

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 reduction) & ENC (voice quality optimized)
- Input dynamic extension with an integrated HW limiter (30 dB above peak)
- P48 phantom power for condenser microphones
- New white OLED display
- New XLR-3F connector with locking collar to ensuring an extremely tight noiseless fit!
- Infrared interface for management and firmware update
- Audio input circuitry with high linearity audio transformer
- Battery: 2 AA Alkaline, rechargeable NiMH or Lithium

General Description

"MTB40S is an extremely small and light plug-on transmitter especially designed for professional audio applications".

Very easy and quick to use thanks to OLED display, MTB40S 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, (see <i>Variants</i> below)
Frequencies	Quartz PLL frequency synthesizer circuit (25 kHz step)
Frequency stability	▪ $\pm 2,5$ ppm (in the rated temperature range)
Temperature range	-10 \div +55 °C
Max RF power	▪ 10 mW (ERP) ▪ 50 mW (ERP) ▪ [100 mW (ERP) (note: in some countries high power can be disabled, for local norm!)]
Spurious emissions	< 2 nW
Modulation	wideband FM, with pre-emphasis
Nominal deviation	± 40 kHz (Peak deviation = ± 56 kHz)
Telemetry feature	MTB40S transmits also a digitally modulated sub-carrier, suitable for: ▪ <i>tone-squelch operating</i> ▪ <i>remote battery monitoring</i>
AF input connector	XLR-3F (transformer isolated) with locking collar and 48V phantom power
AF input level	100 dB adjustable range from -54 dBu (775 uV) to 46 dBu (15.5 V) at peak deviation (1 kHz), adjustable in 1 dB steps
Max. input level	+46 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 \div 21 KHz (3dB) ▪ 55 Hz \div 20 KHz (1dB)
Distortion	< 0.3 % (0.15 % typ.)
Signal-to-noise ratio	▪ typ. 115 dB (A) _{rms} with 40 kHz deviation ▪ typ. 121 dB (A) _{rms} with 56 kHz deviation
Led	RGB Led indication (red, green and blue): ▪ Wireless transmission status - Green when RF transmission power is on, ▪ Battery lifetime status: <i>GREEN - steady</i> (> 25%) - Red when RF transmission power is off. - <i>slowly blinking</i> (< 25%) - <i>quickly blinking</i> (<12%) - Blue when the input signal is above the peak threshold ▪ Modulation peak (if activated & limiter disabled): <i>RED</i>
Display	High contrast OLED (Organic light-emitting diode) white display (128 x 32 pixels) 8 step battery lifetime indication: <u>7 bars</u> (100%-87%-75%-63-50%-38%-25%) and " <u>empty bar</u> " quickly blinking (12% remaining)
Power supply	2 AA size batteries (Alkaline, rechargeable NiMH or Lithium) – Phantom Power to Mic (max 4 mA)
Dimension	124 x 40 x 34 mm (Height-Width-Depth)
Weight	Approx. 210 g. without batteries (250g with batt)

POWER PROFILE & COUNTRY FREQUENCY RANGE:

- EU** max power 50mW (Europe)
EUX max power 100mW (Europe)
US max power 50mW (USA & Canada)
USX max power 100mW (USA & Canada)

* MTB40S -EUX is not an SRD device, it requires specific authorization by your local frequency authority!

VARIANTS:
- FREQUENCY RANGE

- B1** 470-640 MHz
B2 566-798 MHz
B3 510-698 MHz

- COLOR

- PV** ceramic coating

Note: MTB40S series complies with ETSI 300 422

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