Amphibian

1. **Microprocessor**

Commonly used microcontrollers

- Raspberry Pi 3B+ Arduino Uno
- Arduino Mega

2. Sensors
   a. Excel Link:https://docs.google.com/spreadsheets/d/1mLkqG5Eny6n6HNaW_YYksGq_07cpjSYsj7Y3OIlsTs8/edit#gid=0
3. Motor
   a. Brushless Motor(QF2611)→ Best Choice(But Costly)

      Variants:Motor: 3300KV/4000KV/4600KV/5000KV CW CCW

      Max continuous power: 550w

      Max continuous current: 45A

      12 Paddle
   b. Excel Link:(Old Satyak)

   > Untitled

4. Camera
   a. Vemont full HD 1080 p of 12 Megapixels
   b. Micro 120 Degree 600TVL FPV cam
5. Motor Driver
   a. BTS7960B
6. Light
   a. highly polished aluminum(reflectors) → To obtain better effeciency
   b. halogen and metal halide HID lighting
   c. LED 5W 12V DC lamps (310-320 lumen)

Source	Lumens/watt	Life (h)	Color	Size	Ballast
Incandescent	15–25	50–2500	Reddish	M–L	No
Tungsten–halogen	18–33	25–4000	Reddish	S–M	No
Fluorescent	40–90	10 000	Varies	L	Yes
Green fluor.	125	10 000	Green	L	Yes
Mercury	20–58	20 000	Bluish	M	Yes
Metal halide	70–125	10 000	Varies	M	Yes
High-Press. sodium	65–140	24 000	Pink	M	Yes/I
Xenon arc	20–40	400–2000	Daylight	VS	Yes/I
HMI/CID	70–100	200–2000	Daylight	S	Yes/I
Low-press. sodium	100–185	18 000	Yellow	L	Yes
Xenon flash	30–60	NA	Daylight	M	NA

V, very; S, small; M, medium; L, large; I, ignitor required; NA, not applicable.

7. Power

    a. 18650 Battery→ Used Commonly

    b. Battery can be found only after total power consumption

8. Protocol

    a. RS485 Module(To transmit Information)

9. Wires

    a. 50m RJ45 cat6 wire

A Source about the instances where they use wires

"Source:Build Your Own Underwater ROV : 21 Steps (with Pictures) - Instructables

Camera Video signal and ground → Arduino OSD shield in the control box
ArduinoMega PPM signal and ground -⟶ RC receiver in the control box
ArduinoMega Telemetry signal → RS485 -⟶ matching RS485 → Arduino Uno in the control box"