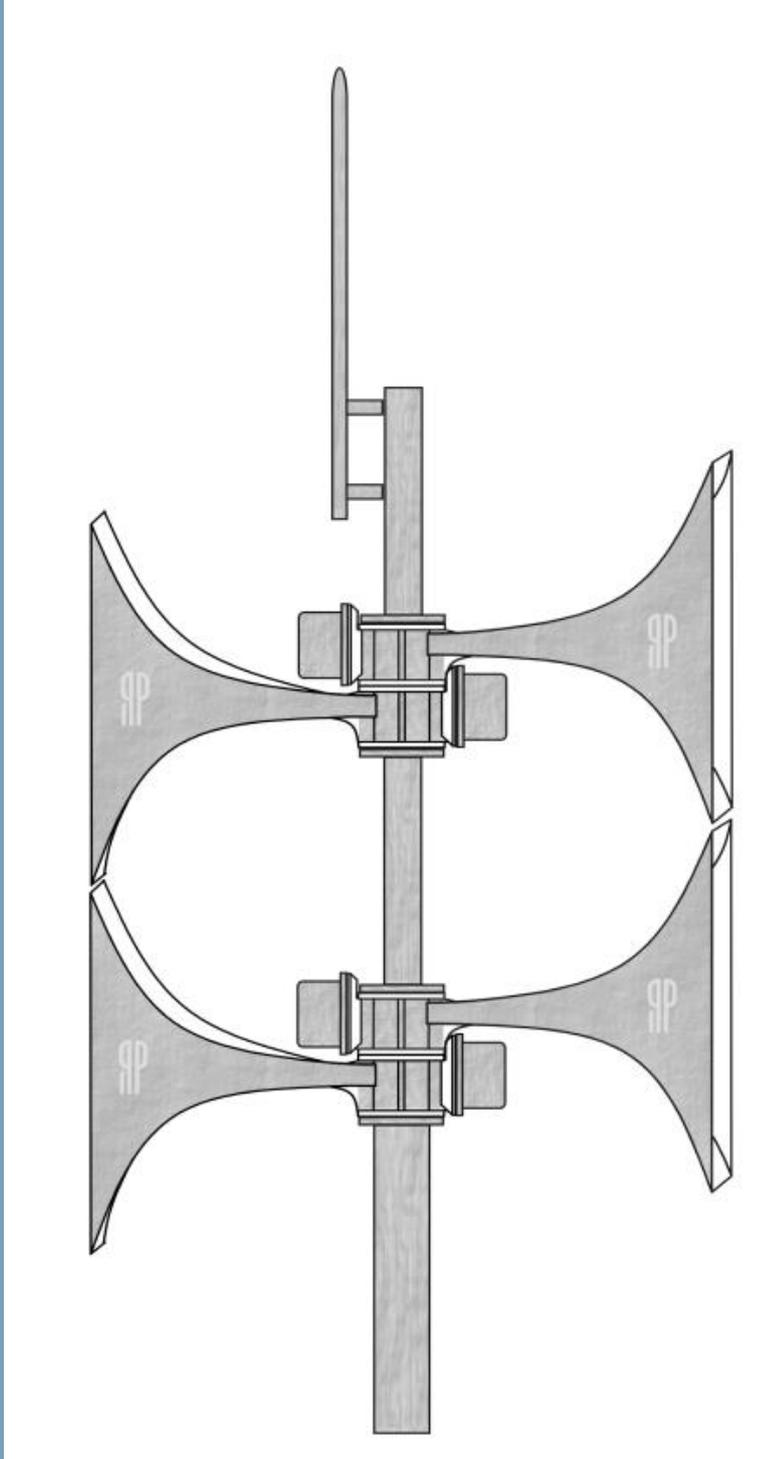


# RPD-601/501 SIREN

## DATASHEET



Developed and manufactured by Hungarian company, they are used as comprehensive industrial and residential emergency alerting devices. The model number represents the RMS sound performance value.

These types of device are able to broadcast predefined siren tunes, sound files stored in its memory and live microphone speech. They enable individual local alerting through interfaces at siren endpoints as well as remote control through the twisted pair cable network from Central Dispatch service. With remote control it is possible to use endpoints individually or in a grouped fashion. Information on the state of the endpoint devices as well as any malfunction thereof is provided through the control software.



There is a status monitoring and testing circuitry installed in control cabinets set up at siren endpoints, enabling recording and transmitting of status information. These functions are available in both local and remote control modes.

Owing to the modular design of the equipment, on-demand expanding of audio frequency power

amplifiers is possible (depending on local availability). Presently an amplifier pair of 250W/300W RMS output power is installed in each piece of equipment.

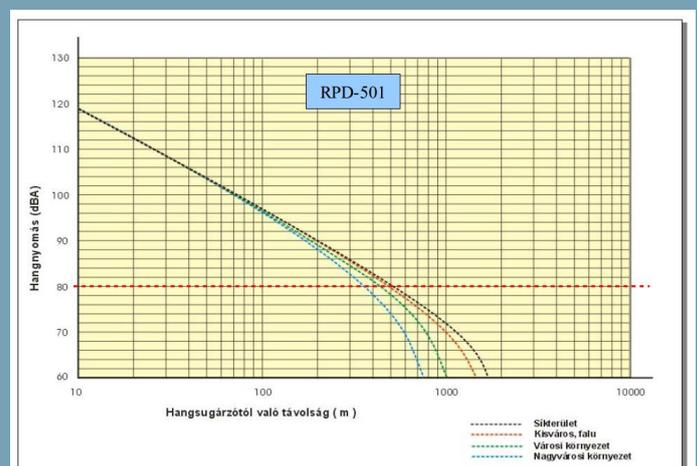
Power is supplied via a battery pack sized to supply such power demand. Regular power supply only charges this battery pack resulting in a small current consumption of 1.5 A from the 230 V network.

Testing and checking on the operational safety of the electronic sirens are achieved through a what is called "mute" testing during which control electronics and speakers are checked. During "mute" testing sound amplification units transmit sound on frequencies outside the human perception range thus not disturbing people in the vicinity. Detections of occasional errors, malfunctions can be seen on the control interfaces in both local and remote mode.

## Siren horns:

The siren-head itself is composed of single aluminum siren horns. The special construction of the siren horn increases sound coverage by the use of a diffraction slit, as well as the sound pressure level by implementing a specially constructed pressurized cabin system. The diffraction slit and the opposite alignment of two horns effects an omnidirectional, 360° sound coverage. Further, the use of two frequencies, which differ by 10Hz from another, essentially decreases the interference effects, i.e. the volume shift. Additionally, a better physiological perception is effected by the dissonance of the two frequencies.

## Propagation diagram:



## Technical specifications:

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Maximum achievable sonic pressure:	in 30 m distance 106 dBA
Power supply connection:	230 V / max 1.5 A
Power consumption at maximum load:	25 A / 24 V / from battery
Output power:	500 W RMS
Minimum alerting time:	20 minutes
Protection type:	IP 65
Device control cabinet size:	60 cm x 60 cm x 35cm

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## P-PAD401, REV1.0 power amplifier modules specification:

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Connector:	DIN 41612
Power source:	24V DC (21V – 29V)
Output power:	250W rms (max. 350W rms)
Current load:	11,8A (250W rms / 24V)
Output voltage:	37V eff. (max. 41V eff.)
Efficiency (signal):	>88%
Efficiency (PA):	>80%
Input sensitivity:	650-2000mV variable
Input impedance:	400 Ohm, gal. isolated, symmetric
Frequency range:	20Hz – 18KHz / -3dB
Operational temperature:	-30 °C ~ +50 °C
Protections:	overload, temperature

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