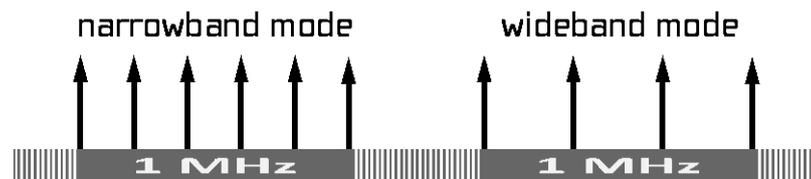


## Main Features



- Up to 232 MHz bandwidth in 470/1160 MHz range
- **Dual power amplifier & phase canceling configuration for intermodulation free operation**
- Wideband and Narrowband options available
- 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
- Intermodulation free allows **EQUALLY SPACES** frequency allocation:



- 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 **Linear** 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 **Linear** benefit also of the latest Wisycom RF technology along with an **enhanced robustness against noise and inter-modulation**.



## TECHNICAL SPECIFICATIONS

<b>Frequency ranges</b>	B7 option: 470 ÷ 663 MHz, B3 option: 510 ÷ 698 MHz, B2 option: 566 ÷ 798 MHz BP option: 806 ÷ 810 MHz, B8 option: 940 ÷ 960 MHz, B6 option: 960 ÷ 1160 MHz
<b>Switchable channels</b>	2400 managed in 40 groups of 60 frequencies completely user customizable
<b>Switching-window</b>	Up to 232 MHz, depending on band (see <i>Variants</i> below)
<b>Frequencies</b>	Quartz PLL frequency synthesizer circuit (25 kHz step)
<b>Frequency error</b>	± 2.5 ppm, in the rated temperature range
<b>RF Power</b>	switchable typ. 20 mW/ 20L mW / 50 mW /100 mW note: in some countries high power can be disabled, for local norm!
<b>Modulation</b>	wideband FM, with pre-emphasis (Narrowband on request)
<b>Nominal deviation</b>	±40 kHz Wideband (±25 kHz Narrowband option)
<b>Peak deviation</b>	±56 kHz Wideband (±35 kHz Narrowband option)
<b>Spurious emissions</b>	< 2 nW
<b>Telemetry feature</b>	TX transmits also a digitally modulated sub-carrier, suitable for: <ul style="list-style-type: none"> <li>▪ tone-squelch operating</li> <li>▪ remote battery monitoring</li> <li>▪ optional PTT (push to talk) operation</li> </ul>
<b>Noise Reduction system</b>	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
<b>AF bandwidth</b>	45 Hz ÷ 21 KHz (3dB), 55 Hz ÷ 20 KHz (1dB) Wideband with LPF at 20KHz 45 Hz ÷ 17 KHz (3dB), 55 Hz ÷ 15 KHz (1dB) Narrowband with LPF at 15kHz
<b>Distortion</b>	< 0.3 % (0.15 % typ.)
<b>SND/D ratio (Analogue)</b>	45 Hz ÷ 21 KHz (3dB), 55 Hz ÷ 20 KHz (1dB) Wideband with LPF at 20KHz 45 Hz ÷ 17 KHz (3dB), 55 Hz ÷ 15 KHz (1dB) Narrowband with LPF at 15kHz
<b>Audio input connector</b>	XLR-3F (transformer isolated) with locking collar and 48V phantom power
<b>Audio input level</b>	from -54 dBu (775 uV) to 26 dBu (15.5 V) at peak deviation (1 kHz), adjustable in 1 dB steps
<b>Max input level</b>	+26 dBu (15.5 V) at clipping, +20 dBu (7.75 V) at nominal level
<b>Managing interface</b>	IrDA
<b>LED</b>	RGB led indication with (red, green and blue): <ul style="list-style-type: none"> <li>▪ Wireless transmission status: GREEN on/RED off</li> <li>▪ Battery lifetime status: GREEN steady (&gt; 25%), slowly blinking (&lt; 25%), quickly blinking (&lt;12%)</li> <li>▪ Modulation peek (if activated &amp; the limiter is disabled): RED</li> <li>▪ Limiter into action: Blue</li> </ul>
<b>Battery lifetime indication</b>	8 steps : 7 bars (100%-87%-75%-63%-50%-38%-25%) and “empty bar” quickly blinking (12% remaining)
<b>Display</b>	High contrast OLED white display (128 x 32 pixels)
<b>Power supply</b>	2 AA size cell (Alkaline, rechargeable NiMH or Lithium)– Phantom Power to Mic (max 4 mA)
<b>Temperature range</b>	-10 ÷ +55 °C
<b>Dimensions</b>	124 x 40 x 34 mm (Height-Width-Depth)
<b>Weight</b>	Approx. 210 g. without batteries (250g with batt)

### MTB40S Linear

#### POWER PROFILE & COUNTRY FREQ. RANGE:

##### RANGE:

**EU** max power 50mW (Europe)

**EUX** max power 100mW\* (Europe)

**US** max power 50mW (USA)

**USX** max power 100mW (USA & Canada)

**US8** max power 100mW (USA & Canada)

**JP** max power 10mW (Japan)

**NZ** max power 100mW (New Zealand)

**AU** max power 100mW (Australia)

##### OPTIONS:

**NB** narrow band

#### • COLOR

**PV** titanium grey

#### • FREQUENCY RANGE

**B7** 470-663 MHz    **B8** 940-960 MHz

**B3** 510-698 MHz    **BP** 806-810 MHz

**B2** 566-798 MHz    **B6** 960-1160 MHz

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

**Note:** MTB40S series complies with ETSI 300 422