

# Hybrid Generator Sets



## TJ 3000 HD-DE

- ▶ Fuel savings up to 65%
- ▶ Super silent canopy 65dBA@7m
- ▶ Remote monitoring and control
- ▶ Environmentally with low carbon emission
- ▶ Quick ROI period up to 2 years
- ▶ Fast and quality after-sales service
- ▶ Longer maintenance intervals
- ▶ Compact design for easy transport

## TJ 3000 HD-DE

<b>MAXIMUM LOAD</b>		3.000 W	
Average Load		2.000 W	
Optimized Load Range		1.000 - 3.000 W	
Nominal Output Voltage		48 VDC	
AC Output Power (optional)		250 - 3.000 VA	
<b>ENGINE</b>			
Make		Deutz	
Model		F2M-2011	
Output Power at 1800rpm		15,0 kW	
Cooling Type		Oil	
Operating Speed		1300-2000 rpm	
Fuel		Diesel	
Standard Maintenance Interval		500 hours	
Increased Maintenance Interval (opt.)		1.000 hours	
<b>ALTERNATOR</b>			
Technology		Permanent-Magnet	
Model		PMG140K/18-90	
Output Power at 1800rpm		9 kW	
<b>BATTERY</b>			
Technology		Lead Acid / Li-Ion	
Type		Lead Carbon / LiFePO4	
Nominal Capacity		500 Ah	
Rated Voltage		48 V	
DoD (Depth of Discharge)		80%	
Cycle Life (25 °C@80%DoD)		3.200 / 5.000	
Maintenance Requirement		No	
Running Temperature (°C)		-15 to 45 / -10 to 55	
<b>SIZE</b>			
	<b>LEAD CARBON</b>	<b>LFP</b>	
Weight	2348	1810	
Dimensions (WxLxH)	1506x2550x2000		
<b>EXPECTED PERFORMANCE VALUES (LOAD)</b>	<b>1,0 kW</b>	<b>2,0 kW</b>	<b>3,0 kW</b>
Battery Discharge Time (hours)	16,8	8,4	5,6
Battery Charge Time (hours)	4		
Battery Cycle per Day	1,16	1,94	2,51
Expected Battery Life (years)	9,5	5,6	4,4
Genset Running Hours per Day (hours)	4,6	7,7	9,9
Engine Maintenance Period (days) (per 500 hours / per 1000 hours)	108/216	65/130	50/100
Fuel Consumption per Day (liters)	10,4	20,1	29,3
Fuel Transfer Period (days)	77	40	27
<b>HYBRID + SOLAR SYSTEM</b>			
Recommended Solar Power (kWp)	6,4		
Number of Solar Panels (pcs)	16		
Genset Running Hours per Day (hours)	1,4	5,2	6,7
Engine Maintenance Period (days) (per 500 hours / per 1000 hours)	357/714	96/192	74/148
Fuel Consumption per Day (liters)	2,7	11,7	20,7
Fuel Transfer Period (days)	296	68	38
Solar Energy Rate (%)	78,9	45,3	31,9
Expected Battery Life (years)	10	7,5	5,7

## Standard Features

<b>DC Power Distribution</b>		<b>Communication Interface</b>	RS232/ RS485
Critical loads (BLVD)	3x63A, 2x32A, 2x16A	<b>System Operating Temp. Range</b>	0 °C / +45 °C
Non-critical loads (LLVD)	1x63A, 2x32A, 2x16A	<b>Remote Monitoring/Control</b>	2G/3G/4G/Ethernet
<b>Internal Fuel Tank</b>	800 litres	<b>Location Tracking</b>	GPS

## Optional Features

<b>230V AC Output</b>	250VA- 6.000VA	<b>Solar Energy Kit -1 (panel, MPPT charger, fusebox)</b>	
<b>Residual Current Protection</b>	For 230V AC circuit		6,4 kWp optimized for TJ3000
<b>Auto-Transfer Switch</b>	Auto-Transfer Board		12,8 kWp optimized for TJ6000
<b>Free Contacts for External Signals</b>	8 Inputs / Outputs		25,6 kWp optimized for TJ10000
<b>Increased Operating Temp. Range</b>	-20°C / +55°C	<b>Solar Energy Kit -2 (panel, MPPT charger, fusebox)</b>	
<b>Load Priority Selection</b>	Critical / Non-critical		Can be optimized acc. to the project req.
<b>Increased Maintenance Interval</b>	1.000 hours	<b>IP Protection Class</b>	Can be optimized acc. to the project req.
<b>External Fuel Tank</b>	up to 5000 litres	<b>Super Silent Cabinet</b>	Can be optimized acc. to the project req.
<b>External Battery Capacity</b>	up to 2000Ah	<b>Dust Filters</b>	Can be optimized acc. to the project location
<b>Multiple User Support</b>	Power measurement per user	<b>Improved Security</b>	Can be optimized acc. to the project location

