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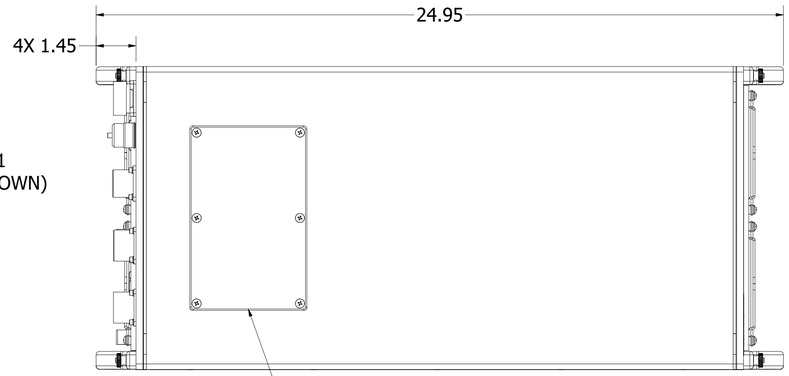
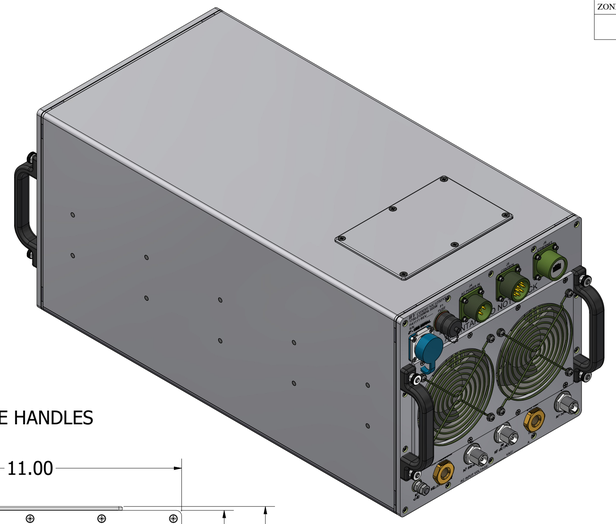
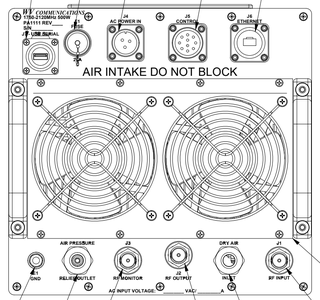
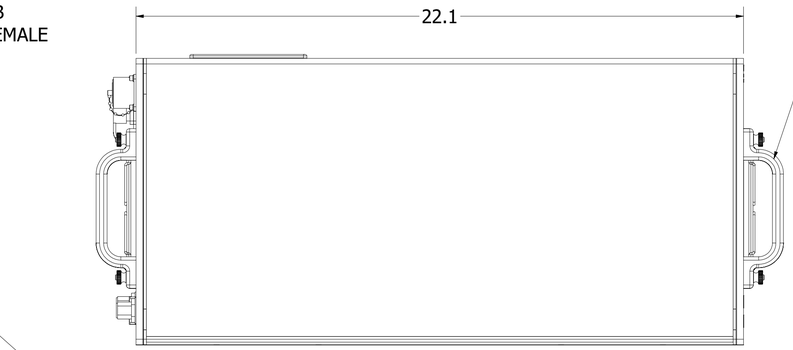
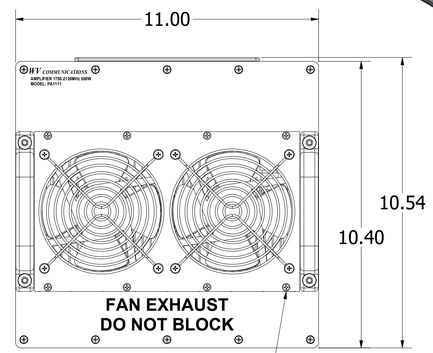
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	RELEASED	9/19/2023	TT











4X REMOVABLE HANDLES

E1
GND STUD
1/4-20

1/4"-NPT
AIR OUTLET

J3 RF MONITOR
"N" FEMALE

J7 USB-SERIAL
USB 3.0
DH-24-J_USB3_212_SX-43-401
(PROTECTIVE COVER NOT SHOWN)

F1 FUSE
15A SLOW BLOW

J4 POWER
3 PIN MALE
MS3102E16-10P

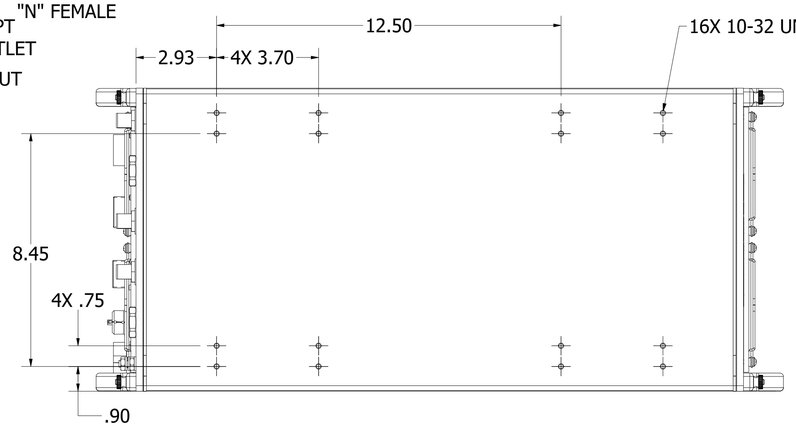
J5 CONTROL
10 PIN MALE
MS3102E18-19P

J6 ETHERNET
RJF-21B
RJ45 FEMALE

J1 RF INPUT
"N" FEMALE

1/4"-NPT
AIR INTLET

J2 RF OUTPUT
"N" FEMALE



J7 - USB SERIAL	
PIN NO.	DESCRIPTION
1	+5VDC
2	DATA-
3	DATA+
4	GROUND

J5 - CONTROL	
PIN LTR	DESCRIPTION
A	INTERLOCK +V
B	INTERLOCK -V
C	BLANKING IN
D	RS-232 TX
E	RS-232 RX
F	GND
G	RELAY SELECT OUTPUT
H	N/C
J	N/C
K	BLANKING OUT

AC POWER CONNECTOR - J4	
PIN LTR	DESCRIPTION
A	230 VAC LINE
B	230 VAC NEUTRAL
C	SAFTEY GROUND

EXTERNAL INTERFACE CONNECTORS			
REF DES	DESCRIPTION	CONNECTOR TYPE	MATING CONNECTOR TYPE
J1	RF INPUT	N-F	N-M
J2	RF OUTPUT	N-F	N-M
J3	RF MONITOR	N-F	N-M
J4	AC POWER INPUT	MS3102E16-10P	MS3106E16-10S
J5	CONTROL	MS3102E18-19P	MS3106E18-19S
J6	ETHERNET	RJFTV21N	RJFTV6N
J7	USB SERIAL	DH-24-J/USB3.0	USB 3.0 PLUG

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

900-50461	PA1111
NEXT ASSEMBLY	USED ON
APPLICATION	

OPERATING FREQUENCY RANGES: 1750-2120MHz
RF OUTPUT POWER: 500W (+57dBm) Minimum @ P3dB Comp pt.
GAIN: 75dB Minimum @ P3dB Comp pt.
RF INPUT POWER: -18 to -8dBm Nominal
RF INPUT POWER W/O DAMAGE: +25dBm Maximum
SMALL SIGNAL GAIN FLATNESS: ±1dB Maximum into 1.25:1 VSWR
INPUT AND OUTPUT IMPEDANCE: 50Ω Nominal
INPUT VSWR: 1.25:1 Maximum
OUTPUT VSWR: 2.0:1 Maximum
HARMONIC SIGNAL LEVELS: 60dBc Maximum
SPURIOUS SIGNAL LEVELS: 60dBc Maximum
COUPLED OUTPUT: 40dBc Nominal
RF ATTENUATION RANGE: 0 to 30dB in 0.1dB Steps
LOCAL CONTROL: Via Internal Color Touchscreen LCD
REMOTE CONTROL: Via USB & Ethernet UDP/IP
TX INTERLOCK (INHIBIT/MUTE): Via J5 PINS A&B
18-25Vdc (24VDC Nominal) – Amplifier On
0-5Vdc – Amplifier Off
STANDARD FEATURES: Amplifier STANDBY/ONLINE
Linear (VVA), Auto Level Control (ALC)
Units display in dB or Watts
Fault Indications; Module Operating Temp
TEMPERATURE RANGES: Operating -40° to +60°C
15 Minutes delay required for Cold Start
Storage -40° to +85°C
HUMIDITY: 0-100% Condensing
All Connectors must be Mated in order to meet the 100% Condensing Humidity specification
COOLING REQUIRED: Via Built-In Forced Air Cooling
AMPLIFIER PROTECTION: Over temperature, VSWR & Overdrive
AC INPUT POWER: 170-264VAC, 47-63 Hz, Single Phase
1750W Maximum (AC Power Includes Amplifier Heater)
ENCLOSURE: Water proof with Positive Pressure air inlet
1PSI safety relief valve
WEIGHT: 70 LBs Maximum
SIZE: 25.56"X13.0"X11.05
PAINT: Per MIL-PRF-82585 White,
Color # 17925 Per Fed-std-595

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	9/19/2023
CHECKED TT	9/19/2023
MECH ENGR TT	9/19/2023
ELEC ENGR LU	9/19/2023
PRODUCTION AM	9/19/2023
Q.A. SG	9/19/2023

DO NOT SCALE DRAWING

WV Communications 1125 A Business Center Circle Newbury Park, CA

AMPLIFIER 1750-2120MHz 500W
COMPACT OUTDOOR SSPA
MODEL: PA1111

SIZE	CAGE CODE	DWG. NO.	REV
D	1GFQ7	050-51035	A
SCALE NONE	Model No. PA1111	SHEET 1 OF 1	

REV A
050-51035
DWG NO.