beam Width .....	E=30° H=34°	Stacking Distance.....	Call
Feed Type .....	"T" Match	Mast Size.....	1-1/2" to 2" Nom.
Feed Impedance.....	50 Ohms Unbalanced	Wind Area / Survival.....	1.9 Sq. Ft. / 100 MPH
Maximum VSWR.....	1.5:1 Typical	Weight / Ship Wt.....	8 Lbs. / 12 Lbs.
Input Connector.....	"N" Female		

**\*Subtract 2.14 from dBi for dBd**

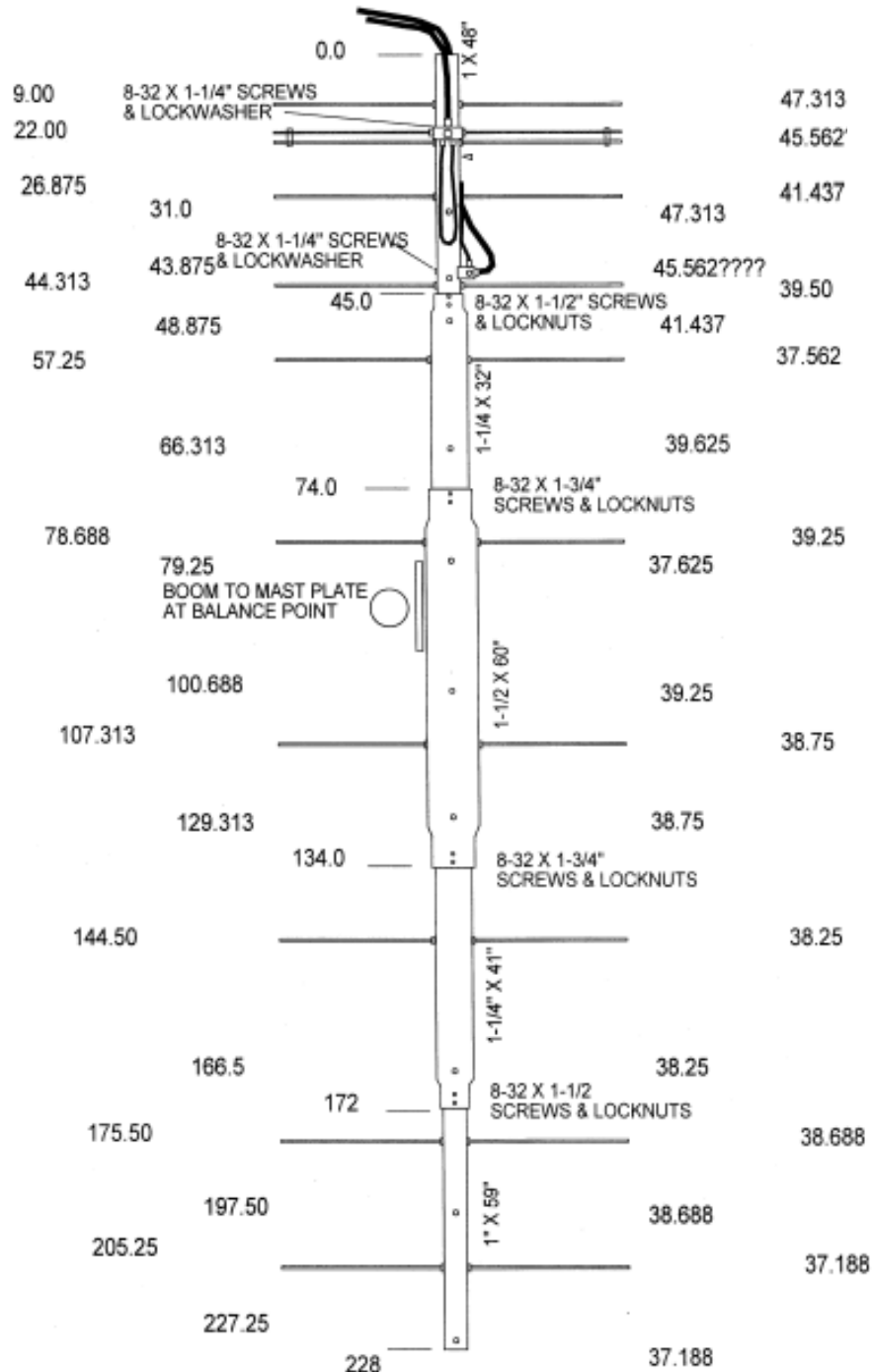
### FEATURES:

The 128XP20 is a high performance cross 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.

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 3/16" 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 128XP20.

# 128XP20 DIMENSION SHEET

## 128XP20 DIMENSION SHEET



DRW BY: M. STAAL	DATE: 5-5-01	M <sup>2</sup> ANTENNA SYSTEMS, INC.
DIMENSIONAL TOLERANCES		1500 N. DEL MAR AVE, FRESNO, CA 93711 508 432 6873
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		PART NAME:
DECIMALS	ANGLES	FRACTIONS
X ± .03	± 1/2	± 1/16
XX ± .015		
XXX ± .005	DIMENSIONS APPLY AFTER PLATING	
BREAK SHARP EDGES 0.0 MAX		128XP20 DIMENSION SHEET
FILLET R .005 MAX		MI PART NUMBER:
THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO M2 ANTENNA SYSTEMS, INC. ANY REPRODUCTION OR USE OF THIS DOCUMENT IS EXPRESSLY PROHIBITED WITHOUT THE WRITTEN AGREEMENT OF M2 ANTENNA SYSTEMS, INC. ANY OTHERS AGREE IN WRITING.		FILE NAME / REV:
		M2 P/N
		128XP20

# 128XP20 PARTS & HARDWARE

DESCRIPTION	QTY
BOOM SECTION #1, 1" X 48" .....	1
BOOM SECTION #2, 1-1/4" X 32" SOE .....	1
BOOM SECTION #3, 1-1/2" X 60" SBE.....	1
BOOM SECTION #4, 1-1/4" X 41" SOE .....	1
BOOM SECTION #5, 1" X 59" .....	1
BOOM TO MAST PLATE, 3/16" X 4" X 6" .....	1
DRIVEN ELEMENT ASSY.....	2
ROD ELEMENT, 3/16" SEE DIM SHEET .....	20
BALUN CABLE, 1/2 WAVE RG-6U .....	2
ASSEMBLY MANUAL .....	1

HARDWARE	QTY
SHORTING BARS, 1/4" X 3/4" X 1.532" .....	4
U-BOLT, 2" .....	2
U-BOLT, 1-1/2" .....	2
NUT, 5/16-18 SS .....	8
LOCK WASHER, SPLIT RING SS .....	8
SCREW, 8-32 X 1-3/4" SS.....	4
SCREW, 8-32 X 1-1/2" SS.....	4
SCREW, 8-32 X 1-1/4" SS.....	2
SET SCREW, 8-32 X 1/4" SS.....	8
LOCK WASHER, #8 SPLIT RING SS .....	2
NUT, NYLOCK 8-32 SS.....	10
NUT SEALS, 3/8-32.....	4
BUTTON INSULATOR, 3/16" .....	40
KEEPER, 3/16" SS .....	40
NYLON TIE, 6" .....	5
PUSH TUBE, 3/8" X 3" ALUMINUM .....	1
ALLEN WRENCH, 5/64" .....	1

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