Table 1. Technical data of each component.

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| --- | --- |
| **Designations** | **Data** |
| **PV**ModelNumber of panelsConnection ModeNumber of cells *ns*maximum power *Pmp* in STC\*Short current –Circuit *Iscn* in STC\*Open circuit voltage *Vocn* in STC\*current at maximum power *Imp* in STC\* voltage at maximum power *Vmp* in STC\*Temperature coefficient of Isc *ki*Temperature coefficient of Voc *kv***Batteries**electromotive force Enumber of series cells C10 capacityRated voltage Vbatninitial State Of Charge SOC**Generator**Rated power Pnfuel**Inverter** Inverter rated power PinvMaxeff**Load**average load | BP-3125126 of 2 series36125W7.54A22.1 V7.1A17.6 V0.065%/°C-80mV/°C2 V121000 Ah24V100%6.6 kWDiesel2.3 kW95 %4600Wh/d. |

\*The Standard testing conditions to measure photovoltaic cells or modules nominal output power. Irradiation level is 1000W/m2, with the reference air mass 1.5 solar spectral irradiation distribution and cell or module junction temperature of 25°C.