

#ref #hw

1 | Thresholds

1.0.1 |prelim

- temp

1.0.2 |series (racks)

- voltage

1.0.3 |parallel

- usable capacity * efficiency
- discharge rate * efficiency

1.0.4 |calculate

- lifetime
- env impact
- cost
- dimensions
- weight
- maintenance
- safety

1.0.5 |objects

```
"single battery" ::
{
  usable capacity, // satisfy
  discharge rate, // satisfy
  current type,
  // instantaneous,
  round trip efficiency,
  cycle count,
  type,
  cost,
  dimensions,
  weight,
  maintenance,
```

```
    safety
  }

  "rack" ::
  {
    count,
  }

  "type" ::
  {
    environmental impact,
    temp operability,
  }

  "output object" ::
  {
    battery,
    in rack,
    racks,
    aggregate environmental impact,
    aggregate cost,
    volume,
    aggregate weight,
    maintenance,
    safety,
    lifetime score,
  }
```

1.0.6 | calculations

lifetime score = cycle count * usable capacity