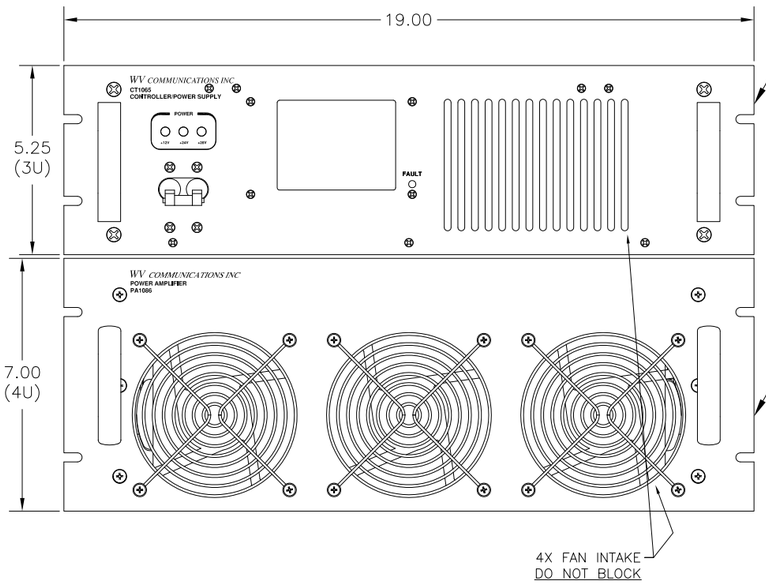
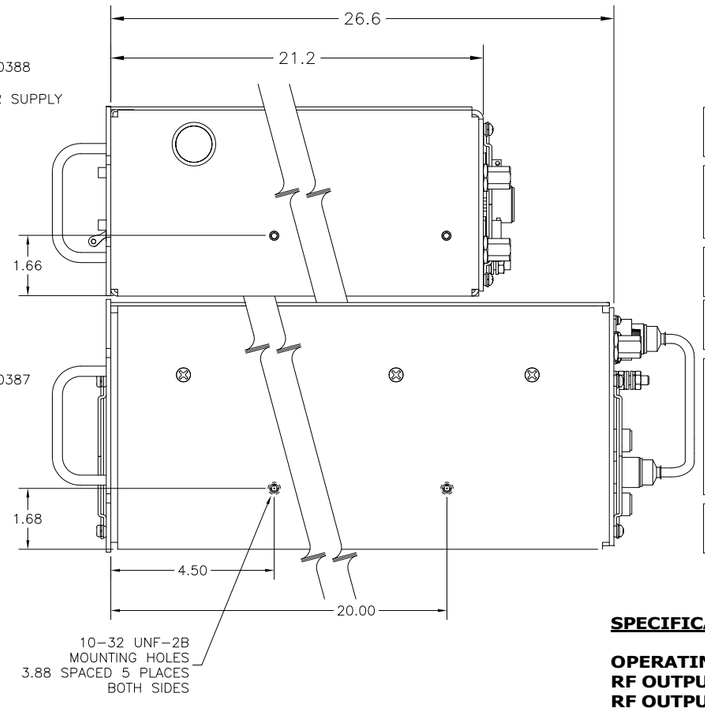
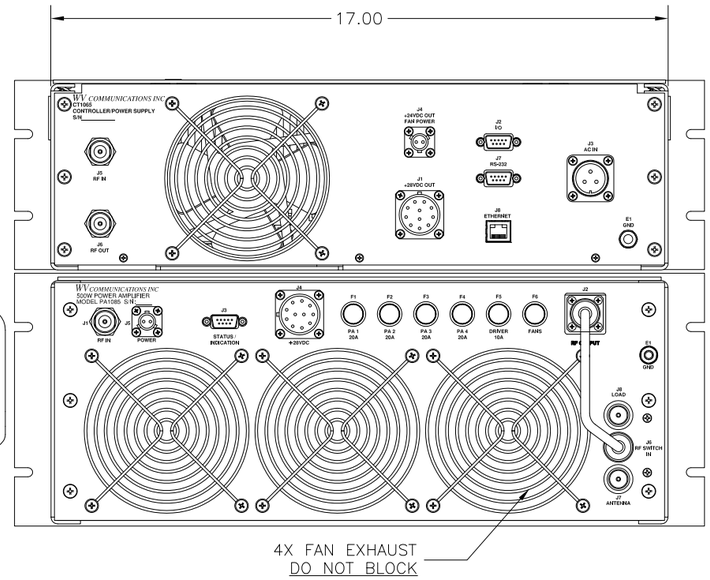
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	RELEASED	3/12/2014	JMO



050–50933/900–50388
370–450MHz 500W
CONTROLLER/POWER SUPPLY
MODEL: CT1065

050–50932/900–50387
370–450MHz 500W
AMPLIFIER
MODEL: PA1085





SPECIFICATIONS SUMMARY

OPERATING FREQUENCY RANGES:	370-450MHz
RF OUTPUT POWER:	500W Minimum 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
SPURIOUS SIGNAL LEVELS:	-55dBc Maximum
RF OUTPUT CONNECTOR:	Type N Female
OUTPUT POWER CONTROL:	23dB Minimum
RF OUTPUT TURN-ON-TIME:	50mSec Maximum after RF power received
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 degrees C
TEMPERATURE RANGES:	Operating 0 to +50°C
	Storage -40 to +70°C
ALTITUDE:	MSL to 70,000 Ft
CHASSIS DEPTH:	26.75" Maximum
AC INPUT POWER:	180-264VAC, 47-63Hz One (1) Phase at 1.5kW Maximum
WEIGHT:	100 LBs Nominal
FRONT PANEL PAINT:	Grey 26307 FED-STD-595A

AMPLIFIER CONNECTORS

J1 RF IN
N FEMALE

J2 RF OUT
N FEMALE

J3 STATUS / INDICATION	
PIN NO.	PIN NAME
1	SPARE
2	SPARE
3	SPARE
4	SPARE
5	GND
6	SPARE
7	DATA+
8	DATA–
9	ADDRESS

J4 +28V IN	
PT02E–18–11P	
PIN NO.	PIN NAME
A	+28V DRIVER
B	+28V FINAL
C	+28V FINAL
D	+28V FINAL
E	+28V FINAL
F	+28V RTN
G	+28V RTN
H	+28V RTN
J	+28V RTN
K	+28V RTN
L	GND

J5 FAN +24V IN	
MS3112E8–2P	
PIN NO.	PIN NAME
A	+24V
B	+24V RTN

CONTROLLER/POWER SUPPLY CONNECTORS

J1 +28V OUT	
PT02E–18–11S	
PIN NO.	PIN NAME
A	+28V DRIVER
B	+28V FINAL
C	+28V FINAL
D	+28V FINAL
E	+28V FINAL
F	+28V RTN
G	+28V RTN
H	+28V RTN
J	+28V RTN
K	+28V RTN
L	GND

J2 I/O	
PIN NO.	PIN NAME
1	SPARE
2	SPARE
3	SPARE
4	SPARE
5	GND
6	SPARE
7	DATA+
8	DATA–
9	ADDRESS

J3 AC IN	
MS3102E16–10P	
PIN NO.	PIN NAME
A	LIVE
B	NEUTRAL
C	GROUND

J4 FAN +24V OUT	
MS3112E8–2S	
PIN NO.	PIN NAME
A	+24V
B	+24V RTN

J5 RF IN
N FEMALE

J6 RF OUT
N FEMALE

J7, RS–232C	
9 PIN 'D' SUB	
PIN NO.	PIN NAME
1	N/C
2	RX
3	TX
4	N/C
5	GND
6	N/C
7	RTS
8	CTS
9	N/C

J8 ETHERNET	
RJ45	
PIN NO.	PIN NAME
1	TX+
2	TX–
3	RX+
4	N/C
5	N/C
6	RX–
7	N/C
8	N/C

900–50389	SYS1031
NEXT ASSEMBLY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. TOLERANCES ARE:
FRACTIONS ± 1/64 | DECIMALS .XX±.01 .XXX±.005 | ANGLES ±0°30' | HOLES .XXX±.005 .XXX±.001
MACHINED FINISH: 32 RMS
REMOVE BURRS .005 MAX
MATERIAL
FINISH
DO NOT SCALE DRAWING

APPROVALS		DATE
DRAWN	TONY T.	3/12/2014
CHECKED	TONY T.	20FEB06
MECH ENGR	GG	20FEB06
ELEC ENGR	JT	20FEB06
PRODUCTION	AM	20FEB06
Q.A.	DB	20FEB06

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

AMPLIFIER SYSTEM
370–450MHz 500W
MODEL: SYS1031

SIZE	CAGE CODE	DWG. NO.	REV
D	1GFQ7	050–50934	A

SCALE NONE SHEET 1 OF 1

REV A
DWG NO. 040–50039

IC–FORM–00010–A, REV C, 06/08