

Digital bidirectional bodypack (Sennheiser Spectera SEK 1G4)

Digital bidirectional bodypack transceiver for wireless transmission of digital audio and control data. The transceiver shall simultaneously transmit both stereo/mono IEM/IFB and mono mic/line signals via a single antenna via a 6 or 8 MHz RF channel to match the wireless system described in the system description.

The bodypack shall provide continuous interference measurement for the RF channel without interrupting the audio signals. Interference or deterioration in connection quality shall be indicated via the proprietary software or WebUI. In addition, permanent full remote control and monitoring of IEM volume and balance, audio level, audio settings, battery status, and RF channel quality parameters shall be provided via the software.

The transceiver shall have a display that shows information even when the batteries are removed. In addition, the transceiver shall offer a power saving mode that activates automatically when it is out of range of its coupled transceiver antenna for a certain period of time.

The antenna of the bodypack shall be replaceable, the battery shall be charged in a separate 19" charging station or via the charging contacts on the SEK in a charging cradle.

The AD/DA converters of all connected bodypacks shall be clocked by a mutual word clock signal. The synchronized word clock for all audio signals shall also allow for immersive on-air 3D audio recording and playback.

The headphone volume shall be adjusted in 0.5 dB steps.

Technical requirements:

Specifications:

RF Channels: 1 (6 or 8 MHz)

Transmission scheme: Multicarrier, TDMA, TDD

Frequency range: 1G4 1350–1400 MHz, 1435–1525 MHz

Audio connections/mobile devices: up to 128 per RF channel

RF output power: max. 50 mW

Encryption: AES 256

Audio frequency response: 20 Hz – 20 kHz (± 1 dB)

Hi-Pass Filter: off/ 30/ 60/ 80/ 100/ 120 Hz

Mic gain: -6 to 42 dB, in 1 dB steps

Mic level: max. 7 Vpp @ 1 kHz

Line level: max. 9 Vpp @ 1 kHz

Battery operating time: up to 7 h (unidirectional)/ 5 h (bidirectional)

Connections, Displays & Controls:

1 x 3.5mm headphone output; 2 x 400 mW RMS (16 Ω , @ 1 kHz)

1 x 3-Pin Connector (female) Mic/ Line In

1 x Antenna Connector

1 x Endless Encoder / Switch

1 x 5 Segment LED Meter

1 x Status LED

1 x Display

1 x Power Switch (Covered)

Physical Properties:

Dimensions: 83.5 x 62 x 21 mm (without antenna)

Weight: approx. 144 g/ 178 g (without/ with battery)

Material: Metal

Operating temperature: approx. -10 °C to +50 °C

Relative humidity: 25% - 95%

Power supply: Li-ion battery

Bodypack shall include antenna and belt clip.