Tactical Air Purifying Respirator (TAPR) Microphone

TAPRM

General Technical Specification

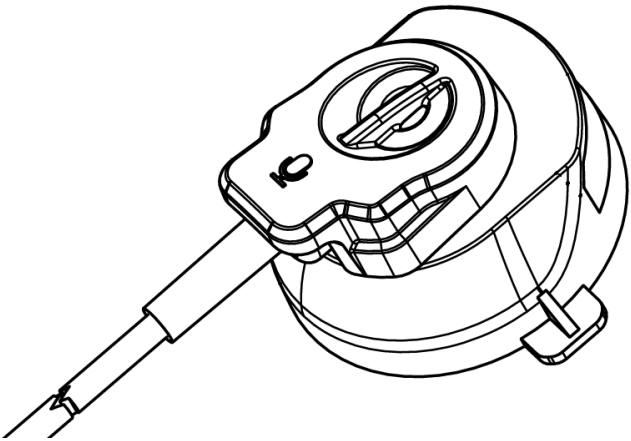


Figure 1: TAPRM

The Tactical Air Purifying Respirator Microphone TAPRM (Figure 1) is designed for the OM-90 and CM-6 full-face masks and for the S-97 half-mask. It can be easily integrated into new as well as older respiratory mask without the need for further modification or additional certification.

The TAPRM is compatible with standard personal headsets, communication hearing protectors and Push-to-Talk (PTT) Boxes. It can be also directly interconnected with radios or voice amplifiers (like Respirator Voice Amplifier RVA C.01).

The TAPRM works in a fully passive mode – it does not require any supply voltage for its operation.

Electro-Acoustic Data

Microphone Type:
Noise-Cancelling,
Dynamic,
Moving Coil

Output Impedance (1 kHz):
150 Ω ± 10 %

Real Output Level
(at usual voice level):
3.5 mV_{rms} ± 10 %

Harmonic Distortion:
max. 5 % over a bandwidth of 315 Hz to 4000 Hz

Frequency Response
(94 dB_{SPL}, 1/1 octave bands):

500 Hz	-5 ± 3 dB
1000 Hz	reference
2000 Hz	0 ± 3 dB
4000 Hz	2 ± 3 dB

Environmental and Other Data

Colour:
Black (RAL 9005)

Weight (including Cable):
50 g ± 10 %
70 g ± 10 % (TAPRM.03 and TAPRM.04)

Dimensions:
Refer to Figure 2
Refer to Figure 3 (TAPRM.03 and TAPRM.04)

Cable Connector Type:
Refer to Table 1

Cable Connector Pinout:
Refer to Table 1

Cable Length:
Refer to Table 1

Cable Strength:
20 N / 20 s

Operating Temperature:
(-33 to +71) °C

Storage temperature:
(-57 to +71) °C

CE Certification:
Approved according to PPE directive 89/686/EEC and EMC directive 89/336/EEC

CBRN:
Designed in accordance with ČSN EN 140

Ingress Protection
(IEC standard 60529):
IP67

Flame Retardant Properties
(UL 94):
Min. level V2

Mean Time Between Failures (MTBF):
> 20 000 hours

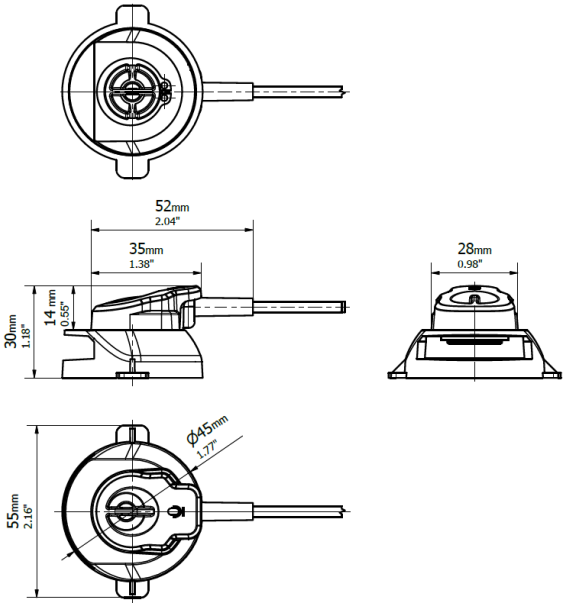


Figure 2: TAPRM Basic Dimensions

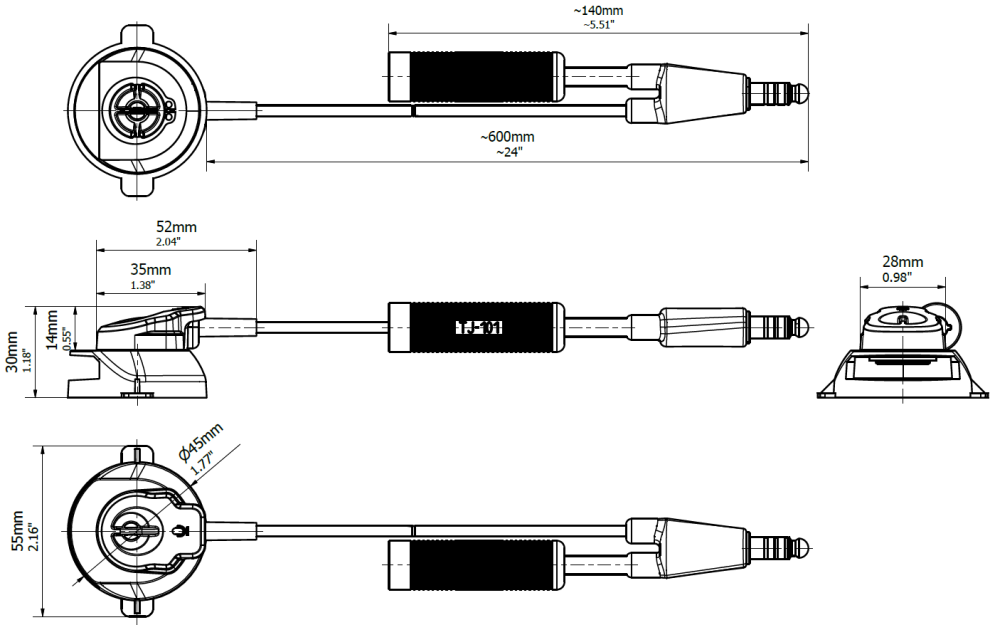
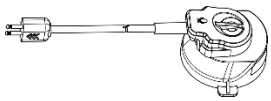
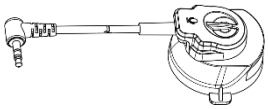
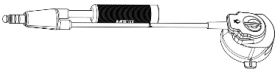


Figure 3: TAPRM.03 and TAPRM.04 Basic Dimensions

Table 1: TAPRM Versions

TAPRM Version	Cable Connector Type and Pinout	Cable Length	Picture
TAPRM.01	U-173/U: 1 TAPRM Signal (MIC +) 2 TAPRM Ground (MIC -)	350 mm ± 5 %	
TAPRM.02	Jack 3.5 mm, stereo (TRS, 90°): Tip TAPRM Signal (MIC +) Ring Not Connected Sleeve TAPRM Ground (MIC -)	1000 mm ± 5 %	
TAPRM.03	TJ-101 (PELTOR standard): 1 Not Connected 2 Not Connected 3 Headset Audio Input 4 Headset Audio Ground TP-120 (PELTOR standard): 1 TAPRM Ground (MIC -) 2 TAPRM Signal (MIC +) 3 Headset Audio Input 4 Headset Audio Ground	600 mm ± 5 %	
TAPRM.04	TJ-101 (NATO standard): 1 Not Connected 2 Headset Audio Input 3 Not Connected 4 Headset Audio Ground TP-120 (NATO standard): 1 TAPRM Ground (MIC -) 2 Headset Audio Input 3 TAPRM Signal (MIC +) 4 Headset Audio Ground	600 mm ± 5 %	
TAPRM.08	Jack 3.5 mm, stereo (TRS): Tip TAPRM Signal (MIC +) Ring Not Connected Sleeve TAPRM Ground (MIC -)	1000 mm ± 5 %