

Illustrative render generated from published specifications

20.4 × 70.3 mm  
61.4 g

Imren GOLD 25A  
3200mAh



Live page & updates

Imren · released 2018

20700

LI-ION

MOOCH-TESTED · 25 A

|                                          |                                             |                                                   |                                                      |
|------------------------------------------|---------------------------------------------|---------------------------------------------------|------------------------------------------------------|
| <div>3,200 mAh</div> <div>CAPACITY</div> | <div>25 A</div> <div>MOOCH CONTINUOUS</div> | <div>3.6 V</div> <div>NOMINAL · 2.5 – 4.2 V</div> | <div>11.52 Wh</div> <div>ENERGY · 187.62 WH/KG</div> |
|------------------------------------------|---------------------------------------------|---------------------------------------------------|------------------------------------------------------|

REFERENCE ONLY — NOT AN OFFICIAL DOCUMENT

This information is gathered from multiple sources, including manufacturer datasheets, independent third-party testing, and community contributions. Cell specifications vary between production batches and change over time, and no figure here is guaranteed to be correct or current. **Always consult the manufacturer's spec sheet directly.** Use this sheet for reference only — never as the sole basis for a safety-critical decision about charging, discharging, or assembling cells. The cell image is an illustrative render generated from published specifications, not a photograph.

CAPACITY AMONG 20700S

#5 of 12

Lowest in database

Highest

A mid-range 20700 cell. Solid for builds that don't need extreme capacity or discharge.

VOLTAGE OPERATING WINDOW

1.7 V usable

Cutoff 2.5 V

Nominal 3.6 V

Max 4.2 V

Below nominal the cell sags fast under load; above it, the last of the capacity fills slowly on the constant-voltage taper.

APPLICATION SUITABILITY

Rule-of-thumb ratings from this cell's capacity and continuous discharge. Check your own load before committing.

|                   |                                                                                             |
|-------------------|---------------------------------------------------------------------------------------------|
| Powerwalls        | High capacity means more stored energy per cell. Fewer cells needed for a given kWh target. |
| Ebike packs       | Good balance of capacity for range and discharge for hills. Works well in most ebike packs. |
| Car audio         | Enough discharge to handle amplifier bursts without voltage sag.                            |
| High-drain vaping | Above the 25A Mooch CDR threshold. Suitable for regulated and mechanical mods.              |
| Flashlights       | High capacity means long runtime. Great for everyday carry and extended use.                |
| Power tools       | Sufficient discharge and capacity for most power tool packs.                                |

| IDENTITY               |                                                                                        | PHYSICAL                 |              |
|------------------------|----------------------------------------------------------------------------------------|--------------------------|--------------|
| Manufacturer           | Imren                                                                                  | Diameter                 | 20.4 mm      |
| Model                  | GOLD 25A 3200mAh                                                                       | Length                   | 70.3 mm      |
| Format                 | 20700                                                                                  | Weight                   | 61.4 g       |
| Chemistry              | Li-ion                                                                                 | ELECTRICAL               |              |
| Year released          | 2018                                                                                   |                          |              |
| Wrap colour            |  Gold |                          |              |
| Terminal               | Flat top                                                                               |                          |              |
| Protection             | Unprotected                                                                            |                          |              |
| ENERGY & POWER DENSITY |                                                                                        | Rated capacity           | 3,200 mAh    |
| Energy                 | 11.52 Wh                                                                               | Nominal voltage          | 3.6 V        |
| Specific energy        | 187.62 Wh/kg                                                                           | Max charge voltage       | 4.2 V        |
| Volumetric density     | 501.36 Wh/L                                                                            | Discharge cutoff         | 2.5 V        |
| Power density (mass)   | 1,466 W/kg                                                                             | Energy                   | 11.52 Wh     |
| Power density (volume) | 3,917 W/L                                                                              | Internal resistance      | 15.6 mΩ      |
| Capacity ranking       | #5 of 12 20700s                                                                        | Max continuous discharge | 25 A (mooch) |
|                        |                                                                                        | Discharge C-rate         | 7.8C         |
|                        |                                                                                        | Standard charge current  | 1,500 mA     |
|                        |                                                                                        | Typical charge time      | 2.1 h        |
|                        |                                                                                        | Cycle life               | 500 cycles   |

| C-RATE | CURRENT | THEORETICAL RUNTIME |
|--------|---------|---------------------|
| 0.2C   | 0.64 A  | 5h 00m              |
| 0.5C   | 1.6 A   | 2h 00m              |
| 1C     | 3.2 A   | 1h 00m              |
| 2C     | 6.4 A   | 30m                 |
| 3C     | 9.6 A   | 20m                 |
| 5C     | 16 A    | 12m                 |
| 8C     | 25.6 A  | 7m 30s              |

Highlighted row is closest to the rated 25 A continuous discharge.

CHARGING

| RATE | CURRENT | ESTIMATED TIME TO FULL |
|------|---------|------------------------|
|------|---------|------------------------|

|          |          |         |
|----------|----------|---------|
| Standard | 1,500 mA | ~2h 08m |
| 0.5C     | 1,600 mA | ~2h 00m |
| 1C       | 3,200 mA | ~1h 00m |

Constant-current phase only. Real charge time runs longer because of the constant-voltage taper at the end.

## SERIES PACK CONFIGURATIONS

Voltages calculated from this cell's own nominal and maximum charge voltage. The 3P columns show one common parallel count as a worked example — scale the parallel group to the capacity you need.

| SERIES | NOMINAL | FULLY CHARGED | CELLS AT 3P | CAPACITY | ENERGY |
|--------|---------|---------------|-------------|----------|--------|
| 3S     | 10.8 V  | 12.6 V        | 9           | 9.6 Ah   | 104 Wh |
| 7S     | 25.2 V  | 29.4 V        | 21          | 9.6 Ah   | 242 Wh |
| 10S    | 36 V    | 42 V          | 30          | 9.6 Ah   | 346 Wh |
| 13S    | 46.8 V  | 54.6 V        | 39          | 9.6 Ah   | 449 Wh |
| 14S    | 50.4 V  | 58.8 V        | 42          | 9.6 Ah   | 484 Wh |

## EXAMPLE PACKS

### 7S2P

24V ebike / small pack

14 cells · 25.2 V

6,400 mAh · 161 Wh

50 A max · ≈0.86 kg cells

### 13S4P

48V ebike standard

52 cells · 46.8 V

12,800 mAh · 599 Wh

100 A max · ≈3.19 kg cells

### 16S4P

DIY powerwall

64 cells · 57.6 V

12,800 mAh · 737 Wh

100 A max · ≈3.93 kg cells

### 4S6P

Power tool replacement

24 cells · 14.4 V

19,200 mAh · 276 Wh

150 A max · ≈1.47 kg cells

## HANDLING & SAFETY

- Never charge above 4.2V or discharge below 2.5V.
- Store cells at around 3.6-3.8V (roughly 40-60% charge) for long-term storage.
- Don't mix cells with different capacities, chemistries, or states of charge in a pack.
- Inspect wraps before use. A torn wrap can cause a short circuit.
- Always use a BMS or balance charger appropriate for your pack configuration.
- Keep cells away from metal objects, keys, and coins. A short across the terminals can cause fire.

## SOURCES & FURTHER READING

Cell Saviors page

[cellsaviors.com/cell-database/imren-gold-25a-3200mah](https://cellsaviors.com/cell-database/imren-gold-25a-3200mah)

Independent test (Mooch)

<https://www.e-cigarette-forum.com/threads/bench-test-results-i...>

Full cell database

[cellsaviors.com/cell-database](https://cellsaviors.com/cell-database)