



# ENIQUEST

Australian Made Diesel Generators



APU12.0, 12kW 28V DC  
AUXILIARY POWER UNIT

ISO 9001 CERTIFIED



## Power You Can Trust

Meets all relevant Mil Standards | Extremely compact | Regulated DC voltage output | 24V electric start  
Remarkable fuel economy | Easy maintenance | Totally enclosed water-cooled alternator  
Able to be reconfigured for any servicing and exhaust orientation



Australian built with  
**YANMAR**

## APU12.0, 12kW 28V DC AUXILIARY POWER UNIT

APU12.0 combines a most compact, smooth running, water cooled Yanmar industrial diesel engine with a unique Enquest developed and manufactured, totally enclosed water cooled 28V DC permanent magnet alternator. This compact light weight highly efficient Enquest alternator makes for a signification reduction in size and mass of the overall APU package.

Packaged in a robust frame with inbuilt vibration isolating mounts provides easy access for scheduled and non-scheduled servicing, makes the APU12.0 an ideal choice for military vehicles.

| APU12.0             |                                  |
|---------------------|----------------------------------|
| <b>APU Package</b>  | Suit Wheeled or Tracked Vehicles |
| <b>Voltage</b>      | 28V DC                           |
| <b>Output Power</b> | 12kW                             |
| <b>Fuel</b>         | Diesel/JP8                       |
| <b>Weight</b>       | 328kg                            |



## Specifications

|                                      |                                                 |
|--------------------------------------|-------------------------------------------------|
| <b>Model</b>                         | <b>APU12.0</b>                                  |
| <b>Continuous Output</b>             | 12kW                                            |
| <b>Output Voltage</b>                | 28.0V DC                                        |
| <b>Voltage Ripple</b>                | < 3%                                            |
| <b>Voltage Stability</b>             | < 2%                                            |
| <b>Continuous Output Current</b>     | 428 Amps                                        |
| <b>Engine</b>                        |                                                 |
| <b>Make/model</b>                    | Yanmar 3TNM74F                                  |
| <b>Engine Type</b>                   | Indirect Injected — 4 Cycle                     |
| <b>Engine Displacement</b>           | 0.993Ltr                                        |
| <b>Number Of Cylinders</b>           | 3                                               |
| <b>Operating Speed — Rpm</b>         | 2000 to 2500rpm Variable For Voltage Regulation |
| <b>Cooling Method</b>                | Water Cooled With Thermo Fan And Radiator       |
| <b>Fuel Type</b>                     | Automotive Diesel and JP8                       |
| <b>Fuel Consumption</b>              | 2.5 Liters/h at Full Load (Diesel)              |
| <b>Starting</b>                      | 24V Electric Start From Host Vehicle Battery    |
| <b>Lube Oil Type</b>                 | SAE15W40 in Ambient -19°C to +44°C              |
| <b>Lube Oil Capacity</b>             | 4.5 Litres                                      |
| <b>Maximum Angle Of Operation</b>    | 25°                                             |
| <b>Crank Case Oil Evacuation</b>     | Hand Operated Oil Evacuation Pump               |
| <b>Service Intervals</b>             | 250 Hours                                       |
| <b>Alternator</b>                    |                                                 |
| <b>Make/model</b>                    | Enquest EQ8.0                                   |
| <b>Alternator Type</b>               | Permanent Magnet, Brushless and Bearing-less    |
| <b>Frame Type</b>                    | Totally Enclosed                                |
| <b>Windings</b>                      | Dual 3 Phase Delta Connected                    |
| <b>No. Of Poles</b>                  | 20                                              |
| <b>Rectifier Type</b>                | Full Wave Double Bridge for Each Winding        |
| <b>Voltage Control</b>               | Variable Engine Speed Control                   |
| <b>Voltage Control Accuracy</b>      | +/- 2%                                          |
| <b>Alternator To Engine Coupling</b> | Direct                                          |
| <b>Alternator Cooling</b>            | Engine Coolant From Engine Radiator             |
| <b>General</b>                       |                                                 |
| <b>Enclosure Type</b>                | Open Frame With Bunding                         |
| <b>Noise</b>                         | < 65DBA at 7 M                                  |
| <b>Fuel System</b>                   | Self-bleeding                                   |
| <b>Fuel Supply</b>                   | External From Host Vehicle System Via Lift Pump |
| <b>Control Type</b>                  | Enquest PM104+ With CAN-Bus Connectivity        |
| <b>Generator Mounting To Frame</b>   | High Performance Vibration Isolation Mounts     |
| <b>Electrical Output Termination</b> | + ve and -ve Busbar                             |
| <b>Exhaust Discharge Direction</b>   | Configured to Suit Application                  |
| <b>Cooling Air Intake Direction</b>  | Configured to Suit Application                  |
| <b>Operating Temperature Range</b>   | -32°C to +49°C                                  |
| <b>Altitude</b>                      | Up to 1200 M                                    |
| <b>Handling</b>                      | 4 x Top Mounted Lifting Eyes                    |
| <b>Dimensions in MM</b>              | 900L x 590W x 600H or to Suit Application       |
| <b>Weight</b>                        | 328kg with Fluids                               |

Please note - Specifications are subject to change without notice.  
- APU image shows configuration with exhaust direction from top and cooling air intake through top.