



DEEP CYCLE

PROFESSIONAL

PHYSICAL CHARACTERISTICS

	SI Units	US Units
Length	336 mm	13.2 inch
Width	173 mm	6.8 inch
Height	235 mm	9.2 inch
Typical weight	28.15 kg	62.06 lbs

GR31 12V DC-110 Ah (C₂₀)



Specifications:

- Nominal voltage: 12 V
- Rated capacity: 110 Ah (at C₂₀ and 25 °C)
- Plate technology: Antimony / Calcium
- Separator: Polyethylene + glass mat
- Electrolyte: Sulphuric acid; analytical grade
- Standards: IEC 60254; IEC 61427
- Case / Lid material: Polypropylene
- Lid type: Flat
- Terminal type: Dual/Bolted
- Carrying Handles: Available
- Cycles at 50% DoD: up to 400 cycles
- PVES applications: up to 900 cycles

Performance characteristics:

BATTERY DISCHARGE PERFORMANCE AT 25°C

Discharge rate	C ₅ (5 h)	C ₂₀ (20 h)	C ₁₀₀ (100 h)	Capacity at 25 A
End of discharge voltage	10,20 V	10,5 V	10,80 V	10,5 V
Discharge capacity	90 Ah	110 Ah	120 Ah	200 min

Temperature correction factor of discharge C₅ (5 h) capacity

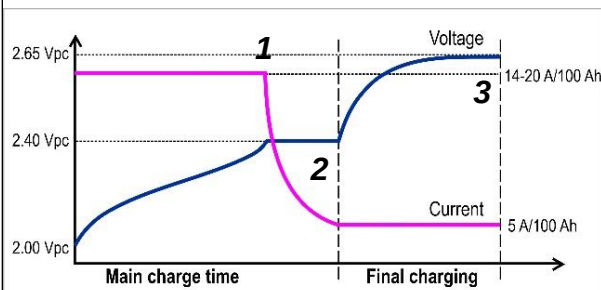
Temperature	-10 °C	0 °C	20 °C	25 °C	30 °C	35 °C	40 °C
Correction factor	0.80	0.88	0.98	1.00	1.03	1.05	1.07

BATTERY CHARGE CONDITIONS AT 25°C

Charging profile:

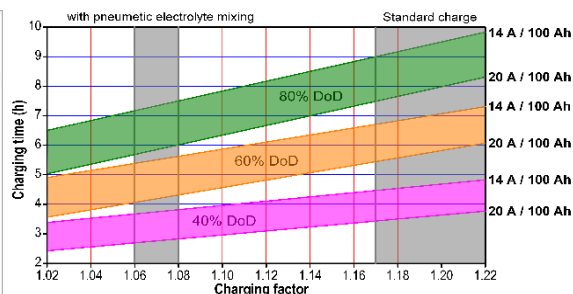
Charge factor: 1.10 – 1.20

IUla –characteristics for flooded batteries



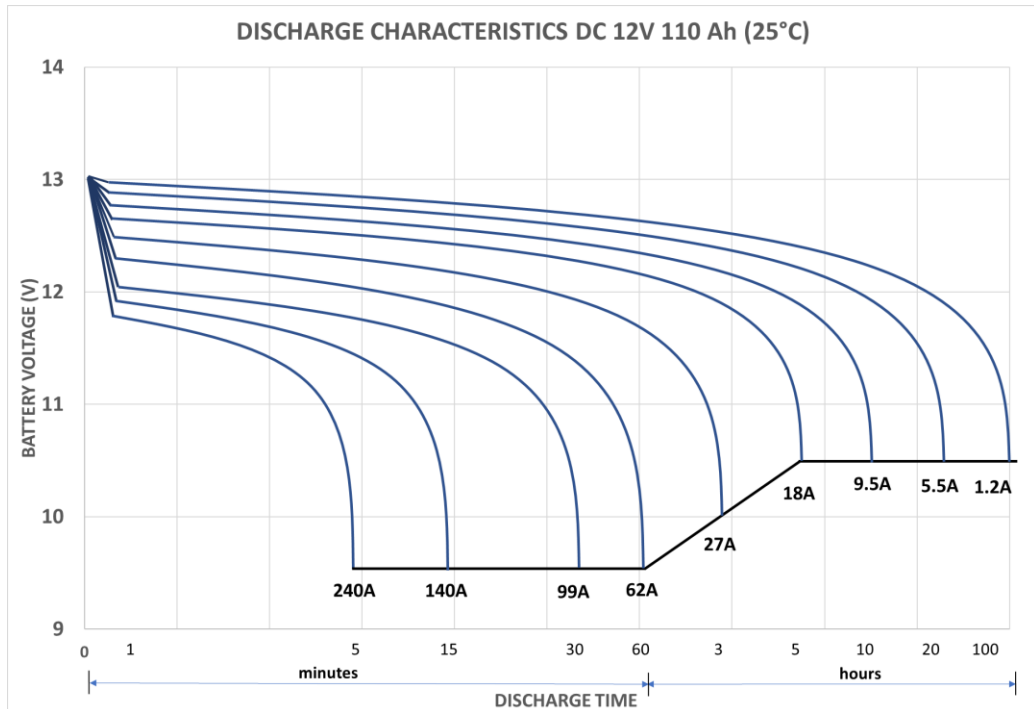
Stage1: Constant current Stage 2: Constant voltage Stage 3: Constant current

Charging times with IUla-characteristics in hours at 25 °C



BATTERY DISCHARGE CURVES AT 25°C

DISCHARGE PERFORMANCE AT CONSTANT CURRENT DISCHARGE (A)



Cycle service life in relation to depth of discharge (DC 12V)

