

**-D option for DPA microdot connector**
**-L option for LEMO connector**

### Main Features

- Up to 232 MHz bandwidth in 470/798 MHz range
- Miniature design with flexible pcb (no connectors) for extended reliability
- Ultra-light metal alloy body
- User selectable multi-companding systems:
  - ENR (noise optimized)
  - ENC (voice optimized)
- Battery:
  - MTP40S: 2 AA Alkaline, rechargeable NiMH or Lithium
  - MTP41S: 1 AA Alkaline, rechargeable NiMH or Lithium
- Autonomy:
  - > 10h @ 50mW output power (5h MTP41S)
  - > 14h @ 10mW output power (7h MTP41S)
- Infrared interface for management and firmware update
- Easy and quick to setup thru an Oled display gain/freq button and a joggle selector
- Extended regulation on Mic input gain: 80dB in 1dB step
- Max input level 26dBu (15.5 V clipping) to connect directly to mixers and instruments
- 48V phantom power to use wired mic thru the PHA48 accessory (*MTP40S only*)
- Input dynamic extension with an integrated HW limiter (30 dB above peak)



### General Description

*“MTP40S - MTP41S series are two extremely small and light pocket transmitters especially designed for professional wireless microphone applications”*

Very easy and quick to use thanks to OLED display, dedicated buttons and a joggle selector.

MTP40S- MTP41S series benefit also of the latest Wisycom RF technology along with an enhanced robustness against noise and inter-modulation.



**Before putting the device into operation, please observe the respective country-specific regulations**



## TECHNICAL SPECIFICATIONS

|  |  |  |  |  |  |
|--|--|--|--|--|--|
| <b>Switchable channels</b>   | 2400 allocated by 40 groups of 60 channels, quickly selectable with dedicated buttons  |  |  |  |  |
| <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 stability</b>   | • $\pm 2,5$ ppm (in the rated temperature range)   |  |  |  |  |
| <b>Temperature range</b>   | -10 $\div$ +55 °C  |  |  |  |  |
| <b>Max RF power</b>  | <ul style="list-style-type: none"> <li>• 10 mW (ERP) (to respect some local norm)</li> <li>• 50 mW (ERP) (note: in some countries middle power can be disabled, for local norm!)</li> <li>• 100 mW (ERP) (note: in some countries high power can be disabled, for local norm!) Only for MTP40S</li> </ul>  |  |  |  |  |
| <b>Spurious emissions</b>  | < 2 nW   |  |  |  |  |
| <b>Modulation</b>  | wideband FM, with pre-emphasis   |  |  |  |  |
| <b>Nominal deviation</b>   | $\pm 40$ kHz (Peak deviation = $\pm 56$ kHz)   |  |  |  |  |
| <b>Telemetry feature</b>   | It transmits also a digitally modulated sub-carrier, suitable for: <ul style="list-style-type: none"> <li>• <i>tone-squelch operating</i></li> <li>• <i>remote battery monitoring</i></li> <li>• <i>optional PTT (push to talk) operation</i></li> </ul>   |  |  |  |  |
| <b>AF input connector LEMO option</b>  | Configurable on 'mic' display menu in 5 options: <ul style="list-style-type: none"> <li>• '2 wires': gain selectable -60 <math>\div</math> +40 (-54 dBu <math>\div</math> +26 dBu peak), no bias voltage</li> <li>• '2 wires + bias': gain selectable -60 <math>\div</math> +40 (-54 dBu <math>\div</math> + 6 dBu peak), 5.5 V on 4k7 bias supply</li> <li>• '3 wires': gain selectable -60 <math>\div</math> +40 (-54 dBu <math>\div</math> +26 dBu peak)</li> <li>• '2 wires &amp; phantom': gain selectable -60 <math>\div</math> +40 (-54 dBu <math>\div</math> +26 dBu peak)</li> <li>• '2 wires + bias &amp; phantom': gain selectable -60 <math>\div</math> +40, (-54 dBu <math>\div</math> + 6 dBu peak), 5.5 V on 4k7 bias supply</li> </ul> |  |  |  |  |
| <b>AF input level</b>  | 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   |  |  |  |  |
| <b>Max. input level</b>  | +46 dBu (15.5 V) at clipping, +20 dBu (7.75 V) at nominal level  |  |  |  |  |
| <b>Noise-Reduction</b>   | ENR (Wisycom Extended-NR), with independent Attack- and Recovery-time, noise optimized<br>ENC (Wisycom Extended-NC), with independent Attack- and Recovery-time, voice optimized & with reduced pre-emphasys   |  |  |  |  |
| <b>AF bandwidth</b>  | <ul style="list-style-type: none"> <li>• 45 Hz <math>\div</math> 21 KHz (3dB)</li> <li>• 55 Hz <math>\div</math> 20 KHz (1dB)</li> </ul>   |  |  |  |  |
| <b>Distortion</b>  | < 0.3 % (0.15 % typ.)  |  |  |  |  |
| <b>Signal-to-noise ratio</b>   | <ul style="list-style-type: none"> <li>• typ. 115 dB (A)<sub>rms</sub> with 40 kHz deviation</li> <li>• typ. 121 dB (A)<sub>rms</sub> with 56 kHz deviation</li> </ul>   |  |  |  |  |
| <b>Led</b>   | Led indication with bicolor led (red & green) on wireless power switch: <ul style="list-style-type: none"> <li>• Wireless transmission status: <ul style="list-style-type: none"> <li>GREEN on/off</li> <li>Modulation peek (if activated &amp; the limiter is disabled): RED</li> </ul> </li> <li>• Battery lifetime status: GREEN - steady (&gt; 25%)<br/>- slowly blinking (&lt; 25%) - quickly blinking (&lt;12%)</li> <li>• Ptt status: RED if active</li> <li>• Limiter into action: Blue</li> </ul>   |  |  |  |  |
| <b>Display</b>   | High contrast OLED (Organic light-emitting diode) white display (128 x 32 pixels)<br>8 step battery lifetime indication: 7 bars (100%-87%-75%-63%-50%-38%-25%) and "empty bar" quickly blinking (12% remaining)  |  |  |  |  |
| <b>PTT function</b>  | Pin 3 of the AF connector can be setup to an external push button  |  |  |  |  |
| <b>Power supply</b>  | 2 AA size batteries (MTP40S )/1 AA size battery(MTP41S) (Alkaline, rechargeable NiMH or Lithium)   |  |  |  |  |
| <b>Battery life</b>  | <table border="1"> <tr> <td>MTP40S (with 2 AA alkaline)</td> <td>MTP41S</td> </tr> <tr> <td> <ul style="list-style-type: none"> <li>• approx. 14 hours @ 10mW continuous working</li> <li>• approx. 10 hours @ 50mW continuous working</li> <li>• approx. 7 hours @ 100mW continuous working</li> </ul> </td> <td> <ul style="list-style-type: none"> <li>• approx. 11 hours @ 50mW continuous working Lithium</li> <li>• approx. 8 hours @ 50mW continuous working with NiMH</li> <li>• approx. 4.5 hours @ 50mW continuous working with Alkaline</li> </ul> </td> </tr> </table>   | MTP40S (with 2 AA alkaline)                                  | MTP41S   | <ul style="list-style-type: none"> <li>• approx. 14 hours @ 10mW continuous working</li> <li>• approx. 10 hours @ 50mW continuous working</li> <li>• approx. 7 hours @ 100mW continuous working</li> </ul> | <ul style="list-style-type: none"> <li>• approx. 11 hours @ 50mW continuous working Lithium</li> <li>• approx. 8 hours @ 50mW continuous working with NiMH</li> <li>• approx. 4.5 hours @ 50mW continuous working with Alkaline</li> </ul> |
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| <b>Dimensions</b>  | <table border="1"> <tr> <td>MTP40S: 73.1 x 64.5 x 21.6 mm (Height-Width-Depth) with clip</td> <td>MTP41S: 58.2 x 64.5 x 21.7 mm (Height-Width-Depth) with clip</td> </tr> </table>   | MTP40S: 73.1 x 64.5 x 21.6 mm (Height-Width-Depth) with clip | MTP41S: 58.2 x 64.5 x 21.7 mm (Height-Width-Depth) with clip |  |  |
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| <b>Weight</b>  | <table border="1"> <tr> <td>MTP40S: Approx. 85 g. without batteries (135g with batt.)</td> <td>MTP41S: Approx. 80 g. without batteries (120g with batt.)</td> </tr> </table>   | MTP40S: Approx. 85 g. without batteries (135g with batt.)    | MTP41S: Approx. 80 g. without batteries (120g with batt.)    |  |  |
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*For the commercial code, see in the Variants area of the Products on our website*

### MTP40S

#### POWER PROFILE & COUNTRY

##### FREQUENCY RANGE:

- EU** max power 50mW (Europe)
- 0W1** / **EUX** max power 100mW\* (Europe)
- US** max power 50mW (USA)
- USX** max power 100mW (USA & Canada)
- JP** max power 10mW (Japan)
- NZ** max power 100mW (New Zealand)
- CN** max power 50mW (China)

##### OPTIONS:

- ADT** hole on battery housing for ADT40

#### VARIANTS:

- **AUDIO CONNECTOR**
  - LM** 3 PIN LEMO CONNECTOR
  - DP** 2 PIN DPA MICRODOT CONNECTOR
- **COLOR**
  - BL** body color black (powder coating)
- **FREQUENCY RANGE**
  - B5** 470-654 MHz
  - B2** 566-798 MHz
  - B3** 510-698 MHz

### MTP41S

#### POWER PROFILE & COUNTRY

##### FREQUENCY RANGE:

- EU** max power 50mW (Europe)
- US** max power 50mW (USA)
- JP** max power 10mW (Japan)
- NZ** max power 50mW (New Zealand)
- AU** max power 50mW (Australia)
- CN** max power 50mW (China)

#### VARIANTS:

- **AUDIO CONNECTOR**
  - LM** 3 PIN LEMO CONNECTOR
  - DP** 2 PIN DPA MICRODOT CONNECTOR
- **COLOR**
  - BL** body color black (powder coating)
- **FREQUENCY RANGE**
  - B5** 470-654 MHz
  - B2** 566-798 MHz
  - B3** 510-698 MHz

\* MTP40S-0W1/MTP40S-EUX is not an SRD device, it requires specific authorization by your local frequency authority!

**Note:** MTP4x series transmitter complies with ETSI 300 422