** PROPRIETARY DATA **

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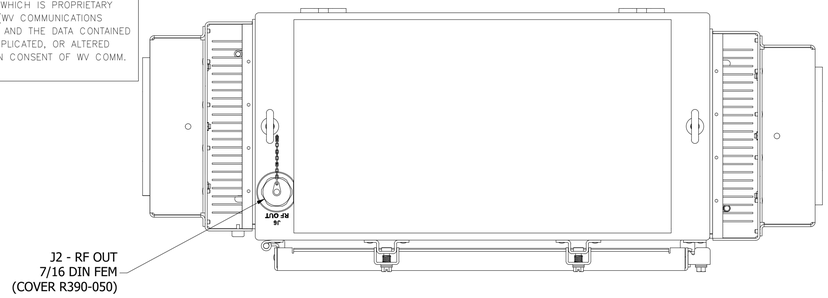
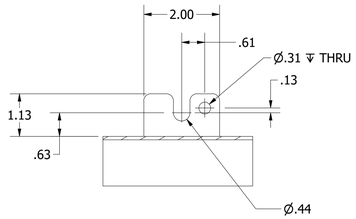
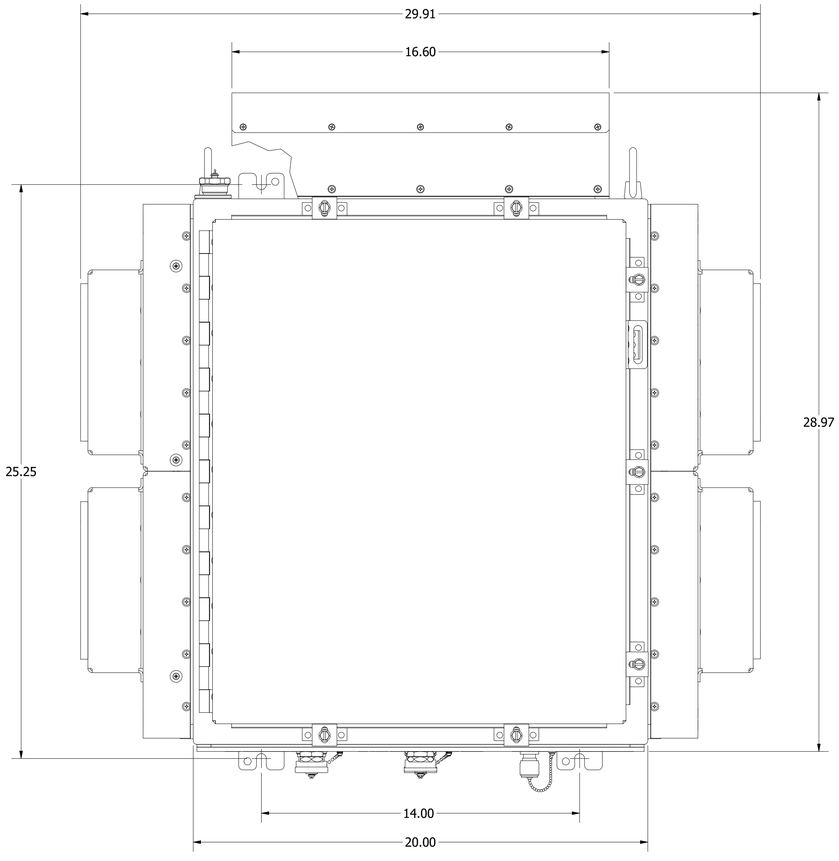
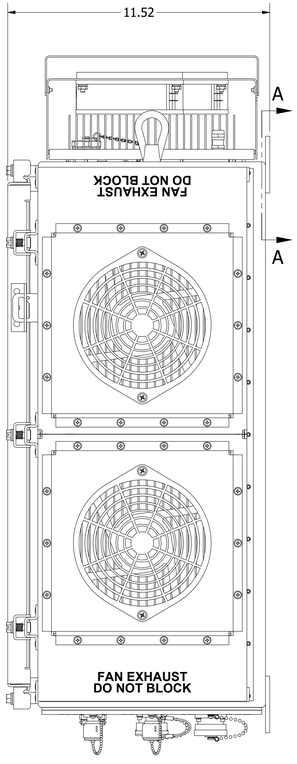
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	RELEASED	12/21/2021	TT
	B	J5-D WAS:SAFTY GROUND, HARMONICS WAS:-60dBc	9/29/2022	UY/tt

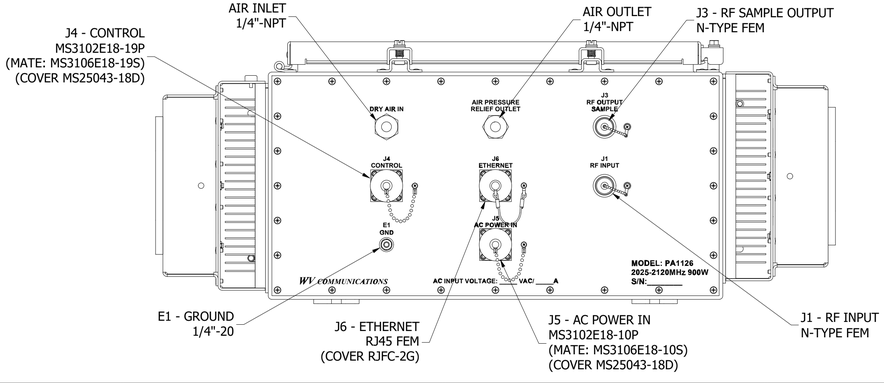




SECTION A-A
4X MTG TABS







RF OPERATING FREQUENCY RANGE:	2025-2120MHz
RF OUTPUT POWER:	900W (+59.5dBm) Minimum at P3dB Comp Pt.
RF INPUT POWER:	0dBm Nominal
RF INPUT POWER W/O DAMAGE:	+25dBm Maximum
SMALL SIGNAL GAIN:	60dB Minimum at P3dB Comp pt.
GAIN STABILITY:	±1.5dB Maximum over operating temperature range
GAIN FLATNESS:	±1.5dB p-p Maximum over 2025-2120MHz band, 1dB p-p Maximum over any 20MHz Range 0.2dB p-p Maximum over any 1MHz bands into 1.25:1 Load VSWR
LOAD VSWR:	Protected to operate into any Load Mismatch & Phase angle without Damage
RF ATTENUATION RANGE:	0 to 30dB in 0.1dB Steps
INPUT AND OUTPUT IMPEDANCE:	50Ω Nominal
INPUT/OUTPUT VSWR:	1.3:1 Maximum (Ref 50Ω)
NOISE FIGURE:	8dB Maximum @ maximum gain
RESIDUAL AM NOISE:	-45dBc/0-10KHz, -78dBc at 500kHz, -80dBc over 0.5-1MHz
TWO TONE INTERMODULATION:	-25dBc Maximum @ 3dB backoff from P3dB Comp Pt. -29dBc Maximum @ 7dB backoff from P3dB Comp Pt.
HARMONIC SIGNAL LEVELS:	-30dBc Maximum
SPURIOUS SIGNAL LEVELS:	-60dBc Maximum over 2200-2300MHz -90dBc over 7.6-8.5GHz
RF MONITOR OUTPUT PORT:	-50dBc ±2dB Maximum
GROUP DELAY:	Linear: 0.02ns/MHz Maximum Parabolic: 0.003ns/MHz² Maximum Ripple: 1.0ns p-p Maximum
AM/PM CONVERSION:	2.5°/dB Maximum @ P3dB
OPERATION MODES:	Linear (VVA), Auto Level Control (ALC)
STANDARD FEATURES:	Amplifier STANDBY/ONLINE, Mute Power Units in dBm or Watts, Power Adjustment, Output
INDICATORS & ALARMS:	Thermal Overload/Shutdown, FWD/REF RF Output Power, Power Supply Voltage & Current, RF Power Module(s) Status/ Fault, Muting
TEMPERATURE RANGES:	Operating: -20 to +55°C (-20°C with 10 minutes warmup) Non-Operating:-40 to +85°C
LOCAL CONTROL:	Via Internal Color Touchscreen LCD
REMOTE CONTROL INTERFACE:	Ethernet UDP/IP & RS-422 (both)
TX INHIBIT:	Via J5 PINS A&B >18Vdc- Amplifier On (24Vdc Nominal) <6Vdc - Amplifier Off
COOLING REQUIRED:	Via Built-In Forced Air Cooling
AMPLIFIER PROTECTION:	Over temperature, VSWR & Overdrive
AC INPUT POWER:	208±10%VAC, 47-63 Hz, Three Phase, 4,800W Maximum
CONNECTORS:	
RF INPUT, OUTPUT & SAMPLE:	RF input & Sample N-type Female, Output 7/16 DIN Female
CONTROL (I/O):	10-Pin MS-type RS-232/Control (mate provided) RJ45 Ethernet, RFJTV21
AC INPUT:	7-Pin MS-type (mate provided)
ENCLOSURE:	Waterproof with Positive Pressure air inlet, 1 PSI Safety relief valve
WEIGHT:	120Lbs Maximum
SIZE:	29.7"X28.5"X11.50"
PAINT:	White Color # 17925 Fed-std-595 Per MIL-PRF-82585

EXTERNAL INTERFACE CONNECTORS			
REF DES	DESCRIPTION	CONN TYPE	CONN MATE
J1	RF INPUT	N-TYPE FEM	N-TYPE MALE
J2	RF OUTPUT	7/16 DIN-F	7/16 DIN-M
J3	RF SAMPLE OUTPUT	N-TYPE FEM	N-TYPE MALE
J4	CONTROL	MS3102E18-19P	MS3106E18-19S
J5	AC POWER	MS3102E18-10P	MS3106E18-10S
J6	ETHERNET	RJ-45	RJ-45

J4 - CONTROL	
PIN#	DESCRIPTION
A	REMOTE INTERLOCK +V
B	REMOTE INTERLOCK -V
C	N/U
D	RX+
E	RX-
F	RS-422 RTN
G	TX+
H	TX-
J	N/U
K	N/U

J6 - ETHERNET	
PIN#	DESCRIPTION
1	TX+
2	TX-
3	RX+
4	N/U
5	N/U
6	RX-
7	N/U
8	N/U

J5 - AC POWER	
PIN#	DESCRIPTION
A	PHASE 1
B	PHASE 2
C	PHASE 3
D	NEUTRAL

900-50525	PA1126
NEXT ASSEMBLY	USED ON
APPLICATION	DO NOT SCALE DRAWING

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. TOLERANCES ARE:
FRACTIONS ± 1/64 | DECIMALS .X± .1, .XX± .01, .XXX± .005 | ANGLES ± 0°30' | HOLES .XX± .005, .XXX +.003 -.001
MACHINED FINISH: 32 RMS
REMOVE BURRS .005 MAX
MATERIAL: -
FINISH: -

APPROVALS	DATE
DRAWN: TONY T	12/21/2021
CHECKED: TT	12/21/2021
MECH ENGR: TT	12/21/2021
ELEC ENGR: TT	12/21/2021
PRODUCTION: AM	12/21/2021
Q.A.: SG	12/21/2021

WV Communications
1125 A Business Center Circle
Newbury Park, CA

AMPLIFIER
2025-2120MHz 900W OUTDOOR
MODEL: PA1126

SIZE	CAGE CODE	DWG. NO.	REV
D	1GFQ7	050-51128	A

SCALE: NONE | MODEL NO.: PA1126 | SHEET: 1 OF 1

REV: A
DWG NO.: 050-51128