INDROME energy storage unit

Indrome is a unique energy storage appliance able to double its own power whenever you want.*

*Just by means of an upgrade.

And just in case that is not enough here are 10 additional reasons to make you understand the difference between Indrome and the other storage devices available on the market.

1. Voltage sensors, current sensors and temperature sensors for individually checking the charge, the output by the renewable sources and the charge absorption.

2. Microprocessor with PLC features which can:
> Customize programs designed for the specific input/output needed by users
> Modify the battery charging curve according to the changes of temperature in the battery pack (internal sensor).

3. Internal tracks made of copper bars are able to endure high currents without risks of breakage.

4. Energy multi-inputs from renewable sources. System output in bypass mode - 100%

5. Isolation stage on the voltage multiplier during the change from 48 Vdc to 330 Vdc. Charge isolation transformer.

6. Short circuit control by limiting the current peaks up to double the voltage than the rated voltage. In case of anomaly the powering section is switched off while the controlling section is kept "activated" dealing with the problem.

7. Internal CAN transmission for controlling 3 devices: battery charger, voltage multiplier and inverter.

8. 1 standard MPPT. The second MPPT (optional) requires the use of a complete battery charger which can also allow for better and individual battery control.

9. Fully programmable charge cycles for flooded lead-acid batteries: IWa + holding (also with a fast cycle).

10. Fully programmable charge cycles for sealed batteries (GEL/AGM):
> IU+ holding. This is the normal cycle under standard operating conditions.
> IUIa. This is the periodical cycle for a greater efficiency of the battery.

INDROME energy storage unit

Much more than a simple storage unit.

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INDROME
energy storage unit

INDROME	H03M1	H06M1	H09T1	H18T1
PV INPUT				
MPPT Range	1 MPPT (the second one is optional)			
Max. input current	65 A *	65 A **	195 A ***	195 A ***
Voltage Input range	70 - 120 V DC			
OTHER INPUTS				
Other sources	Aeolian – Diesel/Gas power unit			
Input Voltage	70 - 120 V DC			
AC OUTPUT				
Output active power (W)	3000	6000	9000	18000
Output voltage	230 Vac +/-10 % Sinusoidal, single-phase		400 Vac +/-10% Sinusoidal, three-phase	
Overload	130% per 60 sec. – short circuit control			
PERFORMANCE				
Inverter	≥ 93%			
PV Efficiency DC/DC	≥ 92%			
OPERATION				
Input sources	Alternated and smart use of input energy sources available			
UPS operation	Total discharge when off-grid			
Protections	Overload – Short circuit – Overheating – Total discharge			
By-Pass	Automatic ****			
Emergency By-Pass	Automatic and/or Manual control ****			
TECHNICAL FEATURES				
Dimensions (HxWxD) (battery pack excluded)	870x450x550	870x450x550 con 1 MPPT 970x450x655 con 2 MPPT	As per drawing	As per drawing
Operating Temperature	-5 / 40°C			
IP Code	IP 20			
Weight (battery excluded)	KG. 60	KG. 80	As per drawing	As per drawing
REFERENCE RULE				
Conformity to the standard	EN 62040 – 2 CEI - CE			
STORAGE DATA				
Battery type	AGM – Gel Lead – Wet cell			
Storage capacity	From 9 kWh/g to 16.5kWh/g		From 27 kWh/g to 49.5kWh/g	
Cycles	From 700 to 2800 according to the type and % of residual charge			
Residual charge	50% - 30%			
Charge cycle	Programmable, with voltage, current and temperature control			
Safety	Battery temperature control for optimizing the charge/discharge operation			
Battery Pack weight	From 270 Kg. (AGM type) – 620 Kg (GEL LEAD type)			
Internal operating temp.	0/50° C			
INPUT / OUTPUT				
Processor	Controlling CPU			
Input	3 digital inputs + 1 analog input			
Output	1 NC per Bypass – 3 programmable NA			
Ports	USB – Rs 485-CAN			
COOLING SYSTEM				
Main System	Heat sinks			
Secondary System	Aeration grids			
Overheating	Forced ventilation			

* Photovoltaic system power recommended for optimal operation: from 3000 to 4500 Watt
** Photovoltaic system power recommended for optimal operation: from 4500 to 6000 Watt
*** Photovoltaic system power recommended for optimal operation: according to the plan
**** It needs an external system to be wired by a technician