

Beacons comparison

<https://marvelmind.com/products>



	DSP RX v5.05/DSP RX v5.05 Outdoor	Mini-beacon TX v5.07/Mini-beacon TX v5.07 Outdoor	Mini-beacon TX v5.07 batteryless	Beacon HW v4.9/Beacon HW v4.9 Outdoor	Beacon-TX-915-25-IP67/Beacon-TX-915-25-EX	Beacon-RX-915-IP67/Beacon-TX-915-EX
Specialty and main use	Universal, multi-frequency and high-sensitivity RX-only beacon	Small TX only beacon	The lightest TX only beacon	Universal dual-use beacon. Support of 433- or 915/868MHz bands	Heavy-duty outdoor/Explosion dangerous environment	Heavy-duty outdoor/Explosion dangerous environment
Mode of operation	RX only	TX only		Dual-use (RX and TX)	TX only	RX only
Range	- Up to 50m ³	- Up to 30m with DSP RX v5.05 - Up to 20m with Beacon v4.9		- Up to 50m with DSP RX v5.05 ³ - Up to 30m with Beacon v4.9 ³	- Up to 30m with Beacon-RX-915-XX	- Up to 30m with Beacon-TX-915-25-XX
Ultrasonic frequencies	- 19/25/31/37/45/56kHz - Several at the same time	- 31/37/45/56kHz - Only one HW defined frequency at the time		- 19/25/31/45kHz - Only one frequency at the time	- 25kHz only	- 19/25/31/37/45/56kHz - Several at the same time
Radio band	915/868MHz	915/868MHz		915/868MHz or 433MHz	915/868MHz (optional with external SMA 433/868/915MHz)	915/868MHz (optional with external SMA 433/868/915MHz)
LiPol battery	750mAh	250mAh	No embedded battery	1000mAh	4300mAh and wireless charging ⁴ or external +12V & RS485 output	4300mAh and wireless charging ⁴ or external +12V & RS485 output
Environmental conditions	- Indoor/Outdoor up to IP67 t=0..40C ⁶	- Indoor/Outdoor ² t=0..40C ⁶	- Indoor t=0..40C ⁶	- Indoor/Outdoor ² t=0..40C ⁶	- Outdoor ² /Intrinsically Safe ⁵ t=0..40C ⁶	- Outdoor ² /Intrinsically Safe ⁵ t=0..40C ⁶
Size and weight	47x42x15mm & 25g/32g	35x35x26mm & 19g	35x35x20mm & 12g ⁹	55x55x33(64 ⁷)mm & 62/75g	83x58x65mm ⁸ & 250g	83x58x33mm ⁸ & 200g
IMU (3D gyro+acc+mag)	Yes (3D acc+gyro)	Yes (3D acc+gyro)	Yes (3D acc+gyro)	No/Yes (for the version with IMU)	Yes (3D acc+gyro)	Yes (3D acc+gyro)
Price₁₀	99/129USD	89/129USD	89USD	69/99USD (w/o IMU) 89/129USD (with IMU)	149/189USD	149/189USD

- 1) Withstand submersion to water on 1m up to 30m (IPX7 requirements)
- 2) Mild outdoor: occasional rain, dust doesn't kill the device. Performance during this time is no guaranteed
- 3) 1D mode: only 1 sensor is enabled
- 4) Other power options available upon request
- 5) Exact type of certification shall be discussed separately

- 6) Temperature range down to -40C is available with external power supply only and upon request
- 7) With antenna
- 8) Sizes without mounting holes
- 9) 6.3g without housing
- 10) For example: DSP RX v5.05=89USD, DSP RX v5.05 Outdoor=129USD