

## Specifications

### XPA U 1002 Series

#### 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<br>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 U 1002 Series (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     |

# Specifications • XPA U 1002 Series (Continued)

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..... CE, CEC, CISPR 22 Class B, C-tick, CUL, ENERGY STAR®, European Code of Conduct, FCC Class B, ICES, KC, RoHS, UL, UL 2043, VCCI Class B
- Product warranty ..... 3 years parts and labor
- Everlast power supply warranty..... 7 years parts and labor

**NOTE:** All nominal levels are at ±10%.

**NOTE:** Specifications are subject to change without notice.

**NOTE:** Shipping weights and dimensions are available at [www.extron.com](http://www.extron.com).

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