

# UltraX-20 POWER AMPLIFIER

**20 Watts  
RF Power For:**

- Neuromodulation Applications



**Featuring:**

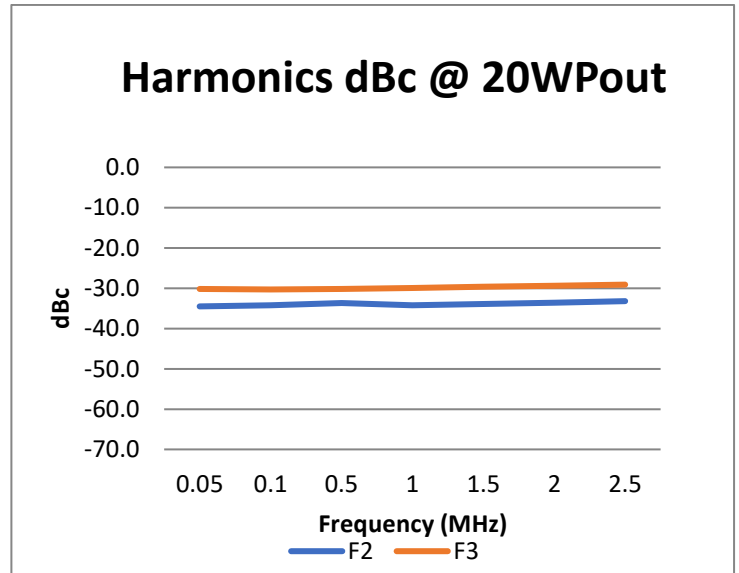
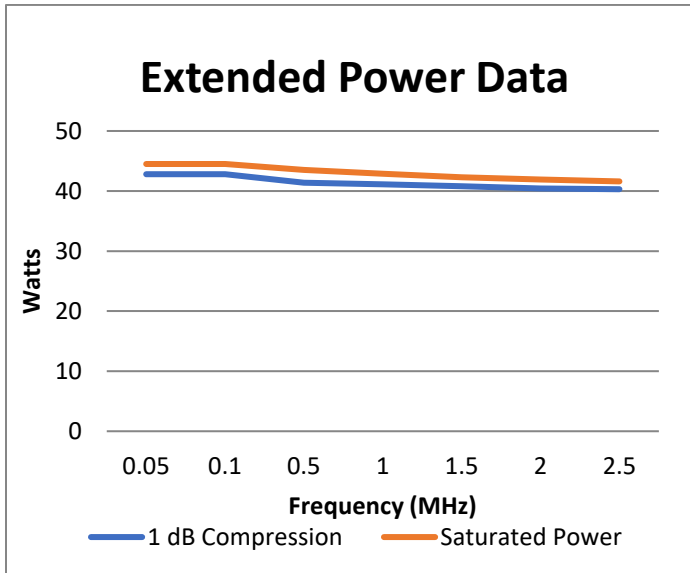
- 100 KHz – 2 MHz
- 20 W 1dB Compression
- Compact Design
- Solid State Reliability
- Forced Air Cooling



E&I UltraX-20 Specifications*	
<b>Class of Operation:</b>	Class A
<b>Frequency Coverage:</b>	100 KHz –2 MHz
<b>Rated Power:</b>	20 Watts P1dB Compression
<b>Saturated Power:</b>	40 Watts
<b>Power Gain:</b>	43 dB nominal
<b>Gain Flatness:</b>	+/- 1.5 dB
<b>Input Power for Rated Pout:</b>	2 mW / 3dBm
<b>Input Impedance / VSWR:</b>	50 Ω / 1.5:1 maximum
<b>Output Impedance / VSWR:</b>	50 Ω / 2:1 maximum
<b>Harmonic Level:</b>	< -20 dBc @ 20W Pout
<b>Ruggedness:</b>	∞:1 VSWR
<b>Stability:</b>	Unconditional into any passive load
<b>Protection:</b>	Unit will withstand input signal of +13 dBm without damage (1.0 V rms) max.
<b>Third Order Intercept:</b>	IP3 ~ 56 dBm
<b>AC Input:</b>	100 – 240 VAC 47-63 Hz
<b>Temperature Range:</b>	0° – 40° C
<b>Cooling:</b>	Forced Air
<b>Dimensions (H x W x D):</b>	3.25 x 13.5 x 12.0 inches 82.55 x 342.9 x 304 mm
<b>Weight:</b>	8.5 lbs (3.9 Kg)
<b>Connectors:</b>	BNC



# UltraX-20 POWER AMPLIFIER



## Performance into 50 ohms

Input				Amplifier Gain Nominal dB	Output			
Input Power Watts	dBm	V p-p Volts	V rms Volts		Output Power dBm	Watts	V p-p Volts	V rms Volts
0.000156	-8.06	0.25	0.09	40	31.94	1.56	25.00	8.84
0.0006	-2.04	0.30	0.18	40	37.96	6.25	50.00	17.68
0.0014	1.48	0.75	0.27	40	41.48	14.06	75.00	26.52
0.0025	3.98	1.00	0.35	40	43.98	25.00	100.00	35.36



Electronics & Innovation, Ltd.  
 150 Research Blvd.  
 Rochester, NY 14623  
 Tel: 585-214-0598 / Fax: 585-214-0580  
 www.eandiltd.com