

## Energy density and ultra-fast charging.

The RLS12-55 is a 12.8 V, 55 Ah (20-hour rate) LiFePO4 lithium battery from the Rekoser Lithium Standard series. It measures 257 × 132 × 200 mm and weighs 8.12 kg, with M6 terminals. It stores 704 Wh and delivers up to 80 A. Energy density and ultra-fast charging. Typical applications: Solar/Wind Energy Systems, Telecommunications and Base Stations, UPS and Data Centers and Light Electric Vehicles.

Formerly **RKL12-55**.

|                 |                    |
|-----------------|--------------------|
| Nominal Voltage | 12.8 V             |
| Capacity (25°C) | 55 Ah (C20)        |
| Energy          | 704 Wh             |
| Weight          | 8.12 kg            |
| Terminal        | M6                 |
| Dimensions      | 257 × 132 × 200 mm |

## MAIN ADVANTAGES

- ✓ **Drop-in replacement:** Takes the place of a lead-acid battery
- ✓ **Cycle life:** Up to 20 times more cycles than lead
- ✓ **Light:** 60% less weight
- ✓ **Built-in BMS:** Protection and ultra-fast charging

**10**  
YEARS

LONG LIFE DESIGN

**5**  
YEARS

**WARRANTY**

\* Subject to charge and temperature parameters stipulated in this datasheet.

## MAIN APPLICATIONS



SOLAR/WIND ENERGY  
SYSTEMS



TELECOMMUNICATIONS  
AND BASE STATIONS



UPS AND DATA CENTERS



LIGHT ELECTRIC VEHICLES

## QUALITY STANDARDS

CE CERTIFIED

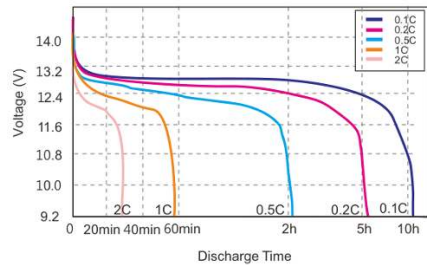
ISO 9001 / 14001

IEC62133

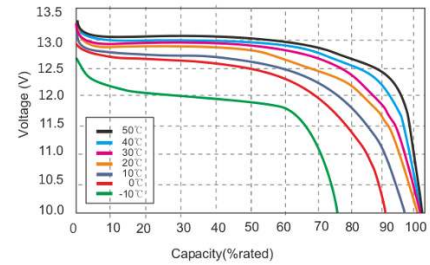
RoHS

## GRAPHICS (25°C)

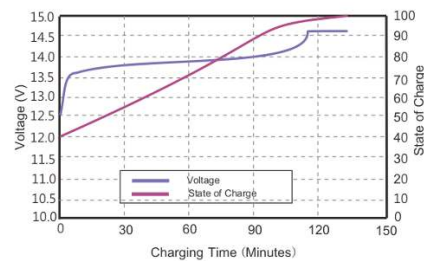
RATE DISCHARGE CHARACTERISTICS 25°C



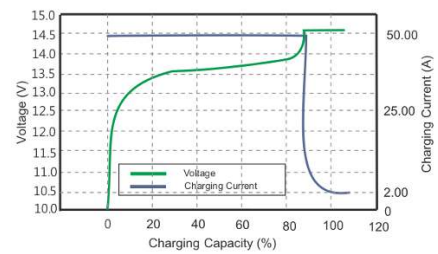
TEMPERATURE DISCHARGE CHARACTERISTICS 25°C



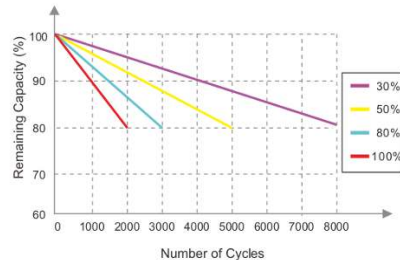
STATE OF CHARGE CURVE



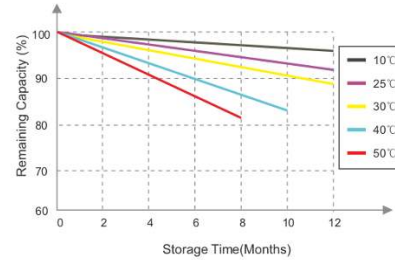
CHARGING CHARACTERISTICS



CYCLE LIFE CURVE



SELF-DISCHARGE CHARACTERISTICS



SPECIFICATIONS

|                              |                                                           |
|------------------------------|-----------------------------------------------------------|
| Nominal Voltage              | 12.8 V                                                    |
| Capacity (25°C)              | 55 Ah (C20)                                               |
| Energy                       | 704 Wh                                                    |
| Cell (Method)                | 26650 (4S18P)                                             |
| Charge Voltage (25°C)        | Cycle use: 14.6±0.2V                                      |
| Charge Mode                  | 0.2C to 14.6V, then 14.6V,charge current to 0.02C (CC/CV) |
| Charger Current              | 25A                                                       |
| Charge Cut-off Voltage       | 15.6V±0.2V                                                |
| Max. Charge Current          | 55 A                                                      |
| Continuous Discharge Current | 70A                                                       |
| Max. Discharge Current       | 80 A (<3s)                                                |
| Discharge Cut-off Voltage    | 8V                                                        |
| Internal Resistance          | 30 mΩ                                                     |
| Self Discharge               | 3 % of capacity per month at 25 °C                        |
| Efficiency of Charge         | 100% @0.5C                                                |
| Efficiency of Discharge      | 96~99% @1C                                                |
| Cycle Life                   | >2000 cycles @1C 100%DOD                                  |
| Protocol (optional)          | SMBus/RS485/RS232                                         |
| SOC (optional)               | LED                                                       |
| Water Dust Resistance        | IP56                                                      |

CONSTRUCTION

| Component | Material                       |
|-----------|--------------------------------|
| Container | ABS (Flame Retardant Optional) |
| Cover     | ABS (Flame Retardant Optional) |
| Sealant   | Epoxy Resin                    |
| Terminal  | Copper                         |

## QUICK INSTALLATION GUIDE

To ensure optimal performance and maximize the lifespan of your REKOSER RLS12-55 battery, follow these assembly and connection guidelines.

### 1. SPACE AND DIMENSION VERIFICATION

Before proceeding, ensure the receptacle or cabinet of your equipment complies with the unit's physical measurements:

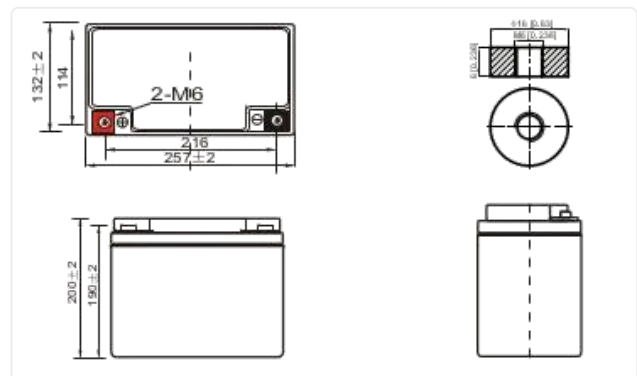
**Length:** 257 mm

**Width:** 132 mm

**Height:** 200 mm

**Total Height:** 200 mm

**Weight:** 8.12 kg



### 2. TERMINAL CONFIGURATION (M6)

**Terminals:** Ensure your system's connectors match the M6 type to prevent electrical arcing.

**Polarity:** Check the positive and negative markings on the battery before connecting, to prevent short circuits.

### 3. CHARGE PARAMETERS

Cycle use: 14.6 ± 0.2V

**Maximum Current:** Do not exceed 55 A of charge.

### 4. SAFETY AND STORAGE

**Maintenance:** Maintenance-free. The built-in BMS protects the battery.

**Charging:** Use a LiFePO4 charger at the stated voltage; do not charge below 0 °C.

**Storage:** Store at partial charge, in a cool and dry place.

### NEARBY MODELS

RLS12-40 (12.8 V · 40 Ah) · RLS12-65 (12.8 V · 65 Ah) · [See all RLS series models](#)

Specialized Technical Support  
<https://rekoser.com> | +34 958 04 29 73