

Proposed charging system for LASS AUV
(based on 43.2V, 21700 12s, 47p 10.2kWH battery spheres)

8 battery spheres have 376 parallel 12s packs.

1C = 5A (x376 = 1880 amps) - Charging time = 1 Hour
C/5 = 1A (x376 = 376 amps) - Charging time = 5 Hours

C/5 charging gives 47A per sphere (or 1A per 12s pack)

Needed power: 376A x 50V = 18.8kW

Ship power: 1.732 * 440VAC * 50A * 0.8 = 30.5kW
(guessing on PF = 0.8)

- 24 Hour Period
- 1 Hour Setup+Deploy
 - 16 Hours Mission (descent+transit+survey+ascent)
 - 1 Hour Recover+Setup
 - 6 Hours Charging+Data Download

