

## Main Features

- Up to 232 MHz bandwidth in 470/798 MHz range
- Enhanced robustness against self-interferences and antenna performances thru a proprietary "intermodulation cancellation" circuit
- Miniature design with flexible pcb (no connectors) for extended reliability
- User selectable companding systems:
  - ENR (noise optimized) & ENC (voice optimized)
- Battery: 2 AA Alkaline, rechargeable NiMH or Lithium
- Infrared interface for management and firmware update
- Audio input circuitry with high linearity audio transformer



## General Description

*"MTB40 is an extremely small and light plug-on transmitter especially designed for professional wireless microphone applications".*


Very easy and quick to use thanks to OLED display, MTB40 benefit also of the latest Wisycom RF technology along with an enhanced robustness against noise and inter-modulation.



**TECHNICAL SPECIFICATIONS**

Switchable channels	2400 allocated by 40 groups of 60 channels (in specific frequency range), quickly selectable with dedicated buttons
Switching window	Up to 232 MHz, depending on band (see Variants below)
Frequencies	Quartz PLL frequency synthesizer circuit (25 kHz step)
Frequency stability	▪ $\pm 2,5$ ppm (in the rated temperature range)
Temperature range	-10 ÷ +55 °C
Max RF power	▪ 50 mW (ERP) when high power selected ▪ 10 mW (ERP) when low power selected
Spurious emissions	< 2 nW
Modulation	wideband FM, with 50 $\mu$ s pre-emphasis
Nominal deviation	$\pm 40$ kHz (Peak deviation = $\pm 56$ kHz)
Telemetry feature	MTB40 transmits also a digitally modulated sub-carrier, suitable for: ▪ <i>tone-squelch operating</i> ▪ <i>remote battery monitoring</i> ▪ <i>optional PTT (push to talk) operation</i>
AF input connector LEMO option	XLR-3F (transformer isolated) with 48V phantom power
AF input level	80 dB adjustable range from -54 dBu (775 $\mu$ V) to 26 dBu (15.5 V) at peak deviation (1 kHz), adjustable in 1 dB steps
Max. input level	+26 dBu (15.5 V) at clipping, +20 dBu (7.75 V) at nominal level
Noise-Reduction	ENR (WisycOM Extended-NR), with independent Attack- and Recovery-time, noise optimized ENC (WisycOM Extended-NC), with independent Attack- and Recovery-time, voice optimized & with reduced pre-emphasys
AF bandwidth	▪ 45 Hz ÷ 21 KHz (3dB) ▪ 55 Hz ÷ 20 KHz (1dB)
Distortion	< 0.3 % (0.15 % typ.)
Signal-to-noise ratio	▪ typ. 115 dB (A) <sub>rms</sub> with 40 kHz deviation ▪ typ. 121 dB (A) <sub>rms</sub> with 56 kHz deviation
Display	High contrast OLED (Organic light-emitting diode) bicolor display (96 x 36 pixels) 8 step battery lifetime indication: 7 bars (100%-87%-75%-63%-50%-38%-25%) and "empty bar" quickly blinking (12% remaining)
Power supply	2 AA size batteries (Alkaline, rechargeable NiMH or Lithium) – Phantom Power to Mic (max 4 mA)

**POWER PROFILE & COUNTRY**
**FREQUENCY RANGE:**

 max power 50mW (Europe)

**VARIANTS:**
**▪ FREQUENCY RANGE**

**B1** 470-640 MHz

**B2** 566-798 MHz

**B3** 510-698 MHz

For the commercial code, see in the Variants area of the Products on our website