

The tables below give estimates of the GPS capacity and battery lifetime of a picoFix UHF + depth sensor tag (non-solar).

This is to give an indication of how the amount of diving and the volume of data that is subsequently generated, will impact upon the available battery power to wirelessly transmit the GPS + depth data to the Pathtrack base station. Examples of 0h, 3h, and 6h of daily diving have been used. All estimates are based on a 10 minute GPS sampling rate, 30 min UHF rate and 4s temporal resolution of depth data.

Full resolution data gives depth to 0.5cm up to a maximum of ~290m and includes temperature to 0.5C.

Compressed resolution data gives depth to 40cm up to a maximum of ~100m.

Table "A"	Diving behaviour	Estimated number of GPS location attempts	Expected battery lifetime (days)
	0hrs (i.e. no diving)	700	4.5
Full resolution	3hrs of diving per day	470	3.5
	6hrs of diving per day	370	2.5
Compressed resolution	3hrs of diving per day	580	4
	6hrs of diving per day	510	3.5

Table "B"	Diving behaviour	Estimated number of GPS location attempts	Expected battery lifetime (days)
	0hrs (i.e. no diving)	1400	9.5
Full resolution	3hrs of diving per day	990	7
	6hrs of diving per day	760	5.5
Compressed resolution	3hrs of diving per day	1200	8.5
	6hrs of diving per day	1060	7.5

Table "C"	Diving behaviour	Estimated number of GPS location attempts	Expected battery lifetime (days)
	0hrs (i.e. no diving)	2200	15.5
Full resolution	3hrs of diving per day	1580	11
	6hrs of diving per day	1220	8.5
Compressed resolution	3hrs of diving per day	1920	13.5
	6hrs of diving per day	1700	12

Table "D"	Diving behaviour	Estimated number of GPS location attempts	Expected battery lifetime (days)
	0hrs (i.e. no diving)	5000	34
Full resolution	3hrs of diving per day	3550	24.5
	6hrs of diving per day	2750	19
Compressed resolution	3hrs of diving per day	4330	30
	6hrs of diving per day	3820	26.5

Table "E"	Diving behaviour	Estimated number of GPS location attempts	Expected battery lifetime (days)
	0hrs (i.e. no diving)	10000	69
Full resolution	3hrs of diving per day	7100	49.5
	6hrs of diving per day	5510	38
Compressed resolution	3hrs of diving per day	8660	60
	6hrs of diving per day	7650	53

Table "F"	Diving behaviour	Estimated number of GPS location attempts	Expected battery lifetime (days)
	0hrs (i.e. no diving)	20000	138
Full resolution	3hrs of diving per day	14190	98.5
	6hrs of diving per day	11010	76.5
Compressed resolution	3hrs of diving per day	17320	120.5
	6hrs of diving per day	15300	106