

## Product Specification

### Features

- 94 dB Dynamic Range
- 110 dB Signal-to-Noise Ratio
- 94 dB Channel Separation
- Linear frequency response up to 24 kHz
- Avoids quality losses due to audio compression
- 128 times digital interpolation filter stage and analog filter stage
- Range of up to 300 ft (line of sight)
- Avoids reception errors by employing ½ rate forward error correction
- Mute output

### Applications

- Wireless home theater systems
- Wireless hi-fi stereo speaker systems

### General Description

The Model 1000 receiver will receive a stereo audio signal that is being transmitted digitally in the 2.4 GHz range by either the Model 1000 or Model 2000 transmitter. The recovered audio signal will pass a digital as well as an analog filter stage to eliminate out-of-band components and is presented at the line output.

By receiving the signal in a digital format, noise and quality losses that are inherent with conventional analog systems are avoided.

The Model 1000 receiver will apply forward error correction to the received signal in order to maximize reception robustness.

There is a logic mute signal provided which is asserted when no valid signal is received.

Reference Data

| PARAMETER                            | CONDITIONS                      | MIN. | TYP.  | MAX. | UNIT |
|--------------------------------------|---------------------------------|------|-------|------|------|
| OVERALL PERFORMANCE                  |                                 |      |       |      |      |
| Dynamic range                        | A-weighted                      | 89   | 94    |      | dB   |
| Signal-to-noise ratio                | idle channel                    |      | 110   |      | dB   |
| Total harmonic distortion plus noise | 0 dB                            |      | -86   | -81  | dB   |
| Channel separation                   |                                 |      | 94    |      | dB   |
| Interchannel gain mismatch           |                                 |      | 0.1   | 0.4  | dB   |
| Pass-band ripple                     |                                 |      |       | ±0.1 | dB   |
| Reception range                      | line of sight,<br>Note 1        |      |       | 200  | ft   |
|                                      | through obstructions,<br>Note 1 |      |       | 60   | ft   |
|                                      | line of sight,<br>Note 2        |      |       | 100  | m    |
|                                      | through obstructions,<br>Note 2 |      |       | 30   | m    |
| DC POWER CHARACTERISTICS             |                                 |      |       |      |      |
| DC supply voltage                    |                                 | 8    | 9     | 18   | V    |
| Power consumption                    |                                 |      | 180   |      | mA   |
| AUDIO INTERFACE                      |                                 |      |       |      |      |
| Full-scale output level              | peak-to-peak                    | ±1.6 | ±1.75 | ±1.9 | V    |
| Quiescent voltage                    |                                 |      | 2.2   |      | V    |
| Min. AC load resistance              |                                 | 3    |       |      | kΩ   |
| Max. AC load capacitance             |                                 |      |       | 100  | pF   |

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### **Contacting Amphony Support**

For contact details and Local Sales Representatives, visit the Amphony web site at:

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