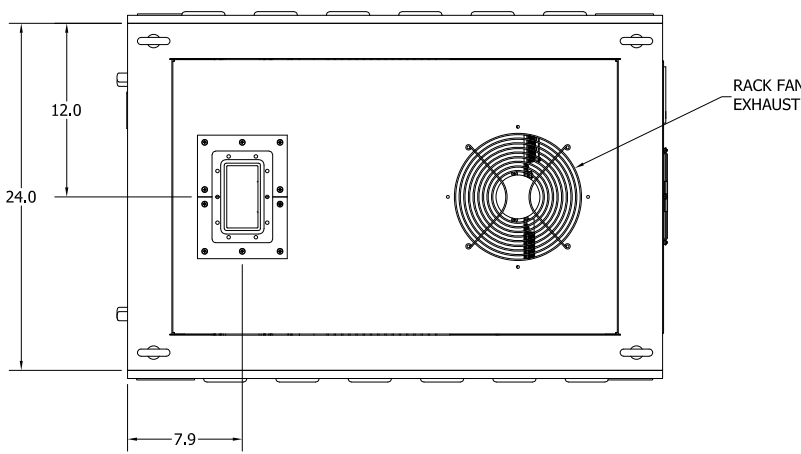


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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
A		RELEASED	5/10/2019	TT



D

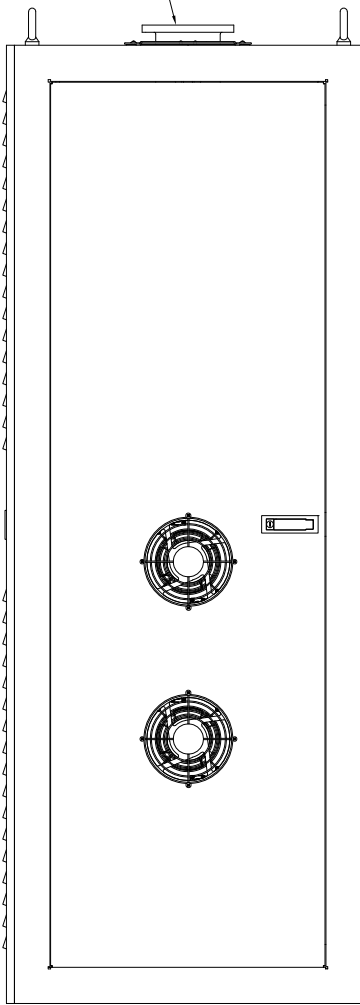
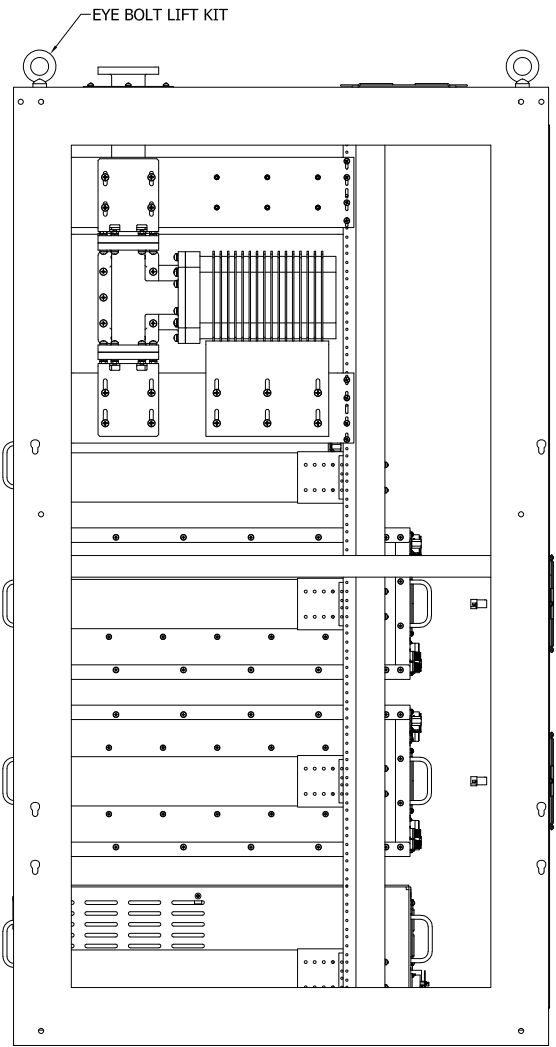
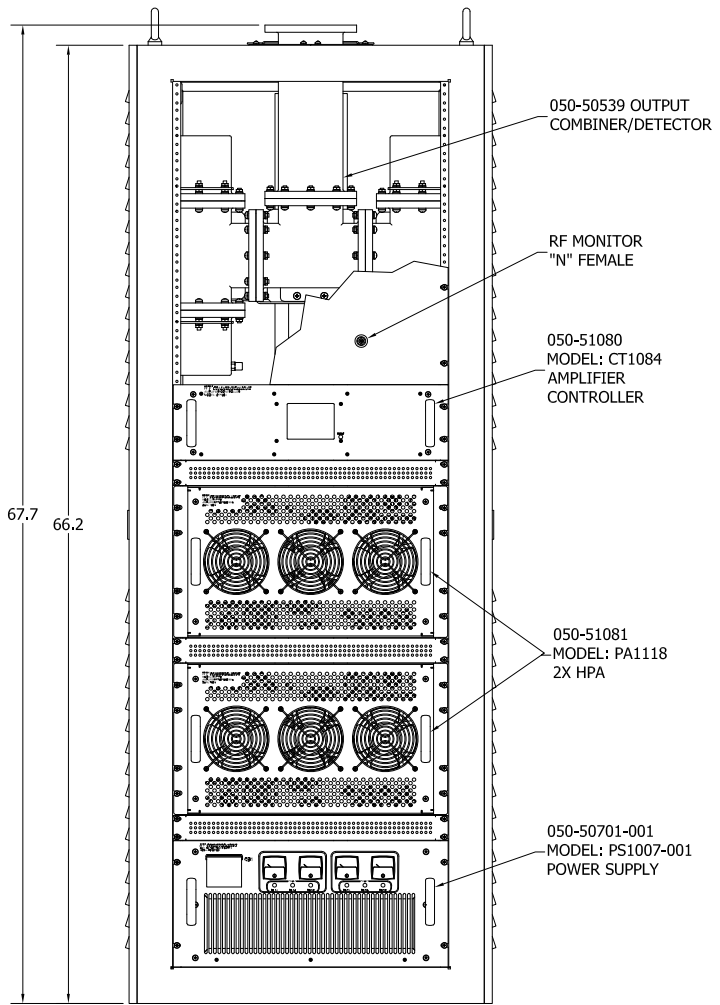
D

**SPECIFICATIONS SUMMARY**

**OPERATING FREQUENCY RANGE:** 1750-1850MHz  
**RF OUTPUT POWER:** 2.25kW Minimum at P1dB Compression Point  
**RF OUTPUT MONITOR:** -60dBc Nominal  
**RF OUTPUT PROTECTION:** Integral Output protection - No Oscillation at any Load Impedance & Phase Angle  
**RF INPUT DRIVE:** 0dBm Nominal ±3dB Range  
**RF GAIN:** 67dB Nominal  
**RF GAIN STABILITY/TIME:** ±0.25dB Maximum over 24 Hours  
**RF GAIN STABILITY/TEMPERATURE:** ±0.25dB Maximum over 10 to 40°C  
 ±0.5dB Maximum over 10 to 50°C  
**RF GAIN SLOPE:** 0.2dB/MHz Maximum over any 5MHz Band in range  
**MAXIMUM RF INPUT POWER:** +10dBm Maximum W/O Damage  
**RF OUTPUT POWER GAIN FLATNESS:** ±0.75dB Maximum over the Band Into 1.3:1 Load VSWR  
 ±0.25dB Maximum over any 4MHz in Band  
**RESIDUAL AM:** -50dBc Maximum over 20 - 400Hz  
 -60dBc Maximum over 400Hz to 2kHz  
 -80dBc Maximum over 2kHz to - 500kHz  
**RESIDUAL PHASE NOISE:** 2° RMS Maximum at 500Hz to 1MHZ offset  
**AM/PM NOISE:** 3° /dB Maximum  
**PHASE NOISE:** Exceeds requirements of IESS-308/309 by 10dB at 10dB Back-off of rated power  
**INPUT AND OUTPUT IMPEDANCE:** 50Ω Nominal  
**INPUT / OUTPUT VSWR:** 1.5:1 Maximum (Ref 50Ω)  
**GROUP DELAY:** 3.0nSec/MHz Maximum Linear  
 2.0nSec/MHz<sup>2</sup> Maximum Parabolic  
 4.0nSec Peak-Peak Ripple Maximum  
**HARMONICS LEVELS:** -70dBc Maximum  
**SPURIOUS LEVELS:** -60dBc Maximum  
**OUTPUT INTERMODULATION:** -29dBc Maximum with 2 equal carriers 5MHz apart at 7dB below rated level  
**RF OUTPUT CONNECTOR:** Waveguide CPR430G Flange  
**OUTPUT POWER CONTROL RANGE:** 25dB Minimum in 0.1dB Steps  
**DRAWER COOLING:** Forced air via integral Cabinet bottom / Front Panel Intake and Rack top / Rear Panel Exhaust Fans  
**OVER TEMPERATURE PROTECTION:** Thermostat Shut-Off Indication at +77°C Heatsink and Power HeatsinkTemperatures  
**MONITORING & CONTROL:** Via Front Panel Color LCD Touchscreen or Remote via Ethernet UDP Protocol  
**REMOTE INHIBIT/INTERLOCK:** Via J6 BNC Female Center Conductor  
 24VDC - Amplifier On  
 0VDC - Amplifier Off  
**MTBF:** 10,000 Hours Nominal  
**MTTR:** 1.25 Hours Nominal  
**GRACEFUL DEGRADATION:** Integral Output protection – Protection of Output Transistor Failures, Redundant 1:1 Power Supply design  
**SYSTEM PRESSURIZATION:** 2 PSI Nominal Dry Air Customer supplied  
**TEMPERATURE RANGES:** Operating 10 to +40°C  
 Non Operating 0 to +70°C  
**ALTITUDE:** Operating: MSL to 10,000 Ft  
 Non Operating: to 40,000 Ft  
**DRAWERS CHASSIS DEPTH:** 26.75" Maximum  
**AC INPUT POWER:** 190-264VAC, 47-63Hz Three (3) Phase WYE at 10kW Maximum (8.75kW Typical at 2.25KW RF Output Power)

C

C



REMOVABLE FLUSH SIDE PANELS NOT SHOWN FOR CLARITY

B

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UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. TOLERANCES ARE:  
 FRACTIONS DECIMALS ANGLES HOLES  
 ± 1/64 .XXX.01 ±0°30' .XXX.005  
 .XXX.005 .XXX.005 .XXX.005  
 MACHINED FINISH: 32 RMS REMOVE BURRS .005 MAX

APPROVALS	DATE
DRAWN TONY T.	5/10/2019
CHECKED TT	5/10/19
MECH ENGR T.T.	5/10/19
ELEC ENGR JT	5/10/19
PRODUCTION AM	5/10/19
Q.A. SG	5/10/19

<b>WV Communications</b> 1125-A Business Center Circle Newbury Park, CA	
<b>AMPLIFIER SYSTEM</b> 1750-1850MHZ 2.25KW SYS1054	
SIZE D	CAGE CODE 1GFQ7
DWG. NO. 050-51082	REV A
SCALE NONE	SHEET 1 OF 1

900-50491	SYS1054
NEXT ASSEMBLY	USED ON
APPLICATION	DO NOT SCALE DRAWING

REV. NO. 050-51082

DC-P004-0011-3, REV. C, 06/19