

Specifications

EM 100

RF characteristics

Modulation	wideband FM
Receiving frequency ranges	516–558, 566–608, 626–668, 734–776, 780–822, 823–865 MHz (A to E, G, see page 4)
Receiving frequencies	1,680 frequencies, tuneable in steps of 25 kHz 20 frequency banks, each with up to 12 factory-preset channels, intermodulation-free 1 frequency bank with up to 12 user programmable channels
Switching bandwidth	42 MHz
Nominal/peak deviation	±24 kHz / ±48 kHz
Receiver principle	true diversity
Sensitivity (with HDX, peak deviation)	< 2,5 µV for 52 dBA _{rms} S/N
Adjacent channel rejection	typ. ≥ 65 dB
Intermodulation attenuation	typ. ≥ 65 dB
Blocking	≥ 70 dB
Squelch	Off, Low: 5 dBµV, Middle: 15 dBµV, High: 25 dBµV
Pilot tone squelch	can be switched off
Antenna inputs	2 BNC sockets

AF characteristics

Compander system	Sennheiser HDX
EQ presets (switchable, affect the line and monitor outputs):	
Preset 1: "Flat"	
Preset 2: "Low Cut"	-3 dB at 180 Hz
Preset 3: "Low Cut/High Boost"	-3 dB at 180 Hz +6 dB at 10 kHz
Preset 3: "High Boost"	+6 dB at 10 kHz
S/N ratio (1 mV, peak deviation)	≥ 110 dBA
THD	≤ 0.9%
AF output voltage (at peak deviation, 1 kHz AF)	¼" (6.3 mm) jack socket (unbalanced): +12 dBu XLR socket (balanced): +18 dBu
Adjustment range of audio output level	48 dB (in steps of 3 dB) +6 dB gain reserve

Overall device

Temperature range	-10°C to +55°C
Power supply	12 V ===
Current consumption	300 mA
Dimensions	approx. 190 x 212 x 43 mm
Weight	approx. 980 g

In compliance with (EM)

Europe:

CE	EMC	EN 301489-1/-9
	Radio	EN 300422-1/-2
	Safety	EN 60065

USA:

FC	47 CFR 15 subpart B
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Approved by

Canada:

Industry Canada RSS 210, IC: 2099A-G3EM100

Mains unit*

Input voltage

NT 2-1	NT 2-3
110 V~ or 230 V~, 50/60 Hz	100 to 240 V~, 50/60 Hz
9 VA	max. 120 mA
13 V ---	12 V ---
300 mA	400 mA
-10 °C to +40 °C	-10 °C to +40 °C

Power/current consumption

Output voltage

Secondary output current

Temperature range

* depending on country variant

In compliance with

Europe:

CE	EMC	NT 2-3: EN 55022, EN 55024, EN 55014-1/-2
		NT 2-1: EN 55013, EN 55020, EN 55014-1/-2
	Safety	EN 60065

USA:

FC	47 CFR 15 subpart B
	ICES 003

Canada:

Certified by cCSAus KL, 60065, CSA.



For accessories and information on connector assignment, visit the ew G3 product page at www.sennheiser.com.

SK 100 and SKM 100

RF characteristics

Modulation

Frequency ranges

Transmission frequencies

Switching bandwidth

Nominal/peak deviation

Frequency stability

RF output power at 50 Ω

Pilot tone squelch

wideband FM

516–558, 566–608, 626–668, 734–776,
780–822, 823–865 MHz (A to E, G, see page 4)

1,680 frequencies, tuneable in steps of 25 kHz

20 frequency banks, each with up to 12 factory-
preset channels, intermodulation-free

1 frequency bank with up to 12 user programmable
channels

42 MHz

±24 kHz / ±48 kHz

≤±15 ppm

typ. 30 mW

can be switched off

AF characteristics

Compander system

AF frequency response

SK

SKM

S/N ratio (1 mV, peak deviation)

THD

Max. input voltage (SK) microphone/line

Input impedance (SK) microphone/line

Input capacitance (SK)

Adjustment range of input sensitivity

Overall device

Temperature range

Power supply

Nominal voltage

Current consumption:

- at nominal voltage
- with switched-off transmitter

Operating time

Dimensions

Weight (incl. batteries)

In compliance with (SK and SKM)

Europe:

Sennheiser HDX

microphone: 80–18,000 Hz

line: 25–18,000 Hz

80–18,000 Hz

≥ 110 dBA

≤ 0.9 %

3 V_{rms}

40 kΩ unbalanced/1 MΩ

switchable

SK: 60 dB, adjustable in steps of 3 dB

SKM: 48 dB, adjustable in steps of 6 dB

–10 °C to +55 °C

2 AA size batteries, 1.5 V

or BA 2015 accupack

2.4 V ==

typ. 180 mA (30 mW)

≤ 25 μA

typ. 8 hrs

SK: approx. 82 x 64 x 24 mm

SKM: approx. ∅ 50 x 265 mm

SK: approx. 160 g

SKM: approx. 450 g

CE	EMC	EN 301489-1/-9
	Radio	EN 300422-1/-2
	Safety	EN 60065, EN 62311 (SAR)

Approved by (SK)

Canada:

USA:

Industry Canada RSS 210, IC 2099A-G3SK

limited to 806 MHz

FCC-Part 74, FCC-ID: DMO G3SK

limited to 698 MHz

Approved by (SKM)

Canada:

USA:

Industry Canada RSS 210, IC: 2099A-G3SKMEM

limited to 806 MHz

FCC-Part 74, FCC-ID: DMO G3SKMEM

limited to 698 MHz

Microphones (SK 100)

	ME 2	ME 3	ME 4
Microphone type	condenser	condenser	condenser
Sensitivity	20 mV/Pa	1.6 mV/Pa	40 mV/Pa
Pick-up pattern	omni-directional	cardioid	cardioid
Max. SPL	130 dB SPL	150 dB SPL	120 dB SPL

Microphone heads (SKM 100)

	MMD 835-1	MMD 845-1	MME 865-1
Radio microphone type	dynamic	dynamic	condenser
Sensitivity	2.1 mV/Pa	1.6 mV/Pa	1.6 mV/Pa
Pick-up pattern	cardioid	super-cardioid	super-cardioid
Max. SPL	154 dB SPL	154 dB SPL	152 dB SPL

Polar diagrams and frequency response curves of the microphone heads (SKM 100)

