

## HIGH PERFORMANCE TRUE DIVERSITY RECEIVER

### Main Features

- Up to 232 MHz bandwidth in 470/798 MHz range
- **TRUE DIVERSITY RECEIVER** with 2 whip antennas
- **200 mW** peak audio power
- Separate release/attack compander
- Miniature design with 2 AA battery pack integrated (body-pack form factor) or rechargeable lithium pack
- Easy to use thanks to an OLED display
- Dedicated function buttons & frequency scan function
- Automatic receiver programming thru infrared and micro-USB
- **FM Stereo mode** for MPX decoding with mix-mode function
- **FM IFB mode** with NARROW-BAND modulation to enhance *noise immunity and coverage (SW selectable)*



### GENERAL DESCRIPTION

MPR50 is a compact true diversity receiver designed for professional in-ear monitoring applications.

This receiver features a real **TRUE DIVERSITY** configuration along with a unique wide-band tuning range up to 232 MHz. Audio processing can be Stereo MPX or mono based.

The output audio stage is especially design to have maximum audio peak-dynamic of 200 mWatt.

Very easy and versatile thanks to its Oled display, navigation button controls, infrared and automatic scan.

Battery management is very flexible since MPR50 allows use of standard battery pack:

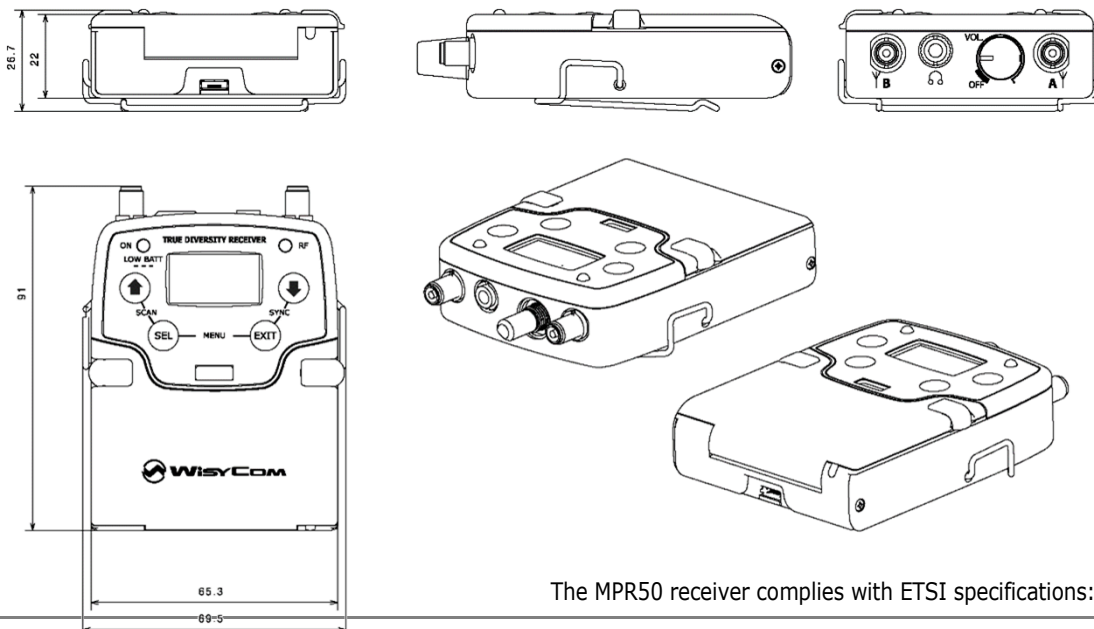
- 2 AA NiMH or Alkaline
- C3-V3 battery pack
- CS-WMR500SL or CR-V3R lithium (i.e. DR9708 duracell)



Charging can be done with dedicated charger or thru the integrated micro-usb-B connector.

## TECHNICAL DATA

- Frequency ranges : N ⇒ option 470 ÷ 700 MHz  
M ⇒ option 566 ÷ 798 MHz  
other ranges are available on request in 470÷798 MHz
- Switchable channels : 40 groups of 60 channels fully user programmable.
- Switching-window : up 232 MHz.
- Frequencies : microprocessor controlled frequency synthesizer circuit,  
with 25 kHz minimum step. The frequencies can be easily  
PC reprogrammed with USB interface of optional UPKmini/UPK300E Programming Kit.
- Frequency error : < ± 2.5 ppm, in the rated temperature range.
- Temperature range : -10 ÷ +55 °C.
- Modulation : FM, (stereo MPX decoding, 19 kHz sync carrier) or 100 kHz narrowband IFB (SW selectable)
- Peak deviation : ±48 kHz
- "A" / "B" antenna in : with sturdy connectors.
- Antenna input imp. : 50 ohm sma type (SWR < 1:2; typ. 1:1.4).
- Sensitivity : ⇒ 2 µV ( 6 dBµV), for SND/N > 52 dB;  
in the whole switching-window [1].
- Co-channel rejection : > 2.5 dB.
- Adjacent chan. Sel. : > 80 dB typical (for channel spacing ≥ 400 kHz).
- Spurious rec. Rej. : > 100 dB.
- IF image rejection : > 90 dB.
- Intermod. rejection : > 76 dB.
- IIP3 : > +10 dBm typical.
- Spurious emissions : < 2 nW (typical = 0.1 pW).
- Noise Reduction : ⇒ **ENS (new)**
- AF bandwidth : 30 Hz ÷ 15 kHz.
- Frequency response : ± 0.5 dB in the 30 Hz ÷ 15 kHz range.
- Distortion : 0.3 % typical.
- SND/D ratio : 90 dB typical [1]
- Stereo separation : > 60 dB
- Display : Display OLED 128x64 (white)
- Powering : 2 x IEC-LR6 1.5V size-AA alkaline or rechargeable elements
- Weight : 100 g approx. without batteries
- Headphone-output : Stereo Plug 3.5mm(TRS) Locking (M6 x 0.5 thread) with 2 X 200mW @ 32 Ohm
- Battery life : approx. 4,5 hours (alkaline batteries), 6 hours (lithium batteries)



The MPR50 receiver complies with ETSI specifications: ETSI 300 422.