

# ew 100 <sup>Ⓢ</sup> Vocal Sets

## RF Wireless Systems | evolution wireless G3

### System variants and included components:

- ew 135 G3 – (1) SKM 100 G3 handheld transmitter, (1) <sup>Ⓢ</sup>835 dynamic, cardioid capsule, (1) EM 100 G3 rack-mountable receiver
- ew 145 G3 – (1) SKM 100 G3 handheld transmitter, (1) <sup>Ⓢ</sup>845 dynamic, super-cardioid capsule, (1) EM 100 G3 rack-mount receiver
- ew 165 G3 – (1) handheld transmitter, (1) <sup>Ⓢ</sup>865 super-cardioid condenser capsule, (1) EM 100 G3 rack-mount receiver

For recommended accessories please visit [www.sennheiserusa.com](http://www.sennheiserusa.com)



### Features

- Sturdy metal housing
- Automatic frequency management for transmitter and receiver
- Tunable UHF frequencies within a large switching bandwidth
- Wireless microphone with a quick-change microphone head from the <sup>Ⓢ</sup>800 series
- Large range of interchangeable microphone heads from the successful evolution series
- Wireless synchronization of transmitters via infrared interface
- Enhanced frequency bank management with up to 12 compatible frequencies
- 42 MHz bandwidth, 1,680 switchable frequencies
- Increased range for audio sensitivity
- Easy-to-read illuminated dot matrix display with warning indicator
- More control options (menu)
- Enhanced AF frequency range
- Soundcheck mode
- Integrated equalizer
- Contacts for recharging the BA 2015 accupack directly in the transmitter (requires LA2 adapter)
- (2) AA batteries for over 8 hours of use
- 4-level battery indicator for transmitter
- HDX compander for crystal-clear sound
- True diversity receiver for optimum reception
- High RF output power for large range
- Suitable for 19" rack mounting (1 U)

### General Description

This system is ideal for vocal applications. Choose from two (2) dynamic microphone heads with cardioid or super-cardioid pick-up patterns and one (1) elective condenser, super-cardioid pattern from the renowned evolution 800 microphone series. The SKM 100 G3 handheld transmitter and the EM 100 G3 rack-mountable receiver each features 20 frequency banks with one user bank and 12 directly accessible frequency presets. Each system is ready for immediate use.

### Technical Specifications

#### ew 100 <sup>Ⓢ</sup>

Modulation..... wideband FM  
 Frequency ranges ..... 516–558, 566–608,  
 ..... 626–668, 734–776, 780–822, 823–865  
 Transmission/Receiving  
 frequencies ..... 20 channel banks, 1 user bank,  
 .....12 factory preset channels each  
 Switching bandwidth.....42 MHz  
 Noise reduction system.....Sennheiser HDX  
 AF frequency response.....25 – 18,000 Hz  
 S/N ratio (at 1mV and peak deviation) ..≥ 110 dBA  
 THD (at nominal deviation and 1 kHz) .....≤ 0.9 %

#### EM 100 <sup>Ⓢ</sup>

Receiver principle..... True Diversity  
 Sensitivity (with HDX,  
 peak deviation) ..... <2.5  $\mu$ V at 52 dBA<sub>eff</sub> S/N  
 Adjacent channel rejection .....≥ 65 dB  
 Intermodulation attenuation .....≥ 65 dB  
 Blocking .....≥ 70 dB  
 Pilot-tone squelch..... detachable  
 Antenna inputs ..... 2 BNC sockets  
 AF output voltage (at peak deviation,  
 1 kHz AF)..... 1/4" (6.3 mm) jack socket,  
 ..... unbalanced: +12 dBu XLR socket,  
 .....balanced: +18 dBu  
 Power supply .....12 V DC  
 Dimensions .....7.48" x 8.35" x 1.69"  
 Weight ..... approx. 1.99 lbs

#### SKM 100 <sup>Ⓢ</sup>

RF output power at 50  $\Omega$  ..... typ. 30 mW  
 AF frequency response .....80 – 18,000 Hz  
 Power supply ..... 2 AA batteries, 1.5 V  
 Nominal voltage..... 2.4 V  
 Operating time .....typ. 8 h  
 Dimensions ..... $\varnothing$  1.97" x 10.43"  
 Weight .....approx. 15.87 oz

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### Architect and Engineering Specifications

The wireless microphone system shall feature a true-diversity receiver with 42 MHz of available tuning bandwidth with a total of 1,680 frequencies accessible in 25 kHz steps. The wireless microphone receiver must feature one Balanced XLR output with a max. output of +18 dBu, and one unbalanced 1/4" output with a max. output of +12 dBu. The wireless microphone receiver must feature two BNC antenna inputs, one for each receiver module in the true diversity system. The wireless microphone receiver must feature a backlit display that displays AF and RF levels, battery telemetry from the transmitter, operating frequency, and diversity switching information. The wireless microphone receiver must feature an automatic frequency scanning function that utilizes twenty (20) banks of pre-coordinated frequencies that are free of intermodulation interference. The wireless microphone receiver must also feature a user bank in order to store user defined frequencies. The wireless microphone transmitter must operate on two 1.5V AA battery cells. The wireless microphone transmitter must have access to 1,680 frequencies tuned in 25 kHz steps across a defined 42 MHz bandwidth. The wireless microphone transmitter must feature a backlit display that displays frequency information, AF level, battery level. The wireless microphone transmitter must transmit a pilot-tone squelch. The wireless microphone transmitter must have a specified RF output power of 30mW. The wireless microphone receiver must accept 12V DC power via BNC antenna inputs.

### Limited Product Warranty/Service

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