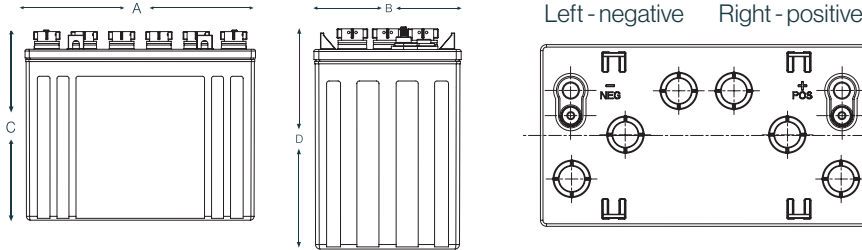


QSRF 1275 (GC12)

QUASAR Flooded Carbon Nano Battery



Electrical Specifications

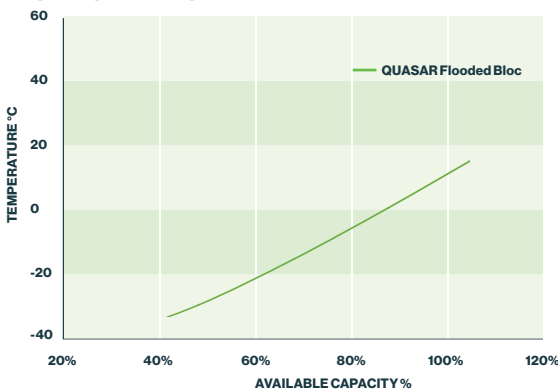
C5 Capacity	120Ah
C20 Capacity	150Ah
Capacity Minutes @25 Amps	279
Capacity Minutes @75 Amp	101
Voltage	12V
80% DOD Voltage Cutoff	11.5V
Self Discharge	Less than 3% per month (20°C/68°F)
Charge Temperature	Min: -10°C (14°F) / Max: 50°C (122°F)
Discharge Temperature**	Min: -40°C (-40°F) / Max: 50°C (122°F)
Storage	Min: -20°C (-4°F) / Max: 60°C (140°F)

Mechanical Specifications

Industry Reference	GC12	
Length (A)	13.0 in	329 mm
Width (B)	7.1 in	181 mm
Height over lid (C)	9.6 in	244 mm
Height over stud (D)	11.0 in	274 mm
Weight	85.9 lbs	39 kgs
Terminal (Opt'l)	UTL	
Cell(s)	6	
Electrolyte	Flooded	
Terminal Torque Nm	11-12Nm	

NOTE: There is a tolerance of +/-2%.

Capacity vs Temperature



Features

- Ultra energy efficient due to low resistance

- Increased cycle life due to Carbon Nano Tube Technology

- Suitable for opportunity charging

- Cost savings due to increased efficiency

- Up to 2 x faster recharge

- Allows for opportunity charging to give you those extra running times when required

- Suitable for extreme temperature variants

Applications

- Golf carts, including electric vehicles

- Access Work Platform (AWP)

- Cleaning Machines

- Maritime

- Wheelchairs

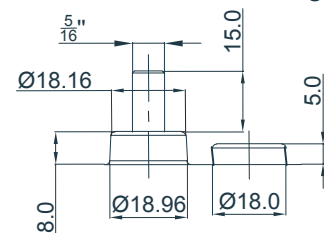
- Solar & Renewable Energy

- Traffic Systems

- Caravans / Motorhomes RV's

- Home Invertor

UTL Positive & Negative



Compliant with: IEC 60254

Designed in compliance with applicable BCI, DIN, BS and IEC standards. Tested in compliance to BCI and IEC standards.

Charging profile

IUI Charging $I_1 = \text{min. } 12\% C_5 \text{ max. } 40\% C_5$
 $U = 2.45 \text{ V per cell}$
 $I_2 = 6\% C_5 \text{ for max. } 4 \text{ hours}$

Charging instructions

Charging Voltage Settings 77°F / @ 25°C					
System Voltage	Per Cell	12V	24V	36V	48V
Bulk Charge	2.47	14.82	29.64	44.46	59.28
Float Voltage	2.25	13.50	27.00	40.50	54.00
Equalize Voltage	2.70	16.20	32.40	48.60	64.80

Charging temperatures

ADD	SUBTRACT
0.005Vpc for every 1°C below 25°C	0.005Vpc for every 1°C above 25°C
0.0028Vpc for every 1°F below 77°F	0.0028Vpc for every 1°F above 77°F

State of Charge Measure of Open - Circuit Voltage

% of SoC	Sp.Gravity	OCV	
		Cell	12V
100	1.285	2.125	12.75
90	1.265	2.105	12.63
80	1.246	2.086	12.52
70	1.227	2.067	12.40
60	1.207	2.047	12.28
50	1.188	2.028	12.17
40	1.169	2.009	12.05
30	1.150	1.990	11.94
20	1.130	1.970	11.82
10	1.111	1.951	11.71
0	1.092	1.932	11.59