



A Division of AMIRIX Systems Inc.

V22 Continuous Transmitter

High power transmitter for large species, open ocean tracking

The V22 acoustic tag was developed for short term animal tracking studies requiring high power output. Typical applications include monitoring fast moving or very large species such as tuna or whales. The V22 is available in continuous transmission mode only, meaning the acoustic ping is sent at a factory pre-set fixed rate between one and two seconds. V22's can measure temperature, depth, or both temperature and depth.

V22's are typically tracked in the field with a VR100 receiver and a VH111 directional low frequency hydrophone, or with the VR28 receiver system. Tags are available in a frequency range of 34 to 50 kHz in 1 kHz steps, however, for real time tracking of multiple animals, 3 kHz spacing between transmitters is recommended.

Options:

The V22 tag is available with several options:

1. Extra Power. An additional 3 dB output power is available for high noise environments.

2. Reed Switch. A reed switch uses a small removable magnet to activate or deactivate the transmitter.

3. Pressure sensor [V22P].

Available pressure sensor ranges include: 17, 34, 68, 134, 204, 340, 680, and 1020 meters. Accuracy is 3% of full scale so it is important to order the range you require based on your maximum expected depth. Permanent damage to the sensor will occur after a 50% over extension.

4. Temperature sensor[V22T].

Temperature sensor ranges are: -5°C to 35°C; or -4°C to 20°C.

5. Temperature & Depth sensors [V22TP]

It is possible to equip the V22 with both temperature and depth sensors. Ranges should be selected from items 3 & 4 above.



The V22 tag has high power output and can be used to track large species in the open ocean.

Transmitters

Contact us

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Specifications may change without notice.

V22 Specifications

The physical measurements and expected life span of the V22 vary with sensor selection. V22 continuous tags have three standard transmission ping periods: 1000, 1500 or 2000 mSec. Other ping periods are available by request.

Specifications and battery life details of the V22 are as follows:

V22	V22-5XS [Acoustic transmitter only]	V22T-5XS [Acoustic and temperature]	V22P-5XS [Acoustic and pressure]	V22TP-5XS [Acoustic, temperature & pressure]	Units
Length	100	100	100	100	Millimeters
Diameter	22	22	22	22	Millimeters
Power Output	165	165	165	165	dB re 1 μ Pa @1m
Weight – Air	74	74	74	74	Grams
Weight – Water	35	35	35	35	Grams
Life @1000 mSec	14	13	13	13	Days
Life @1500 mSec	19	19	19	19	Days
Life @2000 mSec	24	24	24	23	Days

Extra Power

For high noise or extended range environments, extra power output may be necessary. Specifications and battery life details of the V22-EP are as follows:

V22 with Extra Power [EP]	V22-5XS-EP [Acoustic transmitter only]	V22T-5XS-EP [Acoustic and temperature]	V22P-5XS-EP [Acoustic and pressure]	V22TP-5XS-EP [Acoustic, temperature & pressure]	Units
Length	120	120	120	120	Millimeters
Diameter	22	22	22	22	Millimeters
Power Output	168	168	168	168	dB re 1 μ Pa @1m
Weight – Water	40	40	40	40	Grams
Life @1000 mSec	11	10	10	10	Days
Life @1500 mSec	15	15	15	15	Days
Life @2000 mSec	19	19	19	18	Days

How to Order the V22

When ordering the V22 tag, please specify the following:

1. Frequency [range between 34 and 50 kHz]
2. Is Extra Power [EP] required?
3. ping period in milliseconds [1000, 1500, or 2000 mSec].
4. Is a temperature sensor required? If so, what is the range?
5. Is a pressure sensor required? If so, what is the range?
6. Is a reed switch required?

For more information on the specific applications of the V22 or for technical details, please contact VEMCO.

