

**** PROPRIETARY DATA ****
 THIS DOCUMENT CONTAINS DATA WHICH IS PROPRIETARY OR CONFIDENTIAL TO WV COMM (WV COMMUNICATIONS INCORPORATED). THIS DOCUMENT AND THE DATA CONTAINED HEREIN SHALL NOT BE USED, DUPLICATED, OR ALTERED WITHOUT THE EXPRESSED WRITTEN CONSENT OF WV COMM. ALL RIGHTS ARE RESERVED.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	RELEASED	2/14/11	TT
	B	CWO-0313 CHG MS3102R18-11	10/28/13	JO

D

C

B

A

D

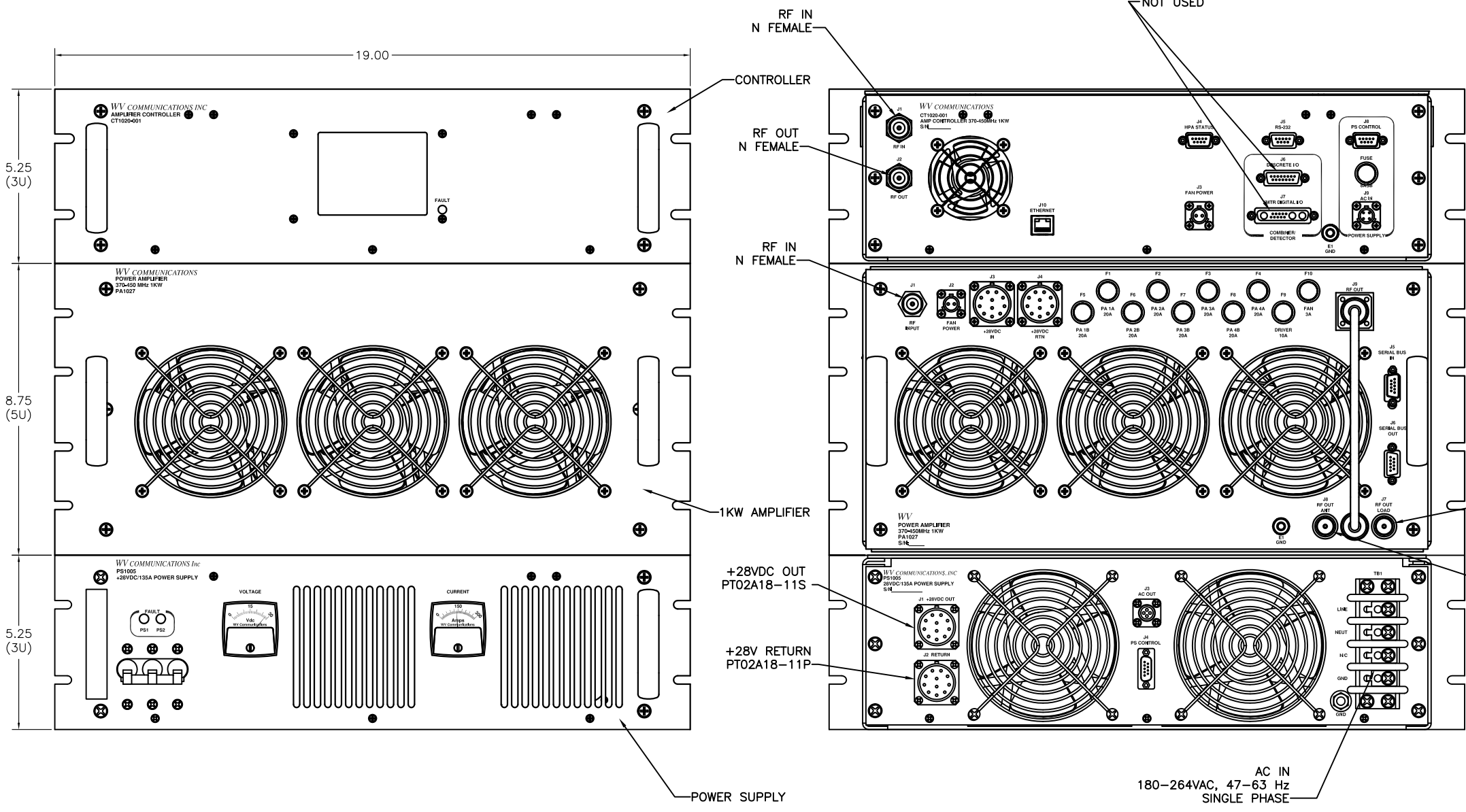
C

B

A

SPECIFICATIONS SUMMARY

OPERATING FREQUENCY RANGES: 370-450MHz
RF OUTPUT POWER: 1KW Min at 1dB Compression point
RF OUTPUT PROTECTION: Integral Output Isolator protected No Oscillation at any Phase Angle at any Load Impedance
RF INPUT POWER: -5dBm to +3dBm Nominal Range
MAXIMUM RF INPUT POWER: +10dBm Maximum W/O Damage
SMALL SIGNAL GAIN FLATNESS: ±1.5dB Maximum Into 1.05:1 VSWR
INPUT AND OUTPUT IMPEDANCE: 50Ω Nominal
INPUT VSWR: 2.0:1 Maximum (Ref 50Ω)
HARMONIC SIGNAL LEVELS: Integral Low Pass Filter
 -90dBc Maximum from 1100 – 2750MHz
 -55dBc Maximum
SPURIOUS SIGNAL LEVELS: Type N Female
RF OUTPUT CONNECTOR: 23dB Minimum
OUTPUT POWER CONTROL: 40dB on/off Ratio Minimum
RF OUTPUT TURN-ON-TIME: 50mSec Maximum after RF power received
MODULATION DISTORTION: 1% Maximum
LOCAL CONTROL: Via Color Touchscreen LCD Display
REMOTE CONTROL: Via RS-232C at 9.6-115.2KB,N,8,1, Ethernet UDP
COOLING: Forced air via integral Front Panel Intake and Rear Panel Exhaust Fans
OVER TEMPERATURE PROTECTION: System shut down when Heatsink temperature reaches 85°C
TEMPERATURE RANGES: Operating 0 to +50°C
ALTITUDE: MSL to 70,000 Ft
CHASSIS DEPTH: 26.75" Maximum
POWER SUPPLY: Redundant N+1 Configuration
 180-264VAC, 47-63Hz Single Phase at 3.0kW Maximum, 2.5kW Typical
AC INPUT POWER: 200 Lbs Typical
WEIGHT: 200 Lbs Typical
FRONT PANEL PAINT: Grey 26307 FED-STD-595A



AC IN
 180-264VAC, 47-63 Hz
 SINGLE PHASE

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. TOLERANCES ARE:
 FRACTIONS DECIMALS ANGLES HOLES
 ± 1/64 .001 10°-90° .005
 .XXX.005 .XXX.005 .XXX.005
 MACHINED FINISH: 32 RMS REMOVE BURRS .005 MAX
 MATERIAL
 FINISH
 900-50242-001 SYS1021-001
 NEXT ASSEMBLY USED ON
 APPLICATION DO NOT SCALE DRAWING

APPROVALS	DATE
DRAWN A. RABACAL	2/14/11
CHECKED DON B.	2/14/11
MECH ENGR T.T.	2/14/11
ELEC ENGR J.T.	2/14/11
PRODUCTION A.M.	2/14/11
Q.A. D.B.	2/14/11

1125A Business Center Circle
 Newbury Park, CA

WV Communications

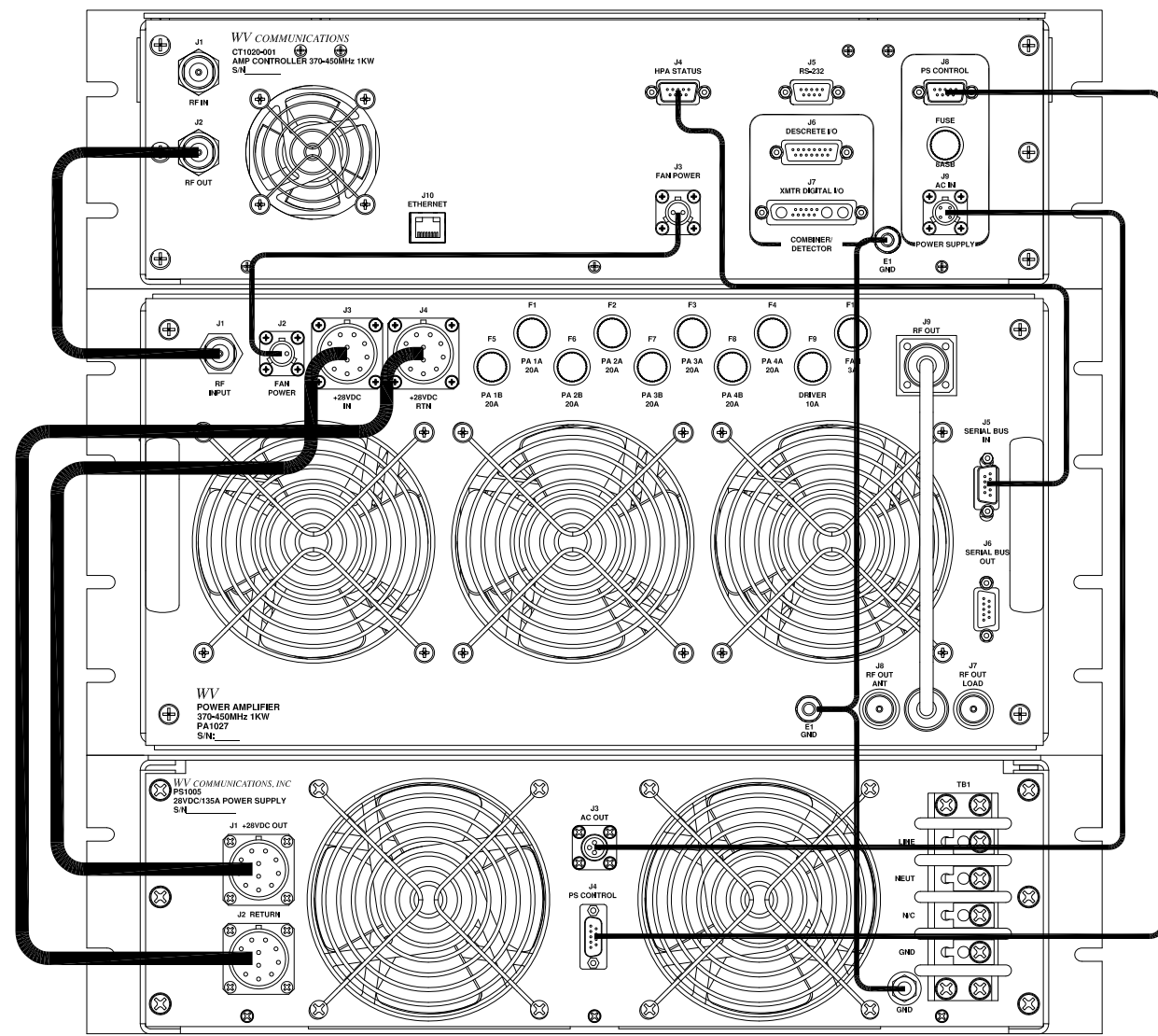
AMPLIFIER SYSTEM
 370-450 MHz 1KW
 MODEL: SYS1021-001

SIZE D	CAGE CODE 1GFQ7	DWG. NO. 050-50836	REV B
SCALE NONE	SHEET 1 OF 2		

DWG. NO. 050-50836

**** PROPRIETARY DATA ****
 THIS DOCUMENT CONTAINS DATA WHICH IS PROPRIETARY OR CONFIDENTIAL TO WV COMM (WV COMMUNICATIONS INCORPORATED). THIS DOCUMENT AND THE DATA CONTAINED HEREIN SHALL NOT BE USED, DUPLICATED, OR ALTERED WITHOUT THE EXPRESSED WRITTEN CONSENT OF WV COMM. ALL RIGHTS ARE RESERVED.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
A		SEE SHEET 1		



AMPLIFIER CONTROLLER
CT1020-001

POWER AMPLIFIER
PA1027

POWER SUPPLY
PS1005

REF DES	SIGNAL DESCRIPTION	FROM/TO	CBL P/N
CT1020-001			
A3			
A3J1	RF IN	A3J1 / CUSTOMER	CUSTOMER CABLE
A3J2	RF OUT	A3J2 / A2J1	CB-900-50242-A3.2
A3J3	FAN POWER	A3J3 / A2J2	CB-900-50242-A3.3
A3J4	HPA STATUS	A3J4 / A2J5	CB-900-50242-A3.4
A3J5	RS-232	A3J5 / CUSTOMER	CUSTOMER CABLE
A3J6	(NOT USED)		
A3J7	(NOT USED)		
A3J8	PS CONTROL	A3J8 / A1J4	CB-900-50242-A3.8
A3J9	AC IN	A3J9 / A1J3	CB-900-50242-A3.9
A3J10	ETHERNET	A3J10 / CUSTOMER	CUSTOMER CABLE
A3E1	GND	A3E1/A2E1/A1E1	CB-900-50242-A3.E1
PA1027			
A2			
A2J1	RF INPUT	A2J1 / A3J2	
A2J2	FAN POWER	A2J2 / A3J3	
A2J3	+28VDC IN	A2J3 / A1J1	CB-900-50242-A2.3
A2J4	+28VDC RETURN	A2J4 / A1J2	CB-900-50242-A2.4
A2J5	SERIAL BUS IN	A2J5 / A3J4	
A2J6	SERIAL BUS OUT	A2J6	TERMINATION 750-50539
A2J7	RF OUT LOAD	A2J7 / CUSTOMER	CUSTOMER CABLE
A2J8	RF OUT ANT	A2J8 / CUSTOMER	CUSTOMER CABLE
A2E1	GND	A2E1/A3E1/A1E1	CB-900-50242-A2.E1
PS1005			
A1			
A1J1	+28VDC OUT	A1J1 / A2J3	
A1J2	RETURN	A1J2 / A2J4	
A1J3	AC OUT	A1J3 / A3J9	
A1J4	PS CONTROL	A1J4 / A3J8	
A1TB1	AC IN	A1TB1 / AC	AC POWER CABLE
A1E1	GND	A1E1/A2E1/A3E1	

REV. B
DWG. NO. 050-50836