

TITAN POWER and TITAN ENERGY – DATASHEET

TITAN POWER and TITAN ENERGY is a complete system of energy storage, for industrial use based on the use of salt batteries.

The system allows the battery pack to be connected to the power grid.

- + Tropicalized electronic boards;
- + RADOX 155 cables for high performance;
- + On-board oscilloscope and real time datalogger;
- + No gas emissions;
- + Redundant safety features (chemistry, cell, battery module and BMS);
- + Free of toxic material;
- + Sustainable and fully recyclable.



TITAN POWER – DC SPECIFICATIONS

Minimum input voltage	d.c. V	500
Maximum input voltage	d.c. V	700
Nominal DC voltage	d.c. V	640
ICU / ICN / ICS	d.c. kA	5
Battery side voltage RIPPLE	%	≤ 0,5
Thermal protection		Yes
Electronic overcurrent protection		Yes
Control		Digital

TITAN POWER – AC SPECIFICATIONS

		TITAN POWER 30 KW	TITAN POWER 50 KW	TITAN POWER 100 KW
Type of network		Three-phase	Three-phase	Three-phase
Nominal input voltage	a.c. V	400 ± 15%	400 ± 15%	400 ± 15%
Rated input frequency	Hz	50 ± 5%	50 ± 5%	50 ± 5%
Rated output voltage	a.c. V	400	400	400
Rated output frequency	Hz	50 ± 5	50 ± 5	50 ± 5
Rated output power	kW	30	50	100
Maximum output current	a.c. A	52	86,6	173,2
Short-circuit current (Phase-Neutral)	kA	10	10	10
Overall short-circuit power	kW	45	75	150
Maximum inrush current	A	200 for 3 ms	200 for 3 ms	200 for 3 ms
THDI (At nominal power)	%	≤ 3	≤ 3	≤ 3
Allowed cos φ		± 0,9	± 0,9	± 0,9
Net type		TT / TN	TT / TN	TT / TN

TITAN ENERGY – DC SPECIFICATIONS

Rated voltage	d.c. V	620
Storage capacity	kWh	22,5 (1 battery) – 90 (4 batteries)
Depth of discharge	%	80
Battery type		Sodium chloride – Nickel
Lifecycle	N°	4500 cycles at 80% DOD
Battery warranty	Years	10
Maximum batteries number	N°	16

SYSTEM – ENVIRONMENTAL SPECIFICATIONS

Ingress protection	IP	20
Maximum working temperature	°C	+ 45
Minimum working temperature	°C	0
Relative humidity	%	< 80
Pollution Degree	PD	II
Maximum altitude	m	2000 A.S.L.

SYSTEM – SAFETY / PROTECTIVE DEVICE

Galvanic separation (inverter)		Yes
Protective class	CLASS	I
AC overvoltage category	OVC	III
DC overvoltage category	OVC	II

SYSTEM – INSULATION SPECIFICATIONS

Impulse withstand voltage U_{imp}	d.c. V	4000
Insulation	a.c. V	2000

SYSTEM – REGULATORY COMPLIANCE

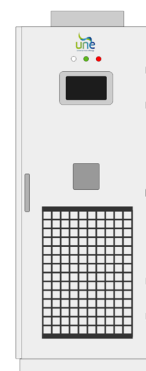
Marking	+	CE
Certifications	+	2014/35/UE
	+	2014/30/UE
	+	CEI EN 62477-1 (2012)
	+	CEI EN 61000-6-1 (2007)
	+	CEI EN 61000-6-3 (2007)
	+	CEI 0-16: 2022-03
	+	VDE-AR-N 4105: 2018-11

SYSTEM – MONITORING

Remote monitoring	ETHERNET
Local monitoring	PC EMBEDDED

TITAN POWER – MECHANICAL SPECIFICATIONS

		TITAN POWER 30 KW	TITAN POWER 50 KW	TITAN POWER 100 KW
Dimensions	mm		820 (W) 820 (D) 2060 (H)	
Weight	kg	390	610	800
Inverters per box	N°	1	1	1
Acoustic emissions	dB	≤ 68	≤ 68	≤ 68
Air ventilation		Forced	Forced	Forced



TITAN ENERGY – MECHANICAL SPECIFICATIONS

		TITAN ENERGY 22,5 – 90 KWH
Dimensions	mm	810 (W) 1320 (D) 2300 (H)
Weight	kg	380 (Without batteries)
Battery weight	kg	256 - (Each battery)
Batteries per box	N°	4
Acoustic emissions	dB	42
Air ventilation		Forced



TYPICAL CONFIGURATION:

