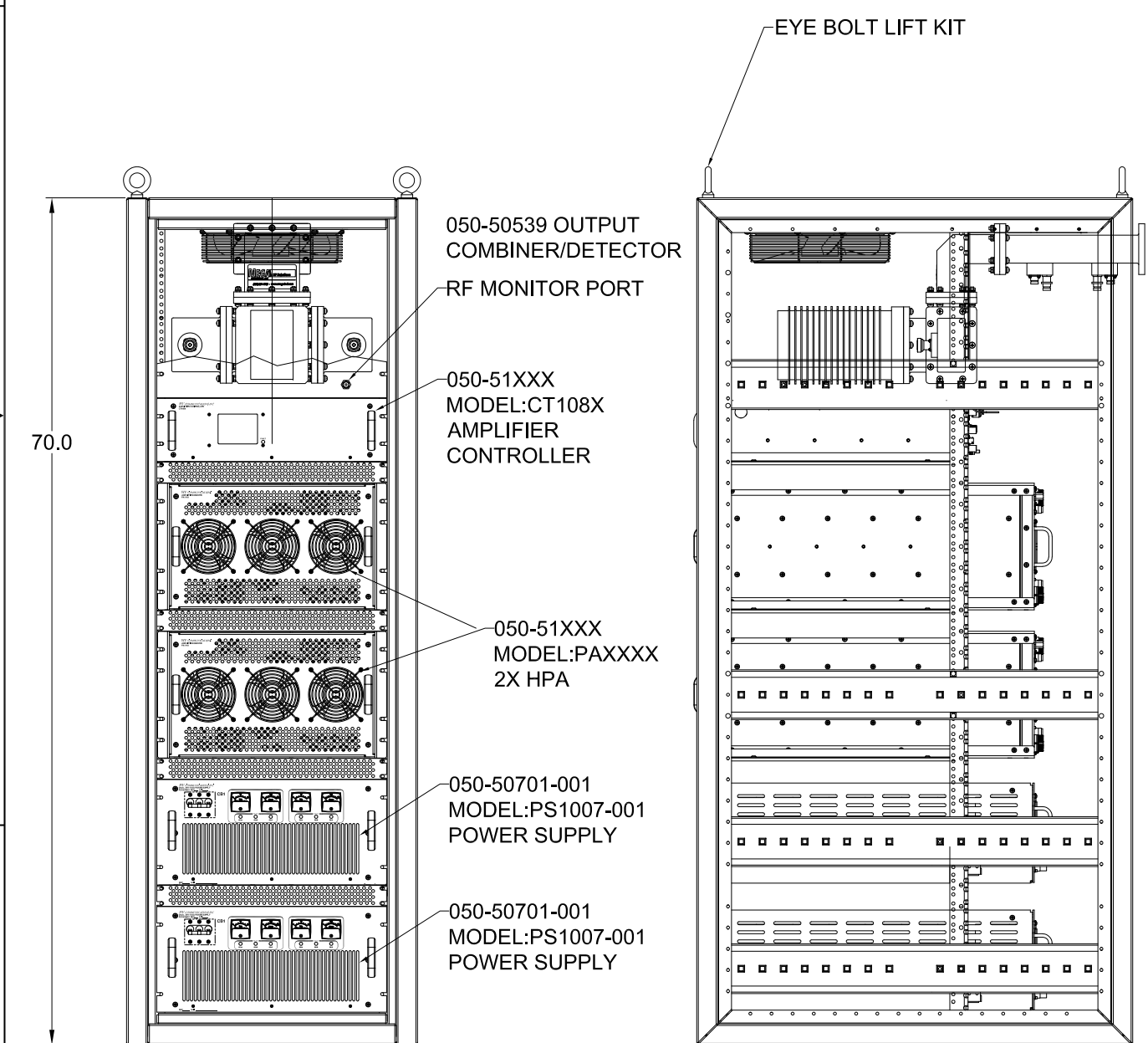
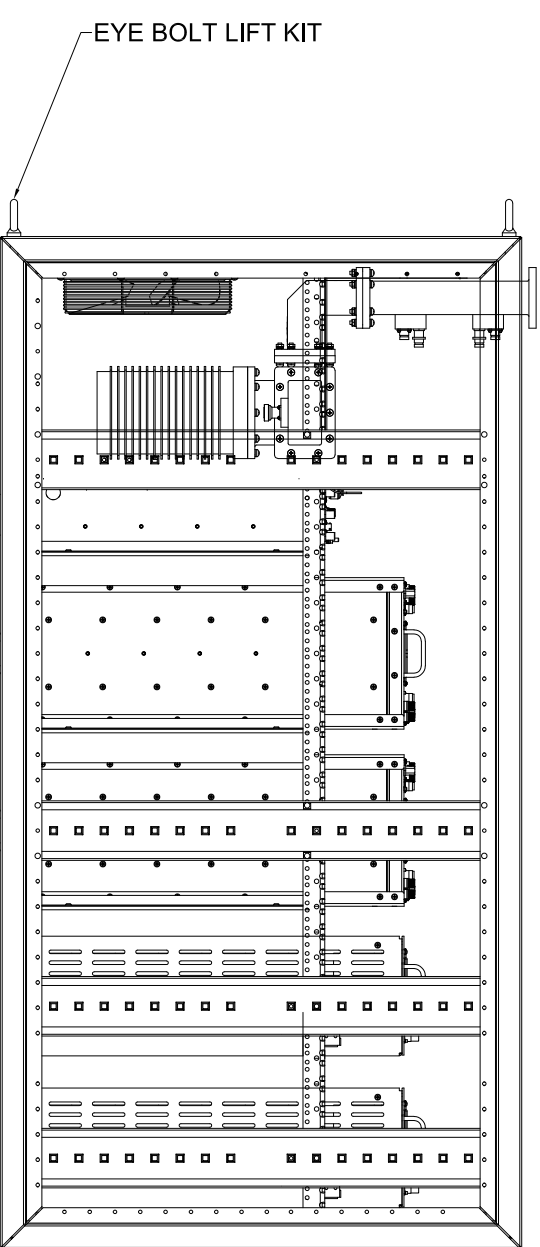


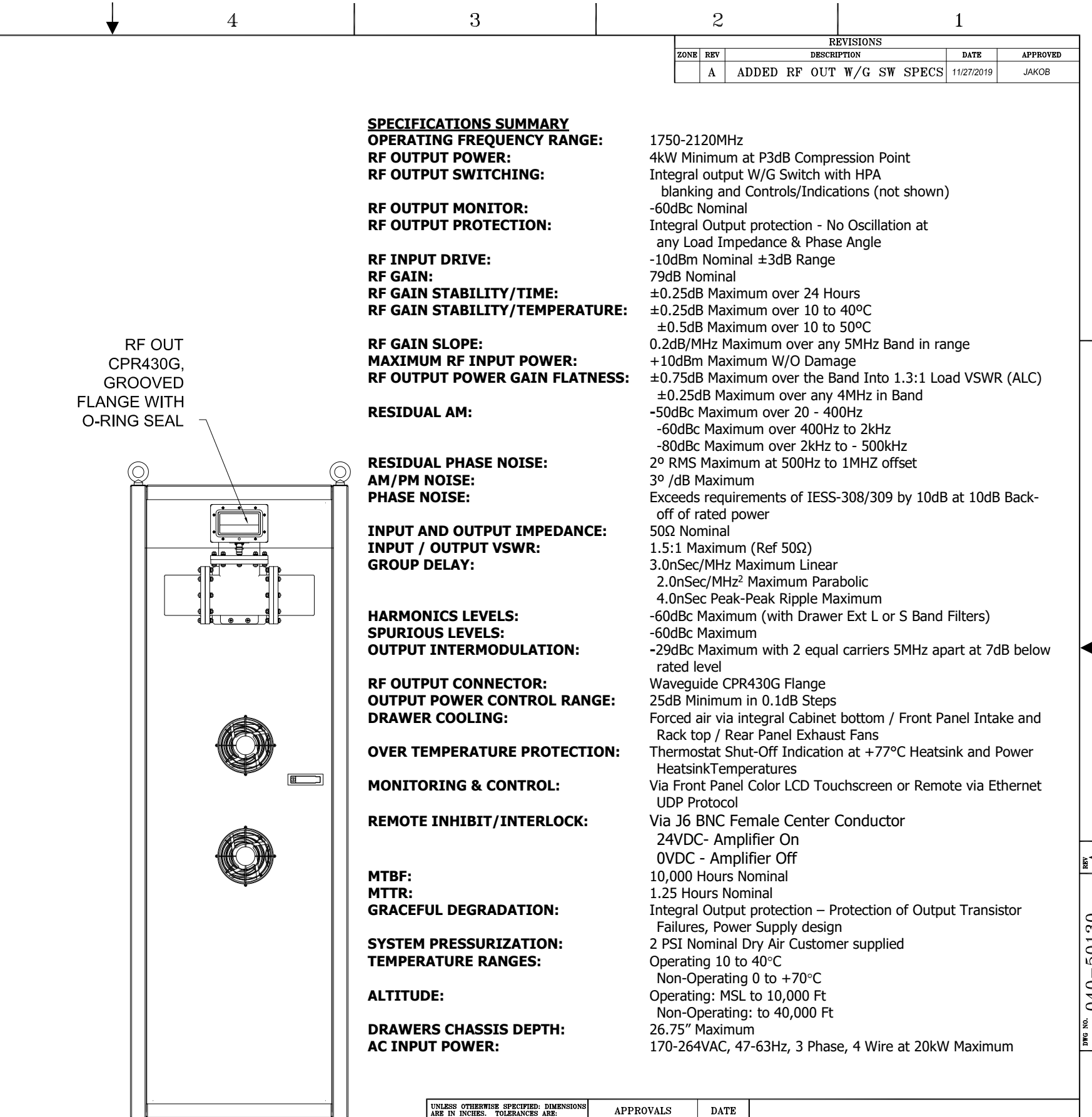
TOP VENTED FRONT PANEL
VENTS NOT SHOWN FOR CLARITY



- 050-50539 OUTPUT COMBINER/DETECTOR
- RF MONITOR PORT
- 050-51XXX MODEL:CT108X AMPLIFIER CONTROLLER
- 050-51XXX MODEL:PAXXX 2X HPA
- 050-50701-001 MODEL:PS1007-001 POWER SUPPLY
- 050-50701-001 MODEL:PS1007-001 POWER SUPPLY



REMOVABLE FLUSH SIDE PANELS NOT SHOWN FOR CLARITY



RF OUT
CPR430G,
GROOVED
FLANGE WITH
O-RING SEAL

SPECIFICATIONS SUMMARY

- OPERATING FREQUENCY RANGE:** 1750-2120MHz
- RF OUTPUT POWER:** 4kW Minimum at P3dB Compression Point
- RF OUTPUT SWITCHING:** Integral output W/G Switch with HPA blanking and Controls/Indications (not shown)
- RF OUTPUT MONITOR:** -60dBc Nominal
- RF OUTPUT PROTECTION:** Integral Output protection - No Oscillation at any Load Impedance & Phase Angle
- RF INPUT DRIVE:** -10dBm Nominal ±3dB Range
- RF GAIN:** 79dB 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 (ALC)
- RESIDUAL AM:** ±0.25dB Maximum over any 4MHz in Band
- RESIDUAL PHASE NOISE:** -50dBc Maximum over 20 - 400Hz
- AM/PM NOISE:** -60dBc Maximum over 400Hz to 2kHz
- PHASE NOISE:** -80dBc Maximum over 2kHz to - 500kHz, 2° RMS Maximum at 500Hz to 1MHz offset, 3° /dB Maximum
- INPUT AND OUTPUT IMPEDANCE:** Exceeds requirements of IESS-308/309 by 10dB at 10dB Back-off of rated power, 50Ω Nominal
- INPUT / OUTPUT VSWR:** 1.5:1 Maximum (Ref 50Ω)
- GROUP DELAY:** 3.0nSec/MHz Maximum Linear, 2.0nSec/MHz² Maximum Parabolic, 4.0nSec Peak-Peak Ripple Maximum
- HARMONICS LEVELS:** -60dBc Maximum (with Drawer Ext L or S Band Filters)
- 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 Heatsink Temperatures
- 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
- MTRR:** 1.25 Hours Nominal
- GRACEFUL DEGRADATION:** Integral Output protection – Protection of Output Transistor Failures, 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:** 170-264VAC, 47-63Hz, 3 Phase, 4 Wire at 20kW Maximum

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	ADDED RF OUT W/G SW SPECS	11/27/2019	JAKOB

**** PROPRIETARY DATA ****
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UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. TOLERANCES ARE:			
FRACTIONS	DECIMALS	ANGLES	HOLE
± 1/64	±.01	±0°30'	±.005
	.XXX±.005		.XXX±.001
MACHINED FINISH: 32 RMS REMOVE BURRS .005 MAX			
MATERIAL			
FINISH			
NEXT ASSEMBLY			
APPLICATION			

APPROVALS	DATE
DRAWN JAKOB	8/22/2019
CHECKED TT	8/22/2019
MECH ENGR TT	8/22/2019
ELEC ENGR JO	8/22/2019
PRODUCTION AM	8/22/2019
Q.A. SG	8/22/2019

WV Communications 1125-A Business Center Circle
Newbury Park, CA

AMPLIFIER SYSTEM
1750-2120MHz 4kW
SYS1055

SIZE	CAGE CODE	DWG. NO.	REV
D	1GFQ7	040-50130	A

SCALE NONE SHEET 1 OF 1

REV. NO. 040-50130 DC-P004-0011-3, REV. C, 06/08