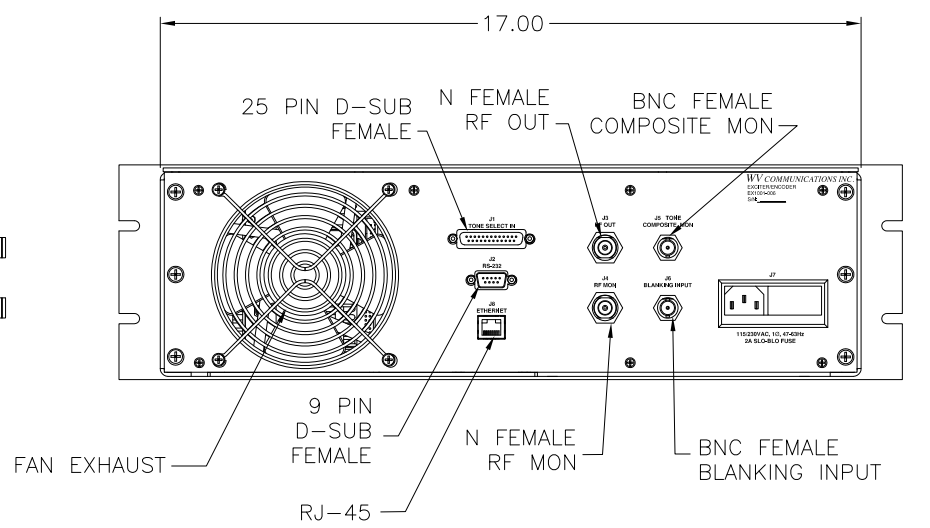
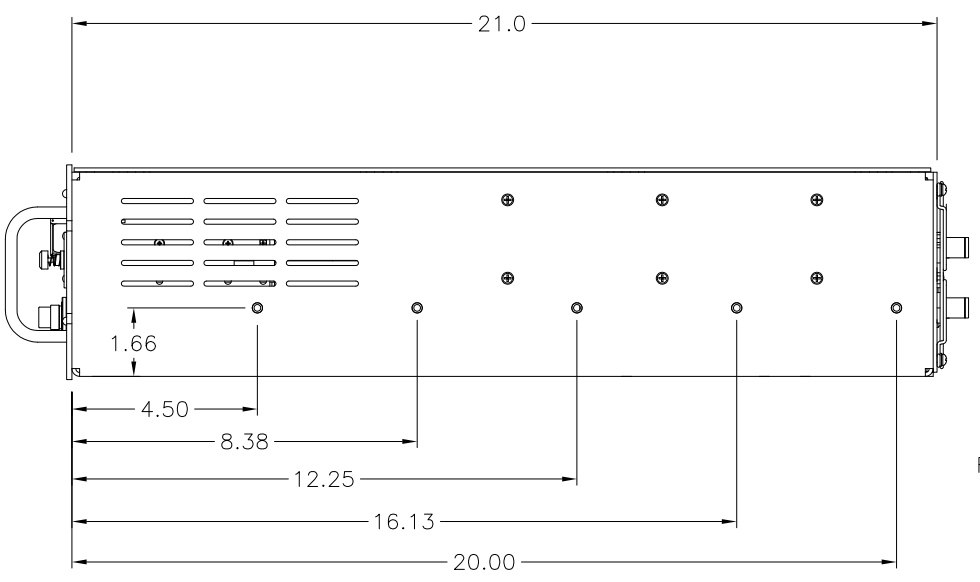
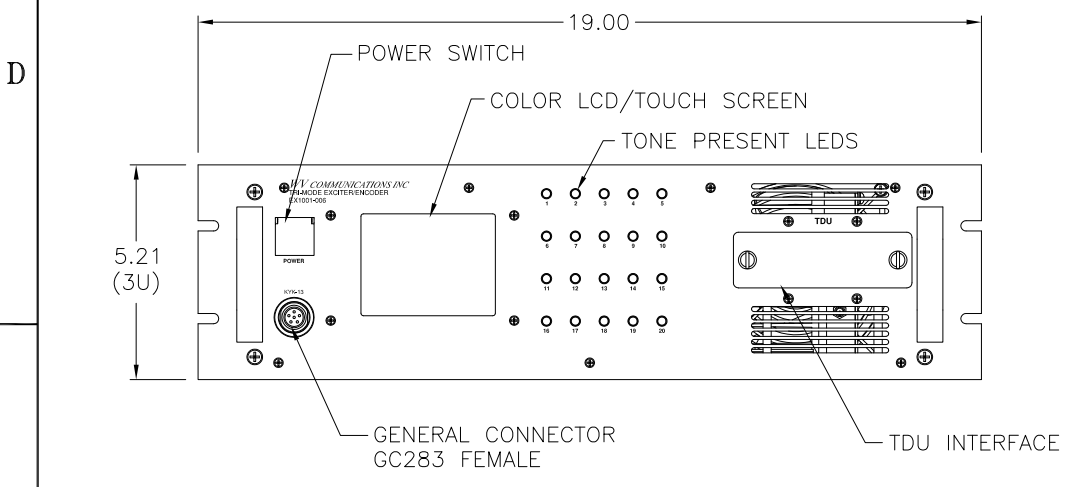


**** PROPRIETARY DATA ****
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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
A		RELEASED	2/02/11	CS



EXCITER
 RF Output Power: +43dBm (20W) Minimum, +44dBm (25W Typical)
 RF Output Power Steps: +29.5 to +44dBm in 0.5dB Steps
 Carrier Frequency: 370.0- 450.0MHz in 100.0KHz Steps
 Carrier Frequency Stability: ±0.0005% Maximum over 24 hours
 RF Output Impedance: 50Ω Nominal
 RF Output VSWR: 2.0:1 Maximum
 Deviation:
 IRIG/High Alpha: ±30KHz per Tone Adjustable 1-35KHz Range
 EFTS: ±50KHz Adjustable
 RF Output Harmonics/Spurious: 60dBc Minimum
 FM Deviation Response: ±0.5dB Maximum over 5-75KHz Tones

ENCODER
 Types: IRIG, High Alpha & EFTS
 Number of Tones: IRIG: 20 Tones, Up to 6 Simultaneous
 Secure: 2 tones (pairs) out of 8 Tones
 ±0.01% Maximum
 Frequency Stable within 0.1% after 1 second
 Tone Frequency Stability:
 Tone Turn On Stability: 1 Pk-Pk/30KHz Pk Deviation Nominal
 Tone Monitor Output Level: 15% Maximum
 Tone Output Amplitude Variation: 1% Maximum
 Tone Output Distortion: 5mSec Max from ACS to Stable Output within 0.1%sec.
 Tone Output Signal Delay: 50Ω Nominal
 Tone Output Monitor Impedance: 64-bit Digital word per RCC 208-06
 EFTS Command Format: 144-bit message frame per RCC 208-06
 EFTS Message Format: 50 messages per second
 EFTS Bit & Message Rate: Manchester Bi-Phase Level Encoding per IRIG 106
 EFTS Encoding: 4-pole linear phase filter with a bandwidth of 14.4KHz at the -3dB points.
 EFTS Pre-Modulation Filtering:
 EFTS Bit Rate Stability: 1,000 ppm Maximum
 Encryption Device: Triple Data Encryption Standard (DES) Unit (TDU)
 Status & Control: Local via Color LCD Touchscreen, Remote via Serial RS-232 and Ethernet UDP/IP

ENVIRONMENTAL:
 Operating Temperature Range: 0 to +50°C
 Operating relative Humidity: 0 - 95 %
 Operating Altitude: 0-10,000 Feet
 MTBF: 20,000 hours Minimum
 MTRR: 1 Hour Maximum down to card level
 AC Input: 115/230 VAC, 1Ø,47-63Hz Auto-Switch at 3/1.5 Amp Maximum
 Front Panel Color: Gray per FED-STD-595 - 26307

TONE	IRIG FREQUENCY (KHz)	SECURE FREQUENCY (KHz)	TONE	IRIG FREQUENCY (KHz)
1	7.50	7.35	11	25.01
2	8.46	8.40	12	28.21
3	9.54	9.45	13	31.83
4	10.76	10.50	14	35.90
5	12.14	11.55	15	40.49
6	13.70	12.60	16	45.68
7	15.45	13.65	17	51.52
8	17.43	15.45	18	58.12
9	19.66	--	19	65.56
10	22.17	--	20	73.95

PIN NO.	PIN NAME
1	N/C
2	RX
3	TX
4	N/C
5	GND
6	N/C
7	N/C
8	N/C
9	N/C

PIN NO.	PIN NAME
1	TX+
2	TX-
3	RX+
4	N/C
5	N/C
6	RX-
7	N/C
8	N/C

PIN LTR.	PIN NAME
A	REF/RTN
B	N/U
C	REQUEST
D	DATA
E	CLOCK
F	N/U

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. TOLERANCES ARE: FRACTIONS DECIMALS ANGLES HOLES $\pm 1/64$.XXX.01 $\pm 0^{\circ}30'$.XXX+.005 .XXX.005 .XXX+.003 MACHINED FINISH: 32 RMS REMOVE BURRS .005 MAX		APPROVALS	DATE	WV Communications 1176 Tourmaline Dr. Newbury Park, CA EXCITER/ENCODER TRI-MODE 370-450MHz 20W AMP
DRAWN		A. RABACAL	2/02/11	
CHECKED		TONY T.	2/02/11	
MECH ENGR		T.T.	2/02/11	
ELEC ENGR		J.T.	2/02/11	
PRODUCTION		A.M.	2/02/11	
MATERIAL		Q.A.	D.B.	2/02/11
900-50305	EX1001-006	FINISH		
NEXT ASSEMBLY	USED ON	DO NOT SCALE DRAWING		
APPLICATION		SCALE NONE		

SIZE	CAGE CODE	DWG. NO.	REV
D	1GFQ7	050-50830	A
SCALE NONE		SHEET 1 OF 1	

REV A
 DWG NO. 050-50830