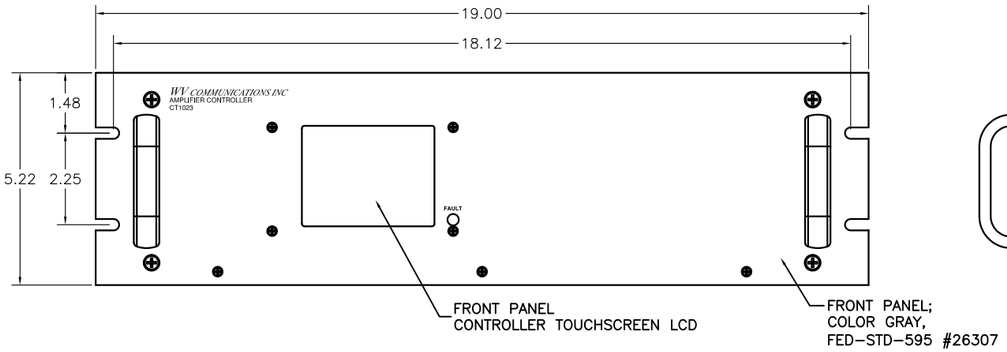
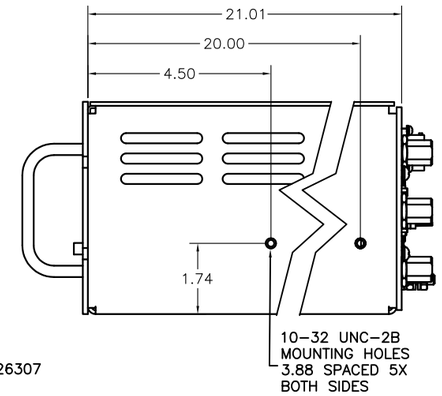
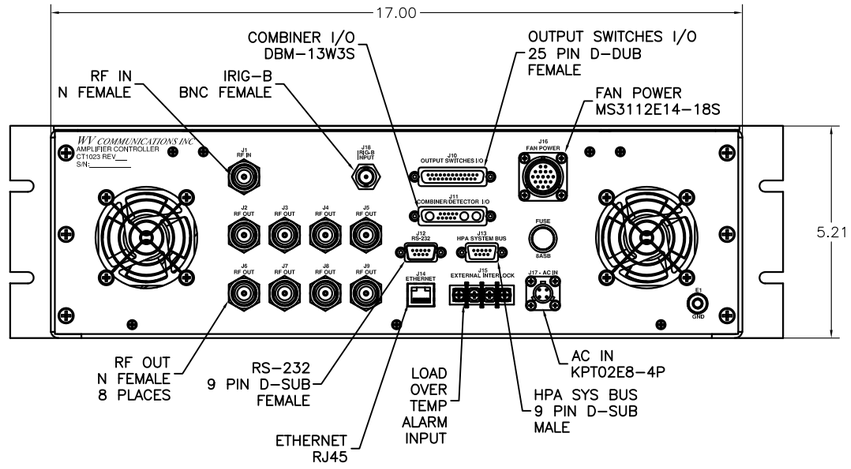
** PROPRIETARY DATA **
THIS DOCUMENT CONTAINS DATA WHICH IS PROPRIETARY OR CONFIDENTIAL TO WV COMM (WV COMMUNICATIONS INCORPORATED). THIS DOCUMENT AND THE DATA CONTAINED HEREIN SHALL NOT BE USED, DUPLICATED, OR ALTERED WITHOUT THE EXPRESSED WRITTEN CONSENT OF WV COMM. ALL RIGHTS ARE RESERVED.

| REVISIONS | | | | |
|---|---|---|---|---|
| ZONE | REV | DESCRIPTION | DATE | APPROVED |
| | A | RELEASE | 8/27/2014 | JMO |
| | B | ADDED BNC CONNECTOR | 02NOV09 | TT |
| | C | J18 WAS BLANKING IS IRIG-B | 08/14/14 | TT |
| | D | ADD RF SPECIFICATIONS | 8/27/14 | JO |
| | E | WAS 'OVERTEMP ALARM" IS 'EXTERNAL INTERLOCK' | 5/15/15 | JO |



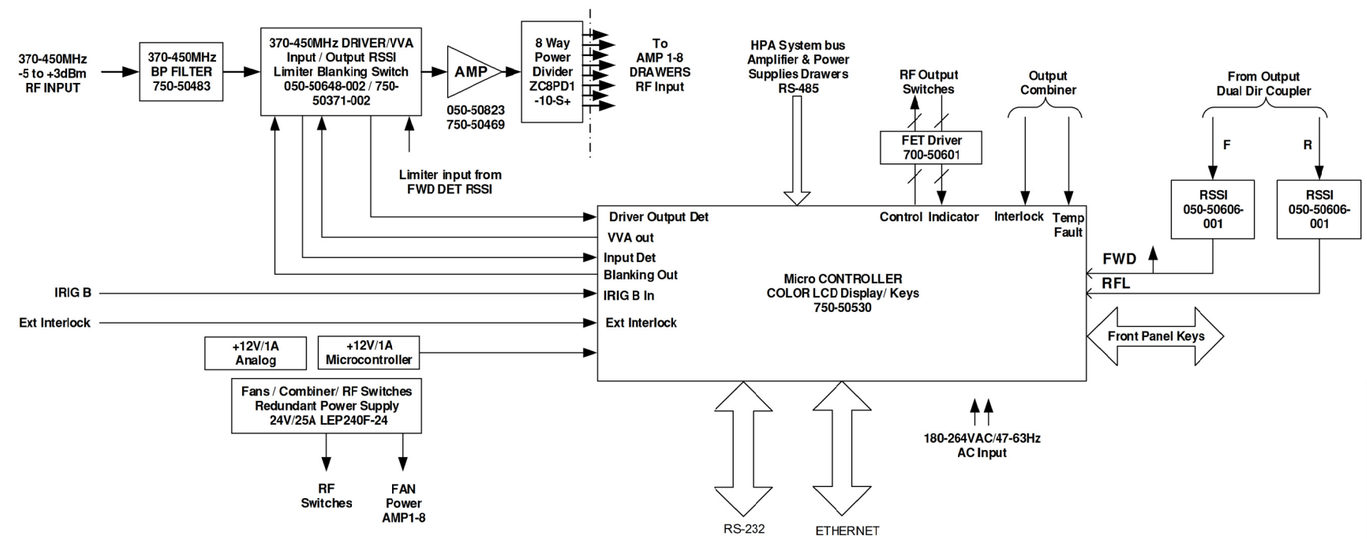




## SPECIFICATIONS:

| | |
|---|---|
| **OPERATING FREQUENCY RANGES:** | 370-450MHz |
| **RF OUTPUT POWER 1 to 8:** | 0.5W Minimum @ P1dB Comp each Output |
| **GAIN:** | 28dB Minimum at P1dB Comp |
| **RF INPUT POWER W/O DAMAGE:** | 10dBm Maximum |
| **SMALL SIGNAL GAIN FLATNESS:** | ±1dB Maximum / 1.25:1 Load VSWR |
| **AMPLITUDE TRACKING 1 to 8):** | ±0.2dB Maximum |
| **PHASE TRACKING 1 to 8):** | ±4° Maximum |
| **INPUT / OUTPUT IMPEDANCE:** | 50Ω Nominal |
| **INPUT VSWR:** | 2.0:1 Maximum (Ref 50Ω) |
| **SPURIOUS SIGNAL LEVELS:** | -60dBc Maximum |
| **TEMPERATURE RANGES:** | Operating 0 to +50°C |
| **COOLING REQUIRED:** | Via Forced air Exhaust Fan |
| **INTEGRAL VVA RANGE:** | 0-30dB Minimum |

**CPU/CONTROLLER**

| | |
|---|---|
| **LOCAL CONTROL:** | Via Color Touchscreen LCD Display |
| **REMOTE CONTROL:** | Via Ethernet UDP/IP Protocol<br>RS-232C 9.6-115.2KB, N, 8, 1 |
| **EXTERNAL IRIG B INPUT LEVEL:** | 1VP-P Nominal |
| **AC INPUT POWER AT:** | 115/230VAC at 4/2 Amp Maximum<br>47-63 Hz Single Phase |
| **FRONT PANEL COLOR:** | Gray Per MIL-STD-595-26307 |




| J13 HPA SYSTEM BUS | |
|---|---|
| PIN No. | FUNCTION |
| 1 | N/C |
| 2 | N/C |
| 3 | SPARE |
| 4 | N/C |
| 5 | GND |
| 6 | N/C |
| 7 | DATA+ |
| 8 | DATA- |
| 9 | ADDRESS INPUT |

| J10 OUTPUT SWITCH I/O | |
|---|---|
| PIN No. | FUNCTION |
| 1 | SW1 +24 VDC POS1 |
| 2 | SW1 +24 VDC POS2 |
| 3 | SW1 +24 VDC COMMON |
| 4 | SW1 INDICATOR 1 |
| 5 | SW1 INDICATOR 2 |
| 6 | SW1 IND COMMON |
| 7 | SW2 +24VDC POS1 |
| 8 | SW2 +24VDC POS2 |
| 9 | SW2 +24VDC COMMON |
| 10 | SW2 INDICATOR 1 |
| 11 | SW2 INDICATOR 2 |
| 12 | SW2 IND COMMON |
| 13 | SW3 +24VDC POS1 |
| 14 | SW3 +24VDC POS2 |
| 15 | SW3 +24VDC COMMON |
| 16 | SW3 INDICATOR 2 |
| 17 | SW3 INDICATOR 1 |
| 18 | SW3 IND COMMON |
| 19 | N/C |
| 20 | N/C |
| 21 | N/C |
| 22 | N/C |
| 23 | N/C |
| 24 | N/C |
| 25 | N/C |

| J11 COMBINER I/O | |
|---|---|
| PIN No. | FUNCTION |
| A1 | FWD RSSI DETECT |
| A2 | REV RSSI DETECT |
| A3 | N/C |
| 1 | +24VDC FAN POWER |
| 2 | +24VDC RTN |
| 3 | N/C |
| 4 | THERMAL ALARM |
| 5 | N/C |
| 6 | INTERLOCK ALARM |
| 7 | N/C |
| 8 | +24VDC FAN POWER |
| 9 | +24VDC RTN |
| 10 | N/C |

| J12 RS-232 | |
|---|---|
| PIN No. | FUNCTION |
| 1 | N/C |
| 2 | RX |
| 3 | TX |
| 4 | N/C |
| 5 | GND |
| 6 | N/C |
| 7 | N/C |
| 8 | N/C |
| 9 | N/C |

| J16 FAN POWER | |
|---|---|
| PIN No. | FUNCTION |
| A | +24VDC FAN POWER |
| B | +24VDC RTN |
| C | +24VDC FAN POWER |
| D | +24VDC RTN |
| E | +24VDC FAN POWER |
| F | +24VDC RTN |
| G | +24VDC FAN POWER |
| H | +24VDC RTN |
| J | +24VDC FAN POWER |
| K | +24VDC RTN |
| L | +24VDC FAN POWER |
| M | +24VDC RTN |
| N | +24VDC FAN POWER |
| P | +24VDC RTN |
| R | +24VDC FAN POWER |
| S | +24VDC RTN |
| T | +24VDC FAN POWER |
| U | +24VDC FAN POWER |

| J17 AC INPUT | |
|---|---|
| PIN LTR. | FUNCTION |
| A | AC LINE |
| B | AC NEUTRAL |
| C | SAFETY GND |
| D | SPARE |

| | |
|---|---|
| | |
| | |
| | |
| 900-50260 | SYS1018 |
| 900-50251 | CT1023 |
| 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 .XX±.005 .XXX +.002 -.001
MACHINED FINISH: 32 RMS REMOVE BURRS .005 MAX
MATERIAL
FINISH
DO NOT SCALE DRAWING

| APPROVALS | | DATE |
|---|---|---|
| DRAWN | G. GODDARD | 3/3/2009 |
| CHECKED | GUY G. | 3MAR09 |
| MECH ENGR | GG | 3MAR09 |
| ELEC ENGR | JT | 3MAR09 |
| PRODUCTION | AM | 3MAR09 |
| APPROVED | UY | 3MAR09 |

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

CONTROLLER 10KW HPA
370-450MHz 8 OUTPUT
MODEL: CT1023

| SIZE | CAGE CODE | DWG. NO. | REV |
|---|---|---|---|
| D | 1GFQ7 | 050-50703 | E |

SCALE NONE SHEET 1 OF 1

REV E
DWG NO. 050-50703