[What size Hydrogen generator system do I need?](http://hydrogenfuelsystems.com.au/size-hydrogen-generator-system-need/)

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What size system do I need

The price structure sheet  below shows the vehicle engine capacity and appropriate system to match.

Basically any engine has a Hydrogen stoichiometric ratio of 12.5 % … that is the optimum volume of required hydrogen is 12.5% or 1/8th  the engine capacity  , measured in litres per  minute

A Gen 10 system has a total electrode area that suits the engine to 5 litre capacity

A Gen 15 system has a total electrode area that suits the engine to 8 litre capacity

A Gen 20 system has a total electrode area that suits the engine to 8  litre capacity and can be connected in series to suit engines to 20 litre capacity

Gen 15 and Gen 10 systems can also be connected in series if required , however the Gen 20 is specially designed  for  series / multiple unit connections for larger engines

All systems can be powered by 12 volt or 24 volt supply .  24 Volt supplies naturally have greater output.  Some clients have opted to use a 12 Volt / 24 Volt DC voltage inverter for their systems .

Turbo powered engines require a greater percentage of hydrogen –  20% of their engine capacity – measures in litres per minute is the accepted value… a 12 litre turbo Diesel needs 2.4 Litres of  Hydrogen per minute , this equates to a volume of 3.6 litres of hydrogen / oxygen mixture produced by the Hydrogen generator.

A naturally aspirated 4.8 litre petrol/ gasoline Powered engine requires 600 mls of hydrogen per minute — = equates to 900 ml of oxygen/ hydrogen mixture produced by the electrolysis system.

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A Gen 20 system is lighter , more compact and more energy efficient  and more advanced  than a Gen 15 systems and are used for engines greater than 8 litre capacity

Gen 15 systems are able to be used instead of Gen 20 systems up to 8 litre engine capacity

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| SYSTEM | vehicle | Weight | Plate area | Price  ($US) | Enclosure | Engine fuel |
| Gen 10 system | family cars to 5 litre capacity | 14.5 kg | 6400 sq cm | $POA + GST | Aluminum43cm x 25 cm x 33 cm high | Petrol , diesel, LPG |
| Gen 10 system | family cars to 5 litre capacity | 15.5 kg | 6400 sq cm | $POA + GST | Steel43cm x 25 cm x 33 cm high | Petrol , diesel, LPG |
| Gen 10 system | family cars to 5 litre capacity | 13.5 kg | 6400 sq cm | $POA + GST | Plastic40 cm x 20 cm x 27 cm high | Petrol , diesel, LPG |
| Gen 15 | Vehicles/ trucks/ 4 WD work vehicles  engine capacity greater than 5 litre | 19.5 kg | 14400 sq cm | $POA + GST | Steel43  cm x 25 cm x 37 cm high | Petrol , diesel, LPG |
| Gen 15 | Vehicles/ trucks/ 4 WD work vehicles  engine capacity greater than 5 litre | 15.5 kg | 14400 sq cm | $POA + GST | Aluminum43  cm x 25 cm x 37 cm high | Petrol , diesel, LPG |
| Gen 20 | Trucks/ Gensets / Trawlers  engine capacity greater than 5 litre | 14kg | 8400 sq cm | $POA + GST | Plastic35  cm x 40 cm x 30 cm high | Petrol , diesel, LPG |
| Gen 20 | Trucks/ Gensets / Trawlers  engine capacity greater than5 litre | 19kg | 8400 sq cm | $POA + GST | Steel35 cm x 40 cmx33cm high | Petrol , diesel, LPG |
| Gen 20 | Trucks/ Gensets / Trawlers  engine capacity greater than 5 litre | 15kg | 8400 sq cm | $POA + GST | Checker-plate aluminum35  cm x 40 cm x 33 cm high | Petrol , diesel, LPG |
| Gen 30 | Trucks/ Gensets / Trawlers  engine capacity greater than 30 litre | 400 kg | 105000 sq cm | $POA+ GST | Steel | Petrol , diesel, LPG |

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| ENGINE  CAPACITY | Gen 10 Hydrogen system | Gen 15 Gen  20 Hydrogen system |
| Up to 3 litre | One Gen 10 |   |
| Up to 5 litre | One Gen 10 |   |
| 6 litre |   | One  Gen 15 |
|  7 litre |   | One  Gen15 |
| 8 litre |   | One  Gen 15 |
| 9 litre |   | One Gen 20 |
| 10 litre |   | One  Gen 20 |
| 11 litre |   | Two Gen 20 |
| 12 litre |   | Two Gen 20 |
| 13 litre |   | Two Gen 20 |
| 14 litre |   | Three Gen 20 |
| 15litre |   | Three Gen 20 |
| 16 litre |   | Three Gen 20 |
| 17 litre |   | Three Gen 20 |
| 18 litre |   | Three Gen 20 |
| 19 litre |   | Three Gen 20 |
| 20 litre |   | Three Gen 20 |