



HYDROGEN
FOR A GREEN PLANET

Fuel Cell Power Generator

500W / 12V-24V/DC & 110 or 230volt AC

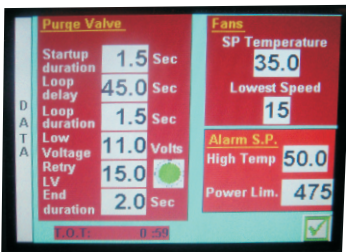
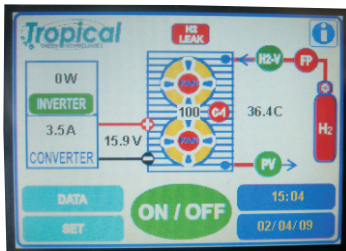
Environmental Friendly & Noiseless Generators



TB - 500

TROPICAL S.A. presents its all new TB-500 hydrogen fuel cell power system, producing 500W nominal electric power using the Proton Exchange Membrane (PEM) technology. The membrane on the fuel cell stack is converting hydrogen into electric power and the only "pollutant" is clean water. This power generator produces high quality electric power 110V or 230V AC & 12V or 24V DC (other voltages on request). It is designed to used as an Uninterruptable Power System (UPS), back-up power system, as a stand alone power generator providing electricity to our homes or a battery charger or in grid back up, solar hybrid or military applications or to remote applications. Its main advantages are: quite in operation, small in size & light weight, produces zero-emissions, minimal maintenance, reliable, stable & quick start operation.

USER FRIENDLY INTERFACE FOR EASY OPERATION & DATA ACQUISITION



The TB-500 hydrogen fuel cell power system is being controlled by an intelligent controller which isoperated by a 16-colored touch screen monitor. The management of the system is easily done through the touch screen monitor and although the system is fully automated, the user has the option to change which ever parameter likes followed by a 4-digit password. Moreover, data acquisition of the parameters can be saved on an excel file (SD memory card) and the parameters that can be changed are the following:

MEASUREMENTS APPEAR ON THE TOUCH SCREEN

- STACK POWER (Watt)
- STACK VOLTAGE (Volt)
- STACK CURRENT (Ampere)
- BATTERY VOLTAGE (Volts)
- AIR STACK TEMPERATURE (C°)
- AIR FAN FLOW (%)
- SET BUTTON (Settings Screen)
- DATA BUTTON (Parameters Screen)
- SYSTEM TOTAL OPERATING TIME
- TIME - DATE / MONTH / YEAR
- OVERLOAD SETTING (Watt)
- SD MEMORY CARD (Data Acquisition)

OPTIONAL

- HYDROGEN PRESSURE (Bar)
- HYDROGEN CONSUMPTION (lt/hr)
- HYDROGEN TANK CAPACITY
- SYSTEM SERVICE TIME
- STACK LIFETIME
- AIR HUMIDITY

TECHNICAL SPECIFICATIONS

FUEL CELL SYSTEM CODE : TB-500
 TYPE : PEM (Proton Exchange Membrane)
 POWER OUTPUT : 500W
 AC OUTPUT : 110 or 230 V/AC
 DC OUTPUT : 12V or 24V/DC
 HYDROGEN PURITY : 99.99%
 OXIDANT : Ambient Air
 COOLING SYSTEM : Air
 WEIGHT : 25 Kg
 DIMENSIONS (mm): L:400 x W:350 x H:450

MAIN APPLICATIONS



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