

Specifications

XPA Ultra Series 1002, 1002-70V, 1002-100V

Audio

Voltage gain	
XPA U 1002.....	23x (27 dB)
XPA U 1002-70V	57x (35 dB)
XPA U 1002-100V	81x (38 dB)
CMRR.....	75 dB @ 1 kHz (typical)

Audio input

Number/signal type	2 balanced/unbalanced
Connectors	(1) 3.5 mm captive screw connector, 5 pole
Impedance	>10k ohms balanced/unbalanced, DC coupled
Nominal level	+4 dBu, balanced
Maximum level	+20 dBu (7.75 Vrms), balanced
Input sensitivity	+4 dBu
Input signal detection threshold	-65 dBu $\pm$ 3 dB, balanced

NOTE: 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV $\approx$ 2 dBu

Audio output

Number/signal type	
XPA U 1002.....	2 channels, 4 or 8 ohms
XPA U 1002-70V	2 channels, 70V
XPA U 1002-100V	2 channels, 100V
Connectors	(1) 5 mm screw lock captive screw connector, 4-pole

NOTE: These connectors accept wires of 22 AWG to 12 AWG.

Load impedance	
XPA U 1002.....	4 ohms minimum
XPA U 1002-70V	50 ohms minimum
XPA U 1002-100V	100 ohms minimum
Amplifier type	Class D
Output power	
XPA U 1002.....	100 Watts per channel, 8 ohms, 1 kHz, 0.1% THD 100 Watts per channel, 4 ohms, 1 kHz, 0.1% THD
XPA U 1002-70V	100 watts per channel, 70V, 1 kHz, 0.1% THD
XPA U 1002-100V	100 watts per channel, 100V, 1 kHz, 0.2% THD
Frequency response	20 Hz to 20 kHz, $\pm$ 1 dB
THD + Noise	0.1% @ 1 kHz, at 3 dB below clipping
S/N.....	100 dB, 20 Hz - 20 kHz, unweighted
Damping factor	
XPA U 1002.....	>100 @ 8 ohms
XPA U 1002-70V	>100 @ 50 ohms
XPA U 1002-100V	>100 @ 100 ohms

Specifications • XPA Ultra Series 1002, 1002-70V, 1002-100V (Continued)

High pass filter

XPA U 1002-70V	80 Hz, 12 dB per octave rolloff, selectable via captive screw
XPA U 1002-100V	80 Hz, 12 dB per octave rolloff, selectable via captive screw

Control/remote

Control port

XPA U 1002.....	(1) 3.5 mm captive screw connector, 2-pole
XPA U 1002-70V	(2) 3.5 mm captive screw connector, 2-pole
XPA U 1002-100V	(2) 3.5 mm captive screw connector, 2-pole

Pin configurations

Standby power control (contact closure)		Pin 1 = GND, pin 2 = Standby
High pass filter (contact closure)		Pin 1 = GND, pin 2 = OFF

General

Power supply	Internal
	Input: 100-240 VAC, 50-60 Hz

Power consumption and thermal dissipation

XPA U 1002		115 VAC, 60Hz				230 VAC, 50Hz			
		AC Line Current	AC Power Consumed	Thermal Dissipation		AC Line Current	AC Power Consumed	Thermal Dissipation	
Condition		A	W	W	BTU/hr	A	W	W	BTU/hr
Active (1/8 power), all channels driven	8Ω	0.4	34.2	9.2	31	0.2	33.5	8.5	29
	4Ω	0.4	35.9	10.9	37	0.2	35.0	10.0	34
Quiescent (idle)		0.1	5.3	5.3	18	0.1	5.1	5.3	18
Standby		<0.1	<1	<1	<3	<0.1	<1	<1	<3

XPA U 1002-70V		115 VAC, 60Hz				230 VAC, 50Hz			
		AC Line Current	AC Power Consumed	Thermal Dissipation		AC Line Current	AC Power Consumed	Thermal Dissipation	
Condition		A	W	W	BTU/hr	A	W	W	BTU/hr
Active (1/8 power), all channels driven	70V	0.4	36.1	11.1	38	0.2	35.4	10.4	35
Quiescent (idle)		0.1	5.5	5.5	19	0.1	5.4	5.4	18
Standby		<0.1	<1	<1	<3	<0.1	<1	<1	<3

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XPA U 1002-100V		115 VAC, 60Hz				230 VAC, 50Hz			
		AC Line Current	AC Power Consumed	Thermal Dissipation		AC Line Current	AC Power Consumed	Thermal Dissipation	
Condition		A	W	W	BTU/hr	A	W	W	BTU/hr
Active (1/8 power), all channels driven	100V	0.4	35.6	10.6	36	0.2	34.9	9.9	34
Quiescent (idle)		0.1	5.4	5.4	18	0.1	5.2	5.2	18
Standby		<0.1	<1	<1	<3	<0.1	<1	<1	<3

Temperature/humidity

Storage	–40 to +158°F (–40 to +70°C) / 10% to 90%, non-condensing
Operating	+32 to +122°F (0 to +50°C) / 10% to 90%, non-condensing
Cooling.....	Convection, no vents
Protection	Clip limiting, thermal, short circuit, DC output
Indication	Limiter/Protect LED indicates the onset of clip limiting, thermal cycling, or a short circuit. Over Temp LED indicates when the amplifier exceeds the recommended operating temperature for optimal unit longevity. Power LED indicates power state, DC output protection (see XPA Ultra Series User Guide for details).
Rack mount	Yes, with included mounting brackets or optional rack shelf
Enclosure.....	Metal
Enclosure dimensions	1.7" H x 8.7" W x 10.5" D (1U high, half rack wide) 43 mm H x 220 mm W x 267 mm D
Product weight	3.4 lbs (1.5 kg)
Regulatory compliance.....	CCC, CE, C-tick, c-UL, EN55032, EN55035, FCC Class B, ICES, KC, UL, VCCI Class B. Meets UL 62368-1, IEC 62368-1, and BSEN 62368-1 for Multimedia Equipment. Complies with the appropriate requirements of ENERGY STAR® (ENERGY STAR qualified amplifier), RoHS, WEEE. UL rated for use in plenum airspaces: meets UL 2043 for heat and smoke release.
Product warranty	3 years parts and labor
Everlast power supply warranty.....	7 years parts and labor

NOTE: All nominal levels are at $\pm 10\%$.

NOTE: Specifications are subject to change without notice.

NOTE: Shipping weights and dimensions are available at www.extron.com.

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