

## TX-3 "Mobile" measurement microphone



Actual size (A4)

The **TX-3 microphone** is equipped with TA4-F connector to be directly connected to the transmitter of many wireless microphones' brands, obtaining an effective and comfortable "wireless measurement system" \*\*. The concept that has inspired the TX-3 is *versatility*. The three terminals of the capsule housed by the microphone are available on the output connector without "electronics" in the middle. In this way, with the right interface, it can be used in endless applications. Connected to our AC-2 active cable (optional), the TX-3 is transformed into a conventional 48 V microphone with excellent characteristics (equivalent to our MYC-3). Through simple adapters-cables you can easily connect the TX-3 to inputs of any type. Connected to an unbalanced preamplifier and fed with 2-10 Vdc, it is perfect in laboratory work, in a recording studio, for Hi-Fi, for the DIY etc. The TX-3 is not only a small and handy microphone characterized by a double use: mobile (on bodypack) during setup, and fixed (via AC-2 active cable) at FOH during the event, but it is a versatile reference... ready for everything!

\*\* *The microphone performance depends on the wireless system used.*



- > Free field **frequency response** between 10 and 20000 Hz falls within the tolerance limits of +/- 2 dB, and each microphone is equipped by its own response **compensation file** and **calibration chart**.
- > **Total harmonic distortion** at the sound pressure level of 130 dB is around 1% and less than 3% to 140 dB.
- > Thanks to its **very low intrinsic noise**, less than 23 dBA SPL equivalent and the **sensitivity** of -36 dBV, this is a versatile device that can be used both in conditions of extremely high sound pressure levels and in the presence of particularly quiet sound fields.
- > The **body** is realized with the highest quality stainless steel (AISI 316 marine grade) and high precision machinery. It is treated with the passivation process to make it absolutely corrosion-resistant.
- > Serial number is **laser-engraved** so it can't be cancelled.
- > Thanks to its **compact size** and solid structure this device is easily handled and it can even be "carelessly" used.
- > The **TA4F connector** allows for a direct connection to body-pack from Shure\*, Line6\*, dBTechnologies\* etc.
- > The **tip** of the microphone has a diameter of 7 mm allowing the use of standard 1/4" calibrators/adapters. It's firmly screwed to the microphone body. It's the most delicate part and therefore the most at risk. Stages, construction sites and similar environments and workplaces are dangerous places! In the unfortunate event of an accident (let's touch wood!), the replacement is easy and cheap, as well as future possible upgrades.

The microphone is protected by a **cylindrical aluminum watertight case** (O-Ring closure). The whole device looks like a closed tube: 10 cm length, 16 mm diameter, for a total weight less than 40 g. Maximum protection, minimum size and weight.

\*Registered marks

**TECHNICAL SPECIFICATIONS**

Omni-directional pre-polarized condenser microphone

Polarity: a positive pressure variation on the diaphragm produces a positive voltage at pins 3 and 4 of the TA4F

Free field frequency response, 0°, +/- 1dB

10–10000 Hz

Free field frequency response, 0°, +/- 2dB

10–22000 Hz

Sensitivity (@ 250 Hz: +/-2 dB)

15 mV/Pa [-36.5 dB re 1 V/Pa]

Max SPL (THD<3 %)

140 dB SPL

Noise

<23 dBA SPL equiv. (typical 22 dBA)

Temperature coeff.

+0.035 dB/°C

Operating temp. range

-10 °C to +50 °C

Powering

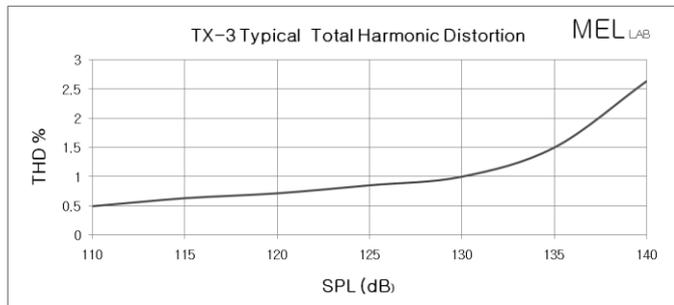
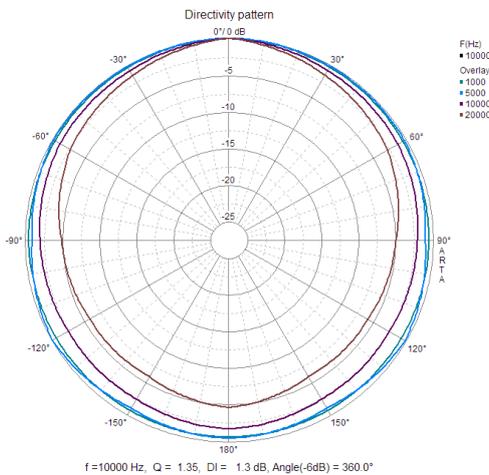
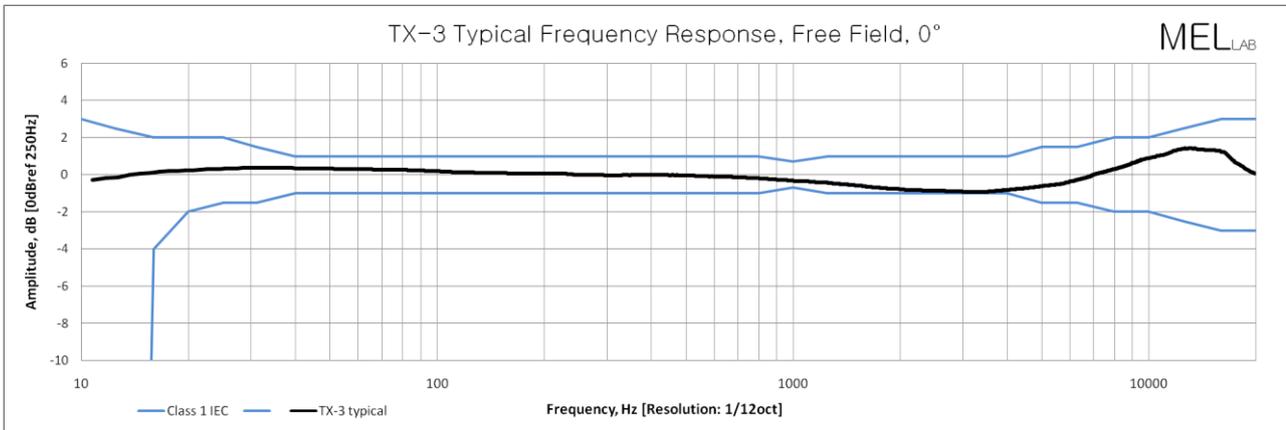
2–10 Vdc

Weight

20 g

Length

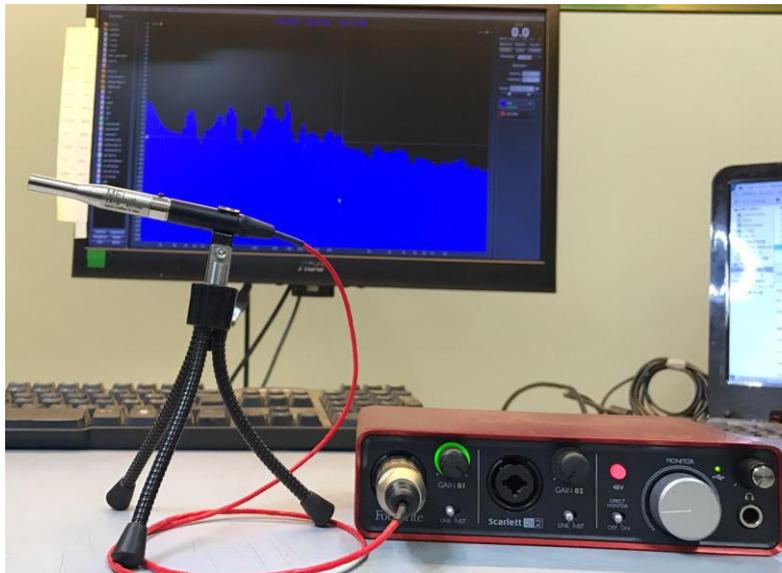
67 mm



This specs refer to a typical TX-3 microphone connected via active cable AC-2 to a MELLab balanced microphone measurement amplifier: 2 kΩ input impedance / 48.2 Vdc phantom power.  
 Frequency response measured in anechoic chamber (f>250 Hz) and pressure chamber (f<250 Hz).  
 Reference microphone Bruel&Kjaer Type 4958 s/n 2864560.  
 Reference pistonphone Bruel&Kjaer Type 4220 s/n 613857.  
 Soundcard: RME Fireface 800. Software: ARTA. Calibration accuracy > +/- 0.5 dB.  
 Standard environmental conditions (23 °C, 50% UR, 1013.25 mb/hPa).



Wireless application (pre-event)



Wired application via active cable AC-2 (show-time)

