

Amplio INDY LION

Energy Storage System for
Residential, Industrial & Utility Uses



a Amplio INDY Energy Storage System



Amplio INDY is a comprehensive Energy Storage System that comprises battery manufactured with advanced technology and Amplio's proprietary software to regulate operation.

It can be custom-designed for residential, industrial and utility uses, so that customers can:

- *Optimize Power Quality & Equipment Management*
- *Increase Revenues from Demand Side Management Business Model*
- *Achieve Efficient Peak-Shaving & Time-of-Use Applications*
- *Smooth Renewable Energy Injection Profile*

Amplio INDY's Advantages:

- Suitable for Stand-Alone & Grid-Connected power plants
- Flexible for Residential, Commercial, Industrial and Utility uses
- Monadic Feature & Scalable Modular Design allowing Fast & Low-cost Installation
- High-Quality components guaranteeing Long-term Reliable Operation
- Full User Autonomy & Easy Maintenance
- Able to connect to Internet for data exchange
- Monitoring & Remote Optimizer Software and Cloud Interface Optional

a Amplio INDY's Applications:



Residential



Industrial



Utility Uses



Offices



Commercial



Health Care
Facilities



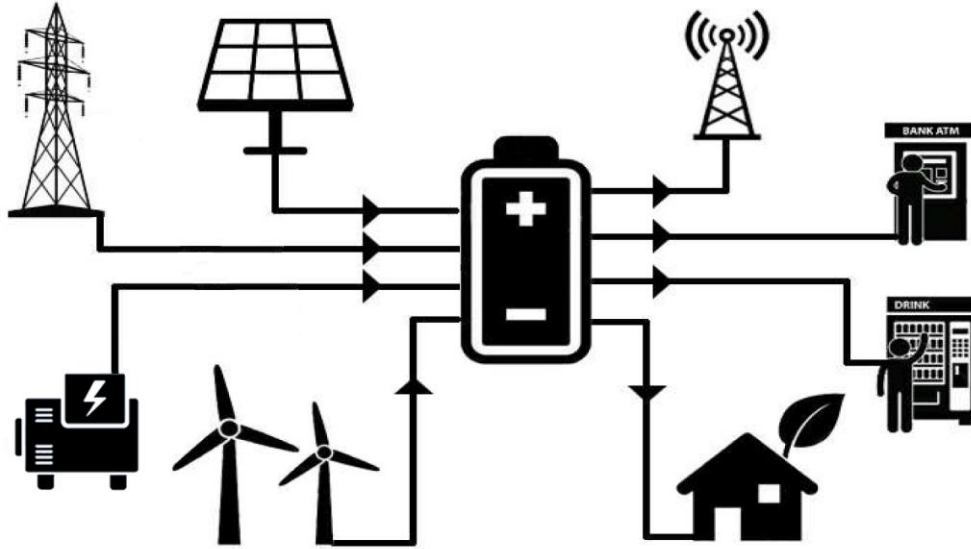
Telecom
Tower



ATM &
Vending Machine

& Many
Others.....

a Amplio INDY's Connection Schematic:



a Amplio INDY Technical Data:

Amplio INDY Cube	Suitable for Residential and Small Office Installations	
	Amplio INDY Mini Cube	Amplio INDY Cube
Power (kVA)	1	3
Energy (Wh)	1408	7064
Energy (kJ)	5068	25430
PV String (max)	3	5
External Panel Interface	Yes	Yes
Expandable	No	Yes
Weight (kg)	25	90
Dimensions (mm)		
width	450	600
length	350	700
height	450	800
IP	20-54	20-54

Amplio INDY Cube	PV Interface	
	Amplio INDY Mini Cube	Amplio INDY Cube
Power (kVA)	1	3
Charging current (A)	20	30
System DC voltage (V)	12	24
Suggested Operating Range (V)	15-18	30-32
Max PV array open circuit voltage (V)	40	80
Optimal Vmp (V)	15	30

Amplio INDY Technical Data:

Amplio INDY Cab	Suitable for Installations for Telecom Tower, ATM and others					
	INDY Cab 1*	INDY Cab 3*	INDY Cab 5*	INDY Cab 10M**	INDY Cab 10L**	INDY Cab 10XL**
Power (kVA)	1	3	5	10	10	10
Energy (Wh)	17.600	17.600	17.600	17.600	35.200	52.800
Energy (kJ)	63.360	63.360	63.360	63.360	126.720	190.080
PV string (max)	3	5	7	14	14	15
External panel interface	Yes	Yes	Yes	Yes	Yes	Yes
Expandable	Yes	Yes	Yes	Yes	Yes	Yes
Weight (kg)	552	554	557	568	1.114	1.660
Dimensions (mm)						
width	400	400	400	400	400	400
length	700	700	700	700	1200	1700
height	1600	1600	1600	1600	1600	1600
IP	54-65	54-65	54-65	54-65	54-65	54-65

*Same Interface as INDY Cube

** Interface available upon request

Characteristics

Design life: more than 4000 cycles, over 10 years in float operations and temperature-controlled environments.

Recyclability: complete.

Designed for use at high temperatures.

Designed for use in unstable-grid and off-grid conditions.

Maintenance free.

Up to 120 h long discharge.

Available battery technology

Lithium-Ion

Optional

Grid interface

Genset interface

Electrical connections

PV direct connection interface

230 Vac input CEE socket

230 Vac output CEE socket

Electrical Protections

MT switch battery system

MT switch expansion block 1

MT switch expansion block 2

MT switch additional power unit

Differential switch input SPD,

lightning protections available Input

voltage waveform Sinusoidal

Nominal input AC voltage 230 V

Loss AC voltage 170 - 280 V \pm 7 V

Loss return AC voltage 180 - 270 V \pm 7 V

Max AC input voltage 300 V

Nominal input frequency 50 / 60 Hz (auto detection)

Loss frequency 40 - 65 \pm 1 Hz

Loss return frequency 42 - 63 \pm 1 Hz

Output short circuit protection Circuit breaker

Efficiency (line mode) > 95% (rated R load, battery fully charged)

Transfer time 10 ms

* Technology and data may be subject to change according to different applications and dimensioning, please contact Amplio for more details.

Amplio Energy Europe:

Via Galliera 91, 40121 Bologna, Italy

Tel: +39 051 095 7100

Fax: +39 051 095 7119

E-mail: efficiency@amplioenergy.com

Amplio Energy K.K.:

5F Sanwa Jitsugyo Omotesando Bldg

Tel: +81 (0)3 5778 9555

Fax: +81 (0)3 5778 9556

E-mail: efficiency@amplioenergy.com