

HIGH PERFORMANCE TRUE DIVERSITY RECEIVER – DIGITAL AUDIO DSP BASED
Main Features

- Up to 232 MHz bandwidth in 470/952 MHz range
- TRUE DIVERSITY RECEIVER with 2 whip antennas
- Miniature design with integrated battery pack:
 - rechargeable lithium pack
 - 2 x AA batteries
- Easy to use thanks to an OLED display
- Dedicated function buttons
- Frequency scan function
- Automatic transmitter programming thru infrared and USB
- MIC and LINE balanced outputs


GENERAL DESCRIPTION

MPR30ENG is a compact true diversity receiver designed for professional ENG, broadcast, and field production applications. This receiver features a real TRUE DIVERSITY configuration along with a unique wide-band tuning range up to 230 MHz.

All audio processing is managed by a powerful DSP to allow multicompanying, audio enhancement and a digital control data. Very easy and versatile thanks to its:

- Oled display,
- navigation button controls,
- infrared sinc and programming,
- micro-usb,
- automatic scan.



Battery management is very flexible since MPR30 allows use of standard battery pack:

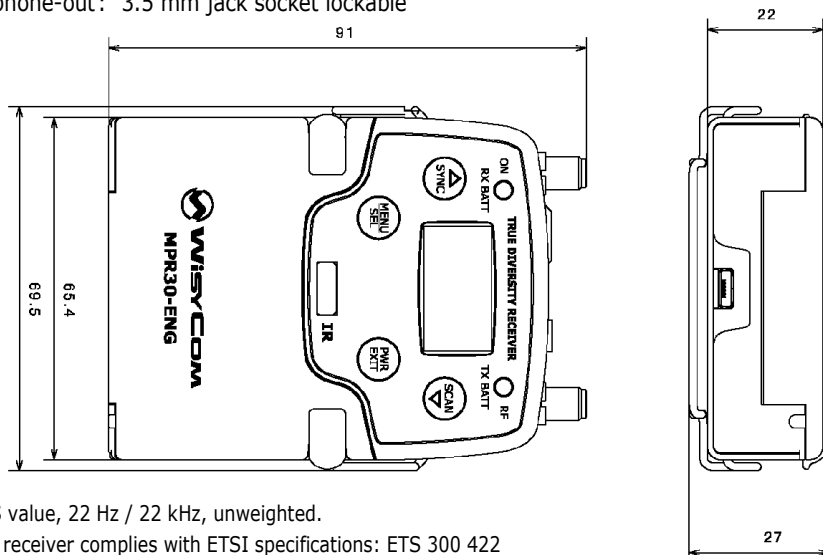
- 2 AA NiMH or Alkaline
- C3-V3 battery pack
- KLIC 8000 or CR-V3R lithium (i.e. DR9708 duracell)

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



TECHNICAL DATA

- Frequency ranges : MPR30 N \Rightarrow option 470 \div 700 MHz
MPR30 M \Rightarrow option 566 \div 798 MHz
other ranges are available on request in 470 \div 952 MHz
- Switchable channels : 2400 user programmable frequencies, organized in 40 groups of 60 channels.
- Switching-window : up 232 MHz.
- Frequencies : microprocessor controlled frequency synthesizer circuit, with 25 kHz minimum step. The frequencies can be easily PC reprogrammed with the optional UPK 300E Programming Kit.
- Frequency error : $< \pm 2.5$ ppm, in the rated temperature range.
- Temperature range : $-10 \div +55$ °C.
- Modulation : FM, with 50 μ s de-emphasis.
- Nominal deviation : ± 40 kHz (Max. operating deviation = ± 60 kHz).
- Antenna input imp. : 50 ohm sma type (SWR $< 1:2$; typ. 1:1.4).
- Sensitivity : $\Rightarrow 2 \mu$ V (6 dB μ V), for SND/N > 58 dB;
 $\Rightarrow 5 \mu$ V (14 dB μ V), for SND/N > 98 dB.
in the whole switching-window [1].
- Amplitude response : < 0.5 dB (for RF input signal: 6 dB μ V \div 100 dB μ V).
- Co-channel rejection : > 2.5 dB.
- Adjacent chan. Sel. : > 80 dB typical (for channel spacing ≥ 400 kHz).
- Spurious rec. reject. : > 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 : \Rightarrow ENR (Wisycor Extended-NR)
- AF bandwidth : 30 Hz \div 20 kHz.
- Frequency response : ± 0.5 dB in the 30 Hz \div 19 kHz range.
- Distortion : 0.3 % typical.
- SND/D ratio (Anal.) : 100 dB typical [1]
- Powering : - 2 x IEC-LR6 1.5V size-AA alkaline or NiMh rechargeable
- C3-V3 battery pack
- KLIC 8000 or CR-V3R lithium (i.e. DR9708 duracell)
- Weight : 100 g approx. without batteries
- Audio line-output : mono balanced on 3.5 mm jack socket lockable
- Audio line-out lev. : MAX +18 dBu (peak deviation), adjustable in one dB step in a range of 54 dB
- Audio Headphone-out: 3.5 mm jack socket lockable



NOTE [1]: RMS value, 22 Hz / 22 kHz, unweighted.

The MPR30ENG receiver complies with ETSI specifications: ETS 300 422



Normally DSLR/Small Camera have a semi-pro input audio and not digital input. With a dedicated DSP profile we can improve the audio quality up to **15/20 dB** (Signal to noise)!!!

