

The Crescend 10206 Compact Power Amplifier (CPA) meets the rigorous requirements for legacy and next generation waveforms. The small, lightweight, design is an ideal choice for airborne, soldier carry, and ground vehicular Defense applications.

Performance Advantages

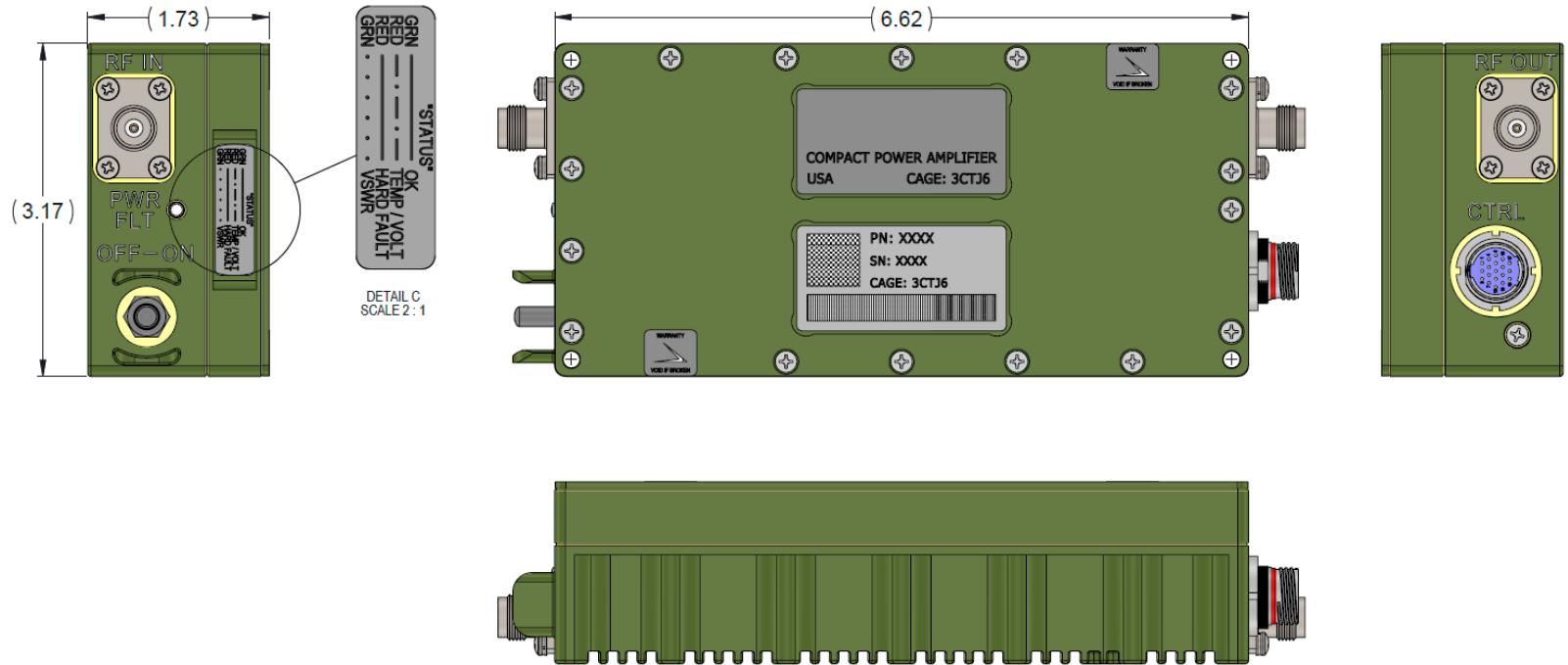
- Small Size, Weight, and Power
- Addresses Airborne and Ground platforms
 - Rotary/Fixed wing
 - Manpack – pull and jerk radios
- Designed to support TSM, SRW, WNW, SINCGARS, ANW2, HAVEQUICK I/II, P25
- 30-88MHz, 225-450MHz (25W), 1250-1850MHz (15W)
- DC input from 10-36V, 75W nominal power consumption
- No Interface required, Input frequency sensing
- Cosite mitigation for adjacent channels
- Small form factor: 7.7”L x 1.73”W x 3.2”H w/connectors
- Weight 2lbs
- Automatic Leveling Control
- VSWR sensing
- Environmentally sealed design
- Tested to MIL-STD-810, 461, and 1275 requirements



Specifications

Frequency Range	30MHz-88MHz narrowband 225MHz-450MHz 1250MHz-1390MHz wideband 1755MHz-1850MHz
RF Input Power	0.5 W minimum 10W maximum
RF Output Power	30-88,225-450 MHz 25W 1250-1850 MHz 15W
Duty Cycle	100% continuous
Harmonics and Spurious	CE106 compliant
Output Load Impedance	50 ohm nominal
Input Port VSWR	1.5:1 (50 ohms)
Load VSWR	3.0:1 max VSWR Graceful output power reduction >3:1
Rx Gain	3dB +/- 1.5dB (30-88MHz) 5dB +/- 1.5dB (225-450MHz) 5dB +/- 1.5dB (1250-1390,1755-1850MHz) (factory configurable or selectable via interface)
Rx Noise Figure	≤ 6 dB (all bands)
Rx Input 3rd Order Intercept Point (IIP3)	≥ +18dBm (all bands)
DC Input Voltage	10- 36 Vdc
DC Power Consumption	75W nominal
Environmental	-40C to +60C MIL-STD-810G/461F/1275D/704F
Interfaces provided (Frequency sensing, no interface required)	Customizable : RS 232, 422, 485, LVDS (Ethernet in development)
Connector Interface	N, TNC, as specified
Chassis Finish	Olive Green CARC, Black anodized/powdercoat, or chemical conversion optional

Single Channel Compact Power Amplifier



"CONTROL CONNECTOR TABLE"

PIN	SIGNAL NAME	PIN	SIGNAL NAME	PIN	SIGNAL NAME
1	GND	8	WB_TXNRX_PA	15	SERIAL_DATA_OUT
2	GND	9	SPL_PA_MISO	16	SPI_PA_MOSI
3	PA_V_BATT	10	REMOTE_OFF	17	SERIAL_DATA_IN
4	GND	11	SPI_PA_SELECT	18	GND
5	GND	12	SPI_PA_CLOCK	19	DET_REV_BUF
6	PA_V_BATT	13	DET_FWD_BUF		
7	PA_V_BATT	14	GND		



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