

UFLEX solutions

SELF-CONSUMPTION & ENERGY STORAGE SYSTEM



Uflex Energy Backup Manager: a competitive solution configurable to your needs

- **Free PV system:** independent dimensioning from the characteristics of the photovoltaic system
 - **Free Battery Pack:** independence in the choice of technology and pack capacity storage batteries
 - **UPS No Break:** the solution continues to feed preferential loads even in the event of a network failure
 - **Free Portal:** integrated LAN / Wi-Fi for free use of the control and monitoring portal
-
- It keeps a constant control of the variations of the energy flows: produced and utilized.
 - It works in real time on the energy exchange between the storage system and the connection point, withdrawing or injecting energy in the most appropriate way in order to guarantee the least possible energy exchange with the network, both in withdrawal and in input.
 - During the night it supplies power to the loads using, as much as possible, the energy produced in excess by the photovoltaic plant during the day and stored in the battery pack.



CEI-021 PV solutions with storage

Suggested to realize of PV systems in contexts where there is a stable AC network or if you want to add an energy storage solution on an already existing system. Systems can be configured with or without feed-in to the network.



CEI-021 GRID CONNECTED SINGLE-PHASE AND THREE-PHASE

	FROM	TO
PV Plant [kWp]	2	100
Inverter Power [kVA]	3 (9)	12 (180)
LiFePo Storage [useful kWh]	2	320
Lead Storage [useful kWh]	1	100
Supercapacitor [useful kWh]	7	70

() indicates tge extremes of the three-phase

HYBRID CEI-021 SYSTEMS CONNECTED TO THE GRID SINGLE-PHASE

	FROM	TO
PV Plant [kWp]	2	6
Inverter Power [kVA]	3	5
LiFePo Storage [useful kWh]	2	75
Lead Storage [useful kWh]	2	50
Supercapacitor [useful kWh]	7	21

Off-grid photovoltaic solutions with storage

Suggested to realize of PV systems in contexts where there isn't the AC network or is not stable.



OFF-GRID SINGLE-PHASE AND THREE-PHASE

	FROM	TO
PV Plant [kWp]	1	60
Inverter Power [kVA]	1	45
Lead Storage [useful kWh]	1	100
Supercapacitor [useful kWh]	7	21

OFF-GRID SINGLE-PHASE AND THREE-PHASE WITH POWER ASSIST

	FROM	TO
PV Plant [kWp]	1	100
Inverter Power [kVA]	9	150
LiFePo Storage [useful kWh]	2	320
Lead Storage [useful kWh]	1	100
Supercapacitor [useful kWh]	7	21

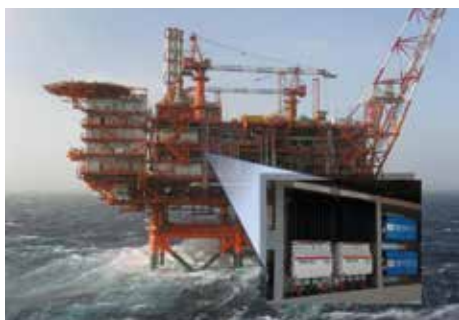
Mini-Grid

Suggested to realize PV systems in contexts where there isn't an AC network a great energy production is required. They allow to share productions points distributed along the AC network.



	FROM	TO
PV Plant [kWp]	30	300
Inverter Power [kVA]	9	300
LiFePo Storage [useful kWh]	20	320
Lead Storage [useful kWh]	20	100
Supercapacitor [useful kWh]	7	21

Off-grid PV solutions with DC output 12-24-48 V



POWER SUPPLY OF IMPORTANT DC LOADS

	FROM	TO
PV Plant [Wp]	500	3000
Power Supply [kWh/gg]	0,6	7
LiFePo Storage [useful kWh]	0,5	7,5
Lead Storage [useful kWh]	0,5	7,5
Supercapacitor [useful kWh]	2,5	7

PV APPLICATION ON VEHICLES

Suggested to realize small PV systems on vehicles like campers, boats, ambulances, etc., in order to charge the service and start-up batteries in the absence of the grid, even if the vehicle is stationary.



	FROM	TO
PV Plant [Wp]	100	800
Power Supply [kWh/gg]	0,2	2
LiFePo Storage [useful kWh]	0,5	2,5
Lead Storage [useful kWh]	0,5	2,5
Supercapacitor [useful kWh]	-	2,5

PV SOLUTIONS INSTALLED ON POLE FOR SPECIAL APPLICATIONS

These solutions allow to realize mini PV systems mounted on poles to provide the power and the management of small loads in remote areas or where you cannot or you don't want to connect the application to the grid.



	FROM	TO
PV Plant [Wp]	10	320
Power Supply [Wh/gg]**	20	800
LiFePo Storage [useful kWh]	0,05	2
Lead Storage [useful kWh]	0,05	1,5

** values subject to the installation area

Most frequent applications



PV LIGHTING FOR ROADS, PARKS, GARDENS, ETC.

The use of LED lighting and light flow regulation techniques allow continuous operation throughout the year. Remote monitoring and management of the solution can also be included.

VIDEO SURVEILLANCE SYSTEMS

The use of outdoor cameras with routers and /or low-power access points of the latest generation allows you to create video surveillance services very efficient and performing even in places where there is no electricity.

MANAGEMENT AND MONITORING OF REMOTE SENSORS AND ACTUATORS

The field of application is very wide and needs met ranging from small sensors and /or low-power actuators to more complex management systems: environmental monitoring, irrigation distribution systems, water conduit, etc



Hybrid stand-alone solutions

