

# MK202 E + iSV1611 1/2" USB Ultrasonic Microphone



The USB microphone model iSV1611 is a digital microphone consisting of pre-polarized 1/2" MK 202 E condenser microphone capsule, preamplifier, 2 channel (stereo) ADC and USB interface which can be used with apps on smartphone, tablet or PC.

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PC, smartphone or tablet receive the digitized 2 channel signaldata via a USB cable connected to the iSV1611.

The two-channel operation allows simultaneous measurementfrom 22 dB(A) to 156 dB(A).

The 1/2" measuring microphone capsule MK 202 E is designed for acoustic measurements in research, development and industry and is also used in building acoustics and audiology, among others.

The MK 202 E measuring microphone capsule is suitable for class 1 sound level meters according to IEC 61672.

## **Technical data**

48/96/192
10 Hz-40 kHz
60US
Sphere
12 dB (A)
22 dB (A)
158 dB
14 mV/Pa
22 dBA - 158 dB
2.0 & 1.1
φ20×165
13.2 mm
96 g

ROGA-Instruments, In Hasenacker 56, D-56412 Nentershausen | Phone: +49 6485 8815803 Email contact@roga-instruments.com



# MK 202 E Specs

Transducer type	Capacitive pressure receiver
Frequency range of free-field	10 Hz 35 kHz (± 1.5 dB)
transmissionmeasurement	40 kHz (03 dB)
Sensitivity	14 mV/Pa
Limit sound pressure level for 3 % distortion at 1 kHz	158 dB
Noise	22 dB
Polarization voltage	backelectret
Capacitance with polarization voltage at 1 kHz	18 pF
Working temperature range	-50 +100 °C
Humidity up to	70 °C, 90 %
Temperature coefficient	≤ 0.01 dB/K
Static pressure coefficient	0.00001 dB/Pa
Diameter with protective cap	13.2 ± 0.02 mm
Height	14.2 mm
Weight	8.5 g
Thread for preamplifier	11.7 mm 60 UNS
Thread for protective cap	12.7 mm 60 UNS



### Maintenance and servicing

In order to ensure proper functionality, the measuring microphone capsule must be protected from mechanical damage and, depending on the conditions of use, checked on all sides for contamination at intervals to be specified in the operating voltage-free state. After removing the protective cap, the impurities in its interior, as well as on the membrane, should be removed extremely carefully with a softbrush or cloth. The measurement microphone capsule is not suitable for use in chemically aggressive media and conductive dust. Condensation formation must be ruled out.

### **Polar diagrams**

2 kHz 5 kHz10 kHz 16 kHz20 kHz 31.5 kHz



#### **Frequency responses**





