

# Cyclic Duty Gel Batteries

SPECIALIST VEHICLE APPLICATIONS 40Ah – 260Ah



Antares have been designing auxiliary electrical power systems for over three decades. During that period we have found that the Cyclic duty GEL battery offers the best characteristics for specialised vehicles.

The GEL battery provides a very cost effective solution for a professional auxiliary battery which has to provide cyclic performance over many years.

The GEL battery is manufactured in the USA to the very highest quality and technical standards by East Penn Manufacturing Inc a global leader in specialised Sealed Valve Regulated Lead Acid technology.

## Benefits

- Thick consistency of gelled electrolyte and tight pack construction prevent the damaging effects of vibration
- Ultra premium sealing valves prevent capacity loss and control pressure
- Fortified posts, straps and welds that resist vibration damage and maximise current transfer
- Recombinant construction with gelled electrolyte eliminates spills, gassing and terminal corrosion under normal operating conditions
- Individual Plate Formation (IPF) Technology optimises power capacity, cell consistency and long term reliability
- 250 quality control checks to ensure superior performance and long life

## Cyclic GEL batteries

The Antares range of GEL batteries are designed to be used where the battery is expected to be repeatedly charged and discharged, as part of its normal day to day operation.

GELs are particularly suited to operating voltage sensitive loads. The battery "holds up" the voltage for longer and can be discharged deeper giving greater usable capacity.

Not all GEL batteries are designed for cyclic applications! However our batteries are designed from the outset for this duty.

## Maximum life and cycling

A phosphoric acid additive is put in which dramatically extends battery cycle life.

The acid does not stratify as with flooded cells (because the electrolyte is immobilised in gel) and this "acid limited" design does not allow self destruction caused by ultra-deep discharging.

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**ANTARES**  
engineering with answers

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## Ease of use

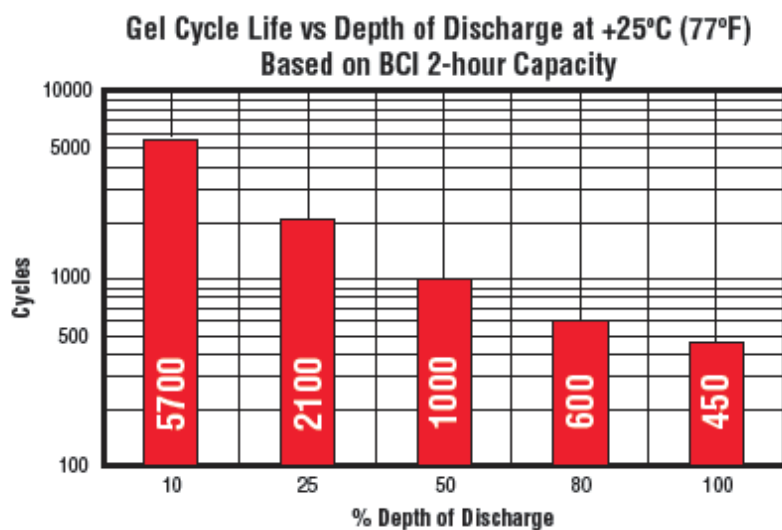
The batteries can be operated in virtually any position. Installation upside down is not recommended.

Any normally ventilated enclosure is suitable.

The larger batteries are fitted with a carrying handle to ease carrying, installation and removal.

## Temperature range

GEL batteries are very well suited to low temperature applications down to  $-60^{\circ}\text{C}$ . A fully charged GEL will not freeze at  $0^{\circ}\text{C}$  and will not be harmed even if at very low arctic temperatures! Capacity is impaired but recovers when the battery is warmed up.



The batteries operate best at  $+20^{\circ}\text{C}$  to  $25^{\circ}\text{C}$  however they can be successfully operated up to  $+60^{\circ}\text{C}$  ambient. If kept at consistently elevated temperatures the life of the

battery is reduced.

These batteries are the standard by which all other GEL batteries are measured.

Part Number	66040	66050	66060	66070	66080	66100	66110	66145	66210	66260
Voltage	12VDC									
Nominal 5hr capacity	26.8Ah	34.0Ah	43.2Ah	47.5Ah	63.0Ah	72.0Ah	80.5Ah	96.8Ah	153.0Ah	188Ah
Nominal 20hr capacity	31.6Ah	40.0Ah	51.0Ah	60.0Ah	73.6Ah	88.0Ah	97.6Ah	115Ah	183.0Ah	225Ah
Peak 5hr capacity	28.4Ah	36.0Ah	45.8Ah	50.3Ah	66.0Ah	76.0Ah	85.0Ah	110Ah	153Ah	188Ah
Peak 20hr capacity	33.3Ah	42.1Ah	53.7Ah	63.2Ah	77.0Ah	91.0Ah	102Ah	125Ah	193Ah	237Ah
CA ( $0^{\circ}\text{C}$ )	290A	325A	300A	420A	575A	700A	780A	636A	1245A	1470A
Length mm	214	197	228	259	259	326	328	345	527	519
Width mm	132	168	139	169	173	167	171	171	214	279
Height mm	183	175	235	179	209	237	239	290	250	253
Weight	11KG	14KG	17KG	18.6KG	23KG	28KG	31KG	38KG	58KG	71KG
Terminations	T873 8mm Hole	1/4" Female	T881 SAE/BOLT	1/4" Female	1/4" Female	T881 SAE/BOLT	SAE + STUD	SAE POST	SAE POST	SAE POST
SAE post to 8mm stud conversion – Positive post clamp part no <b>64570</b> , Negative post clamp part no <b>64571</b>										
Footnotes	1,2,3,4	2,3,4	2,3,4	2,3,4	1,5	2,3,4	1,5	1,4	1,4	1,4
	1=Includes Handle, 2 =“Non spillable” defined by IOT, 3 = “Non spillable as defined by IATA/ICAO 4 = Standard Life Cycle, 5 = Standard Life Cycle x 0.67									
Charging Instructions	WARRANTY VOID IF OPENED OR IMPROPERLY CHARGED. Constant under or overcharging will damage any battery and shorten its life! Use a good constant potential charger, voltage regulated charger. For 12 Volts charge to at least 13.8 but no more than 14.6V at $20^{\circ}\text{C}$									
Charge Voltage	13.8-14.1VDC @ $20^{\circ}\text{C}$									
Float Voltage	13.5-13.8VDC @ $20^{\circ}\text{C}$									
Container	Polypropylene									
Electrolyte	Sulphuric Acid Thixotropic GEL									
Plate Alloy	Lead Calcium/Copper grid alloy									
Vent	Self sealing 2psi operation									