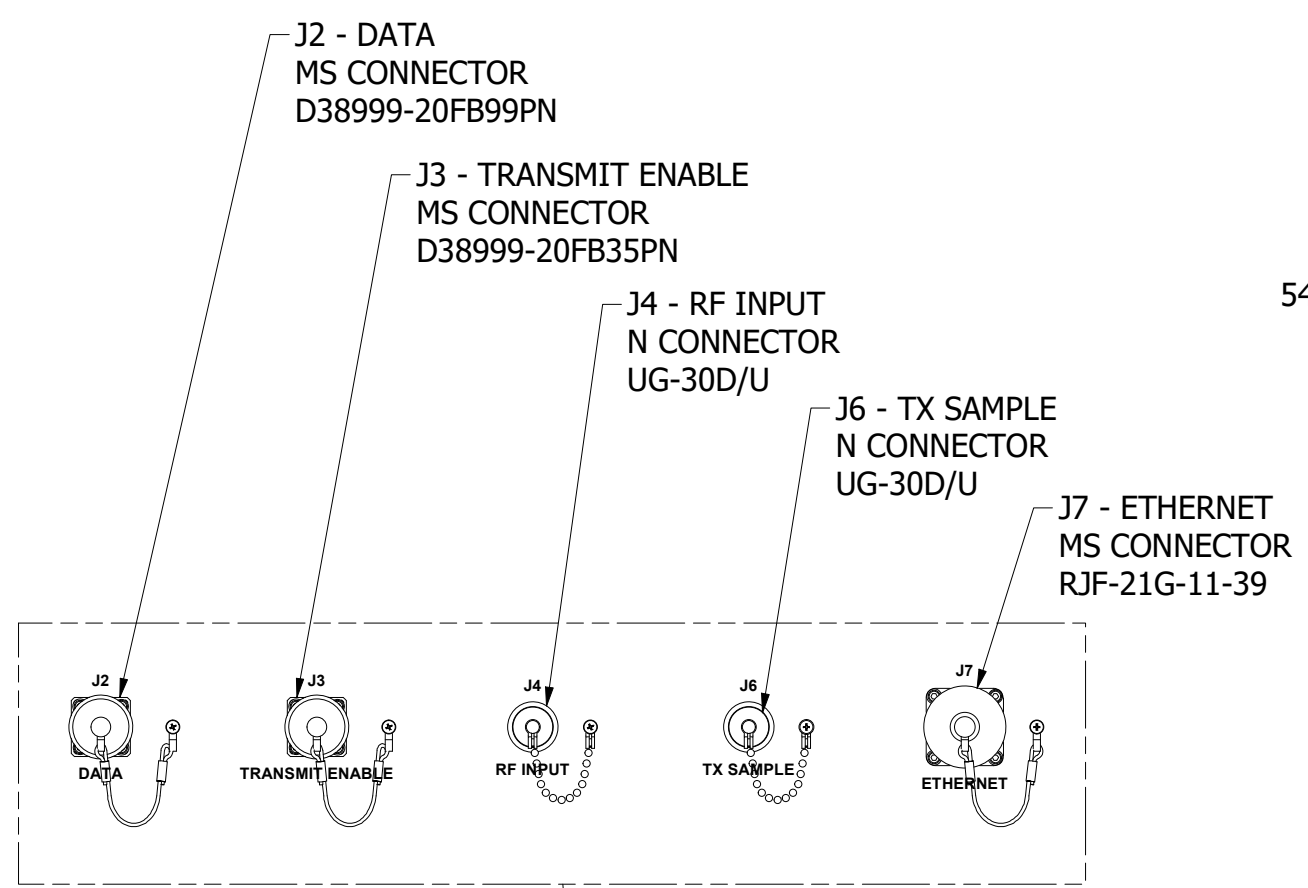
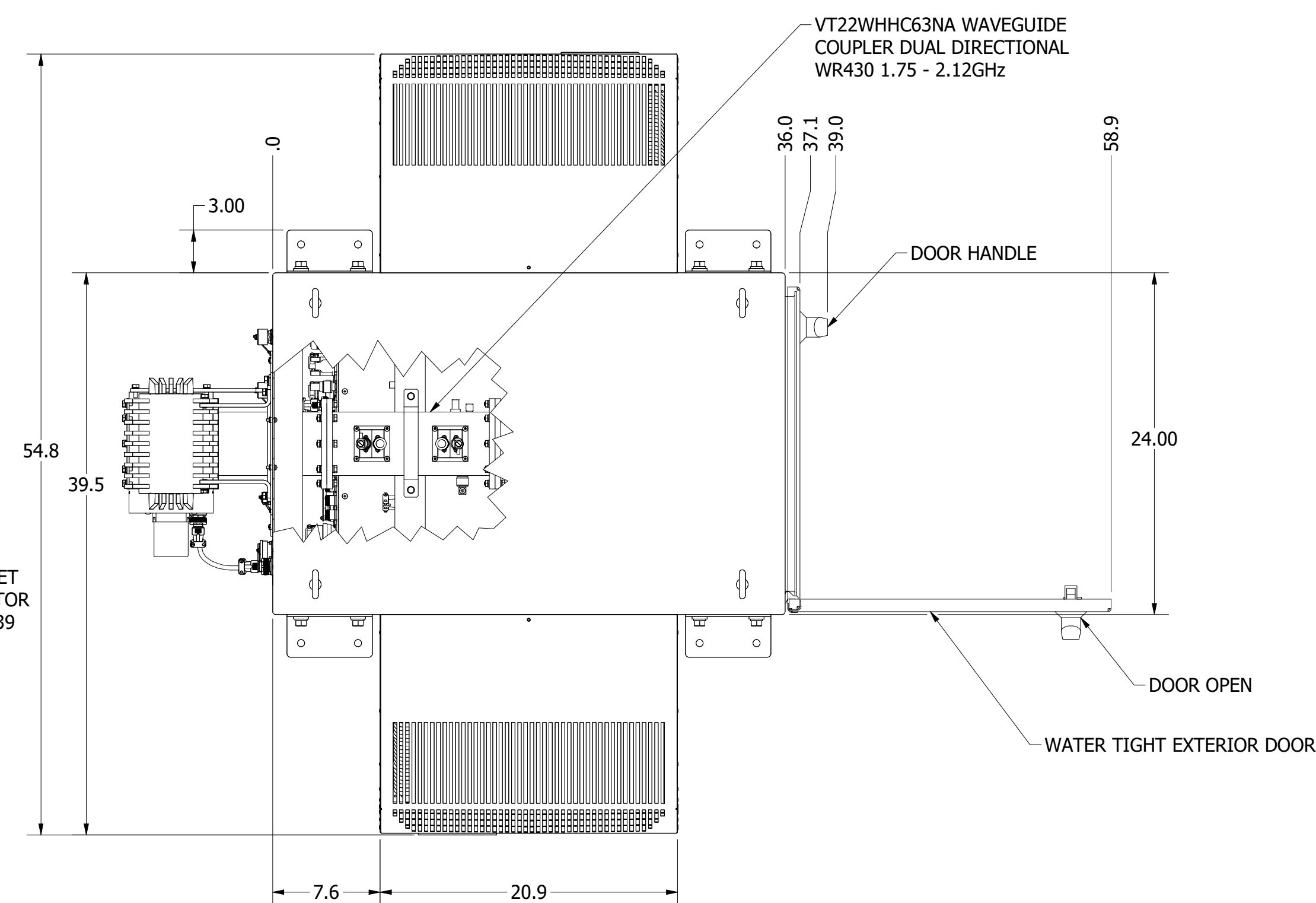


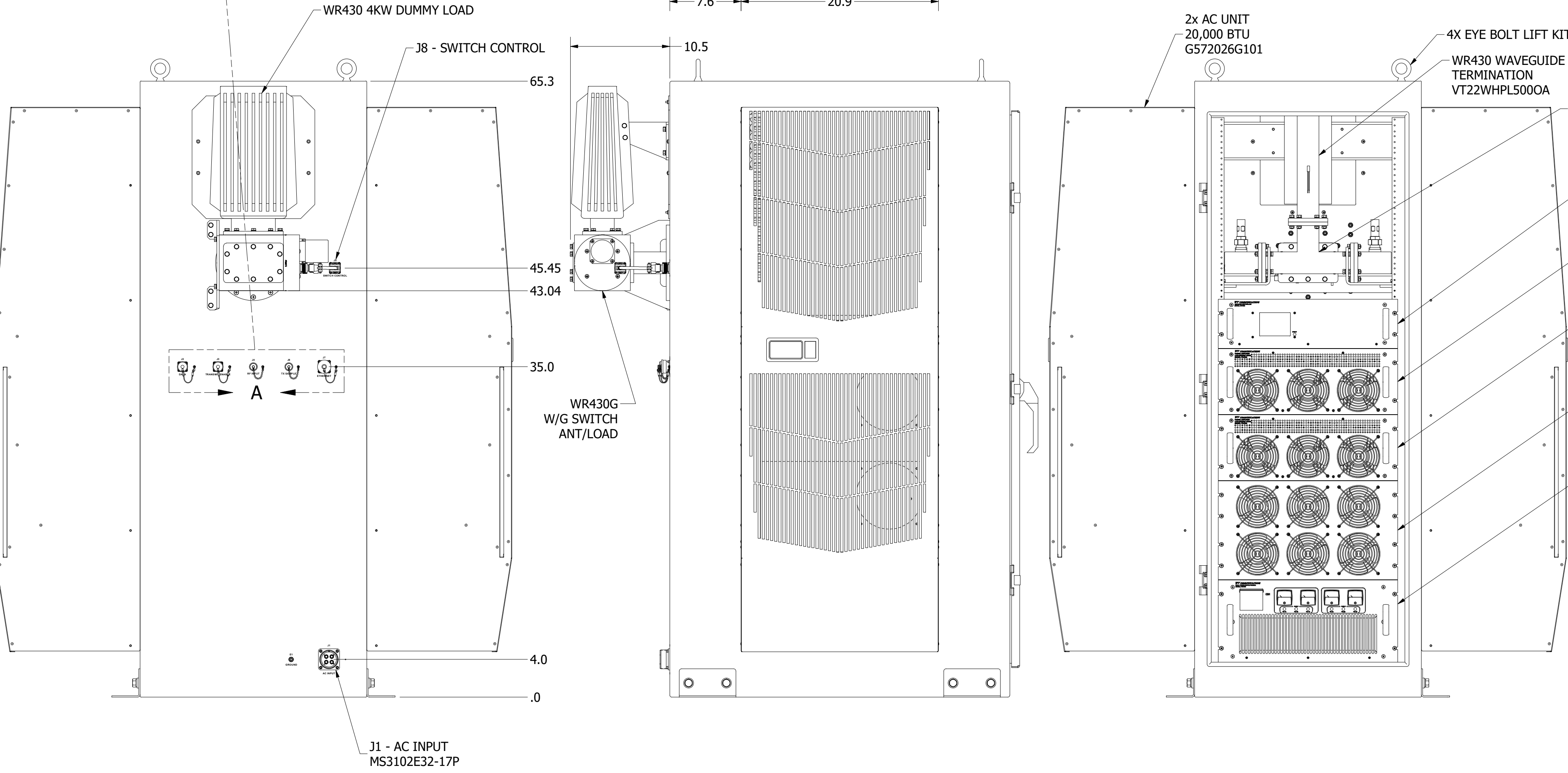
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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	RELEASED	11/8/2021	DB



**SPECIFICATIONS SUMMARY**

**OPERATING FREQUENCY RANGE:** 1750-1850 & 2025-2120MHz  
**RF OUTPUT POWER:** 2kW Minimum @ Linear  
**RF OUTPUT MONITOR:** -76dBc Nominal  
**RF INPUT DRIVE:** 0dBm Nominal (±3dB Range)  
**RF INPUT DAMAGE LEVEL:** +25dBm Minimum  
**RF GAIN:** 48-68dB Nominal  
**GAIN FLATNESS:** ±0.75dB Maximum  
**GAIN SLOPE:** ±0.2dB /10MHz Maximum  
**GAIN VARIATION WITH TEMPERATURE:** ±1.5dB from -40°C to +60°C  
**OUTPUT POWER CONTROL RANGE:** 25dB Minimum in 0.1dB Steps  
**RF INPUT/OUTPUT VSWR:** 1.3:1 Typical  
**LOAD VSWR:** Unconditionally stable, open or short at any phase angle  
**NOISE FIGURE:** 8dB Maximum  
**INPUT/OUTPUT IMPEDANCE:** 50Ω Nominal  
**GROUP DELAY (over any 35MHz band):** Linear: 0.01ns/MHz  
 Parabolic: 0.003ns/MHz<sup>2</sup>  
 Ripple: 1.0ns pk-to-pk  
**HARMONICS/SPURIOUS LEVELS:** -60dBc from 1750-2200MHz  
 -30dBc from 2200-3000MHz  
 -40dBc from 3000-7600MHz  
 -138dBc from 7600-8500MHz  
 -40dBc above 8500MHz  
**INTERMODULATION DISTORTION @ Linear:** -25dBc Maximum with two 500W tones, 5MHz spacing  
**MAXIMUM OUTPUT NOISE POWER DENSITY:** -75dBW/4kHz (-45dBm/4kW)  
**MAXIMUM OUTPUT POWER WHEN MUTED:** -20dBm Maximum  
**RF OUTPUT INTERFACE:** Waveguide – CPR430G Flange  
**OVERTEMPERATURE PROTECTION:** Thermostat Shut-Off Indication @ +77°C heatsink temp  
**MONITOR & CONTROL INTERFACE:** Via Front Panel Color LCD or Remote via Ethernet / RS-422 Serial Interface (both)  
**SERIAL INTERFACE:** 9.6-115Kbps Baud Rate, 8 data bits, no parity, 1 stop bit  
**CONTROLS, INDICATORS & ALARMS:** Output Power Adjustment  
 Forward & Reflected RF Power Monitoring  
 RF Power Status/Faults  
**TRANSMIT ENABLE:** Via D38999/24FB35PN (J3)  
**MODES OF OPERATION:** Fixed GAIN (VVA)  
 Fixed Output Power w/ Automatic Level Control (ALC)  
**HPA COOLING:** Forced Air over Heat Sink Plenums via Drawer Front Panel Intake and Rear Panel Exhaust Fans  
**ENCLOSURE HEATING & COOLING:** Via an integrated Environmental Control Unit (ECU)  
**TEMPERATURE RANGES:** Non-Operating: -50°C to +85°C  
 Operating: -40°C to +55°C (cold start with 15 minute heating period)  
 Survival: 53.64 m/s (120mph) Minimum  
 Operating: 26.82 m/s (60mph) Minimum  
**WIND:** 10cm/h (3.9 in/h) for 4 hours  
**RAIN:** 0.91 meters (3-ft)  
**SNOW:** 6.2mm (0.25 in) thick  
**ICE:** 0.5 – 15mm (0.02 – 0.60 in)  
**HAIL:** 0.0001 – 0.3mm diameter blown in winds up to 40 m/s (90 mph)  
**SAND & DUST:** 1060 W/m<sup>2</sup> (336 BTU/h-ft<sup>2</sup>)  
**SOLAR RADIATION:** NFPA 780 (MILHDBK-419A)  
**LIGHTNING:** 775 – 520 mmHg (-540 to 10,000ft)  
**BAROMETRIC PRESSURE:** 190-264VAC, 47-63 Hz, 3-Phase 4-Wire Delta @ 10kW Maximum  
**AC POWER:**



J1 - AC INPUT	
PIN NO.	PIN NAME
A	1φ
B	2φ
C	3φ
D	GND

J2 - DATA	
PIN NO.	PIN NAME
A	NOT USED
B	RS422 TX+
C	RS422 TX-
D	RS422 RTN
E	RS422 RX+
F	RS422 RX-
G	CHASSIS GND

J3 - TRANSMIT ENABLE	
PIN NO.	PIN NAME
1	HORN OUTPUT
2	NC
3	LIGHTS OUTPUT
4	LIGHTS/HORN COMMON
5	XMIT ENABLE
6	XMIT ENABLE RTN
7	XMIT POWER
8	XMIT POWER RTN
9-13	NOT USED

J8 - SWITCH CONTROL	
PIN NO.	PIN NAME
A	POS 1, VOLTS
B	COM
C	POS 2, VOLTS
D	POS 1, IND 1
E	IND 1 COM
F	POS 2, IND 1

APPROVALS	DATE
DRAWN FREDERICK B.	11/8/2021
CHECKED TT	11/8/2021
MECH ENGR TT	11/8/2021
ELEC ENGR JT	11/8/2021
PRODUCTION AM	11/8/2021
Q.A. SG	11/8/2021

SIZE	CAGE CODE	DWG. NO.	REV
D	1GFQ7	050-51143	A

APPLICATION	DO NOT SCALE DRAWING
900-50536	SYS1056-001
NEXT ASSEMBLY	USED ON
APPLICATION	DO NOT SCALE DRAWING

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

**AMPLIFIER SYSTEM OUTDOOR**  
 1750-2120MHz 2kW  
 MODEL: SYS1056-001

SCALE: NONE MODEL NO: SYS1056-001 SHEET: 1 OF 1

050-51143