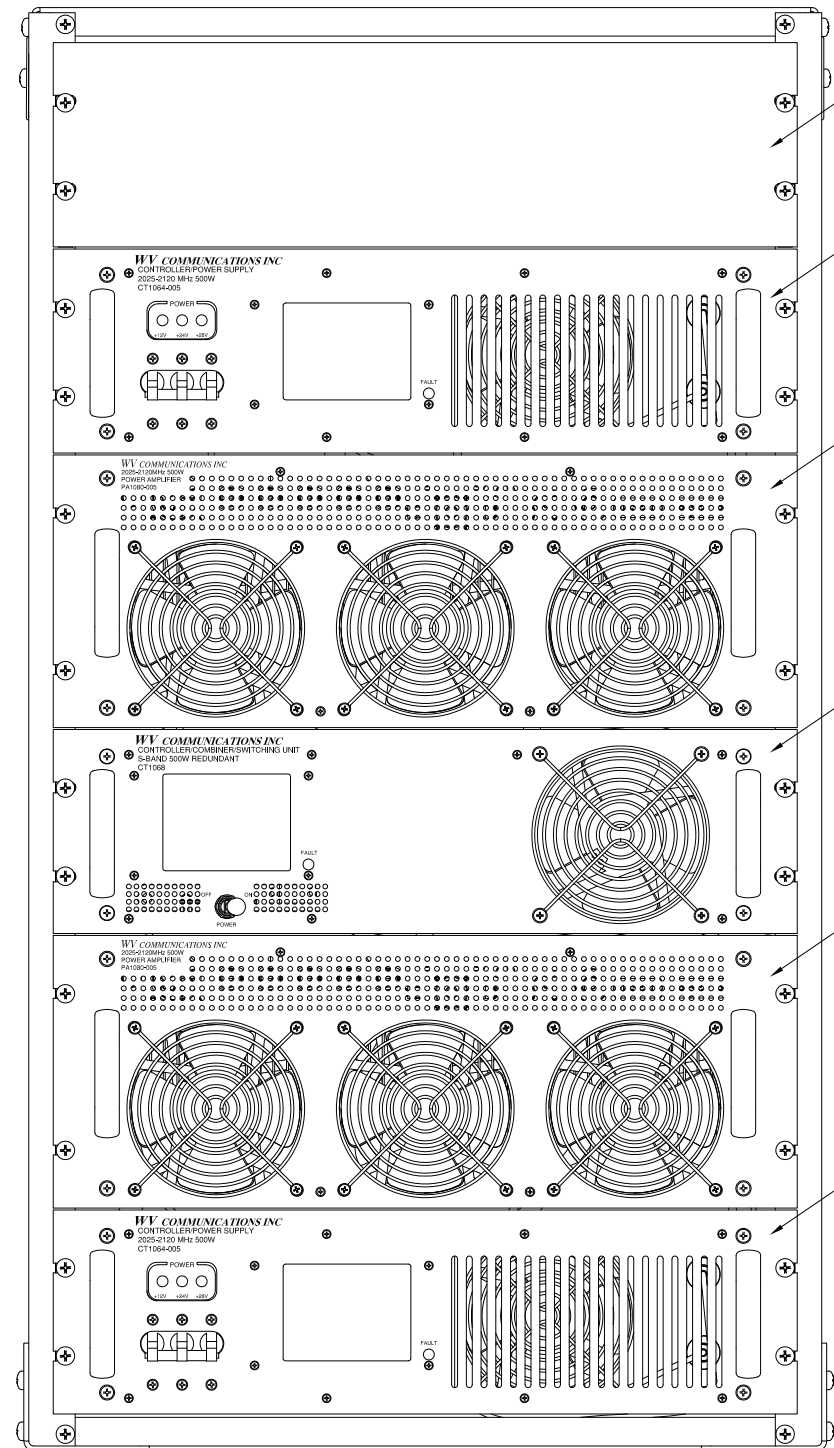


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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
A		RELEASED	11/05/14	TT

D  
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A



3U BLANK PANEL

CONTROLLER/POWER SUPPLY  
 2025-2120MHz 500W  
 050-50958- CT1064-005

POWER AMPLIFIER  
 2025-2120MHz 500W  
 050-50957 - PA1080-005

CONTROLLER/COMBINER/SWITCHING UNIT  
 S-BAND 500W REDUNDANT  
 050-50954 - CT1068

POWER AMPLIFIER  
 2025-2120MHz 500W  
 050-50957 - PA1080-005

CONTROLLER/POWER SUPPLY  
 2025-2120MHz 500W  
 050-50958- CT1064-005

**REDUNDANT/COMBINED AMPLIFIER SPECIFICATIONS SUMMARY**

**OPERATING FREQUENCY RANGES:** 2025-2120MHz  
**RF OUTPUT POWER:** Two each 500W Minimum at 1dB Compression  
**RF OUTPUT MODES:**  
**Mode 1:** Two each 500W Minimum at P1dB Compression Operating One Amplifier at the time, 2<sup>nd</sup> Amplifier in Backup mode  
**Mode 2:** Combined Amplifiers  
**AMPLIFIER SWITCHING:** Automatic Blanking to facilitate safe switching with all modes  
**RF OUTPUT PROTECTION:** Integral Output protected No Oscillation at any Phase Angle at any Load Impedance & Phase Angle  
**RF INPUT POWER:** 0dBm±3dB Range Nominal  
**MAXIMUM RF INPUT POWER:** +10dBm Maximum W/O Damage  
**RF OUTPUT POWER GAIN FLATNESS:** ±2dB Maximum over 2025-2120MHz Into 1.3:1 VSWR (Ref 50Ω)  
 ±0.25dB Maximum over any 4MHz Band in the 2025-2120MHz Range Into 1.3:1 VSWR  
**RESIDUAL AM:** 50dBc Maximum  
**RESIDUAL PHASE NOISE:** 2° RMS Maximum at 500Hz to 1MHz offset  
**INPUT AND OUTPUT IMPEDANCE:** 50Ω Nominal  
**INPUT / OUTPUT VSWR:** 2.0:1 Maximum (Ref 50Ω)  
**NOISE:** -180dBc/Hz Maximum over 2200-2300MHz  
**SPURIOUS & HARMONICS LEVELS:** -145dBc Maximum over 2200-2300MHz  
 -55dBc Maximum in 2025-2120MHz  
 -85dBc Maximum below 2025MHz & above 2300MHz  
**RF OUTPUT CONNECTOR:** 'N' Female  
**OPERATION MODE:** Class 'AB' Linear  
**OUTPUT POWER CONTROL:** 25dB Range Minimum  
**OUTPUT POWER CONTROL STEP:** 0.1dB Nominal  
**DRAWER COOLING:** Forced air via integral Front Panel Intake and Rear Panel Exhaust Fans  
**OVER TEMPERATURE PROTECTION:** Thermostat Shut-Off Indication at +77°C Heatsink Temperature  
**MONITORING & CONTROL:** Local: Via Front Panel Color LCD Touchscreen  
 Remote: Via Ethernet UDP Protocol/RS-232  
**MTBF:** 10,000 Hours Nominal  
**MTRR:** 1.25 Hours Nominal  
**TEMPERATURE RANGES:** Operating 0 to +50°C  
**ALTITUDE:** MSL to 10,000 Ft  
**HUMIDITY:** 0 to 95% Non-Condensing  
**DRAWERS CHASSIS DEPTH:** 27" Maximum  
**AC INPUT POWER:** 180-264VAC, 47-63Hz Three (3) Phase at 2.5KW Maximum  
 (2KW Typical at 500W RF Output Power)  
**FRONT PANEL COLOR:** GRAY per MIL-STD-595 26307

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A

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

APPROVALS	DATE
DRAWN TONY T.	11/5/2014
CHECKED TT	11/05/14
MECH ENGR TT	11/05/14
ELEC ENGR JT	11/05/14
PRODUCTION AM	11/05/14
Q.A. SH	11/05/14

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

**AMPLIFIER SYSTEM**  
 2025-2120MHz 500W REDUNDANT  
 MODEL: SYS1044

SIZE D	CAGE CODE 1GFQ7	DWG. NO. 050-50959	REV A
SCALE NONE	SHEET 1 OF 1		

900-50403	SYS1044
NEXT ASSEMBLY	USED ON
APPLICATION	DO NOT SCALE DRAWING

8 7 6 5 4 3 2 1

REV A  
 DWG NO. 050-50959  
 DC-FORM-9011-3, REV. C, 05/08