

DURACELL®

ENERGY

Bank



ENERGY Bank

Product Overview

In order to meet European market requirements, Duracell has successfully developed a 3.3kVA / 3.3kWh household Energy Storage solution.

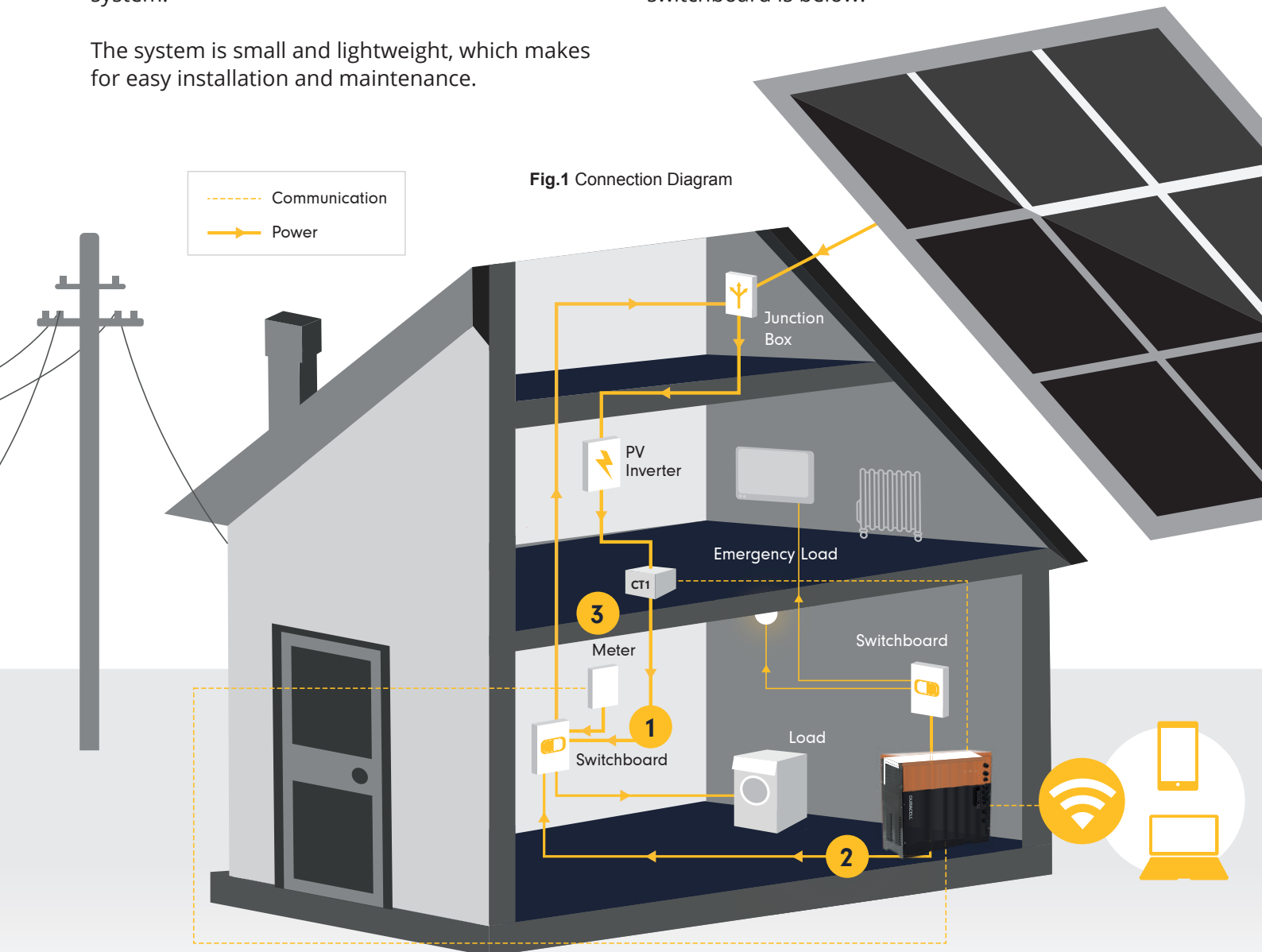
The solution includes smart technology / applications, LiFePO₄, PCS, BMS and a monitoring system.

The system is small and lightweight, which makes for easy installation and maintenance.

System Structure

The 3.3kWh energy storage cabinet consists of 3.3kWh battery and 3.3kVA PCS, the system is connected to the customers switchboard via cables.

The suggested connection between system and switchboard is below.



ENERGY Bank

DURACELL®



Data Table

Type

Energy Bank DURA3EBV1

On-grid

| | |
|-------------------|---------------------|
| Nominal Voltage | Single Phase AC230V |
| Maximum Current | 13A |
| Nominal Frequency | 50Hz |
| Maximum Power | 3.3kWh |
| Current Harmonics | <5% |
| Power Factor | -0.99~+0.99 |

Protection

| | |
|-----|------------------------------|
| Bms | Short Protection |
| | Under Temperature Protection |
| | Overheat Protection |
| | Overvoltage Protection |
| | Low-voltage Protection |
| | Over Current Protection |

Off-Grid

| | |
|--------------------------------------|----------------------|
| Voltage Range | Single Phase 230v±1% |
| Nominal Current | 8a |
| Maximum Current | 16a |
| Nominal Power | 2kva |
| Nominal Frequency | 50hz |
| Total Harmonic Distortion Of Voltage | <3% |
| Load Power Factor | 0.7~1 |

Other

| | |
|-------------------------|--|
| Work Humidity | 10%~95% |
| Altitude | <2000m |
| Cooling Method | Air Cooling |
| Noise | <45db |
| Communication Interface | Ethernet |
| Work Temperature | 0~40°C |
| Storage Temperature | -10°C~40°C |
| Size | 680mm W × 256mm D) × 610mm (H) |
| Pure Weight | About 96kg |
| Protection Level | Ip32 |
| Work Condition | Indoor (No Condensation, frozen, Sunshine) |

Protection

| | |
|-----|---------------------------|
| PCS | AC voltage Protection |
| | AC frequency Protection |
| | DC voltage Protection |
| | Anti-islanding Protection |
| | Overheat Protection |

Standards

| | |
|------------------|--|
| Safety standard | EN 62477-1, EN 62109-1/2, EN62040 |
| EMC standard | CE-EMC |
| On-grid standard | VDE 4105, VDE 0126-1-1, G 83 (pending) |
| Battery standard | IEC62619 |

Battery

| | |
|-----------------|----------------|
| Nominal Voltage | 52v |
| Type | Lifepo4 |
| Capacity | 3.3kwh@dc Side |

Warranty

Battery 10 years *60% minimum capacity at year 10 years
Electrical Systems - 6 years

dod Range

85%

ENERGY

Bank

Performance

Battery

The Duracell LiFePO4 battery is stable, green, long lasting and environmentally friendly. The design and test is based on UL1642.5th and IEEE 1625-2004, which is also popular in electric vehicles and when combined has a total range more than 250 million km.

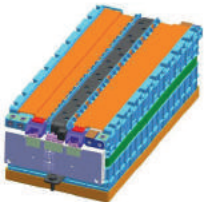


Fig.2 Battery Module

BMS

BMS can create a balanced consistency between the battery cell, battery module, battery string and the battery array, to ensure the long-term reliability of the system.

BMS performs the battery monitoring, operation control, insulation monitoring, balanced management, protection warning and communication functions.

Through the real-time battery monitoring, it ensures a normal and stable system and applies balance to protect the battery and ensure the efficiency and life of the battery system.

PCS

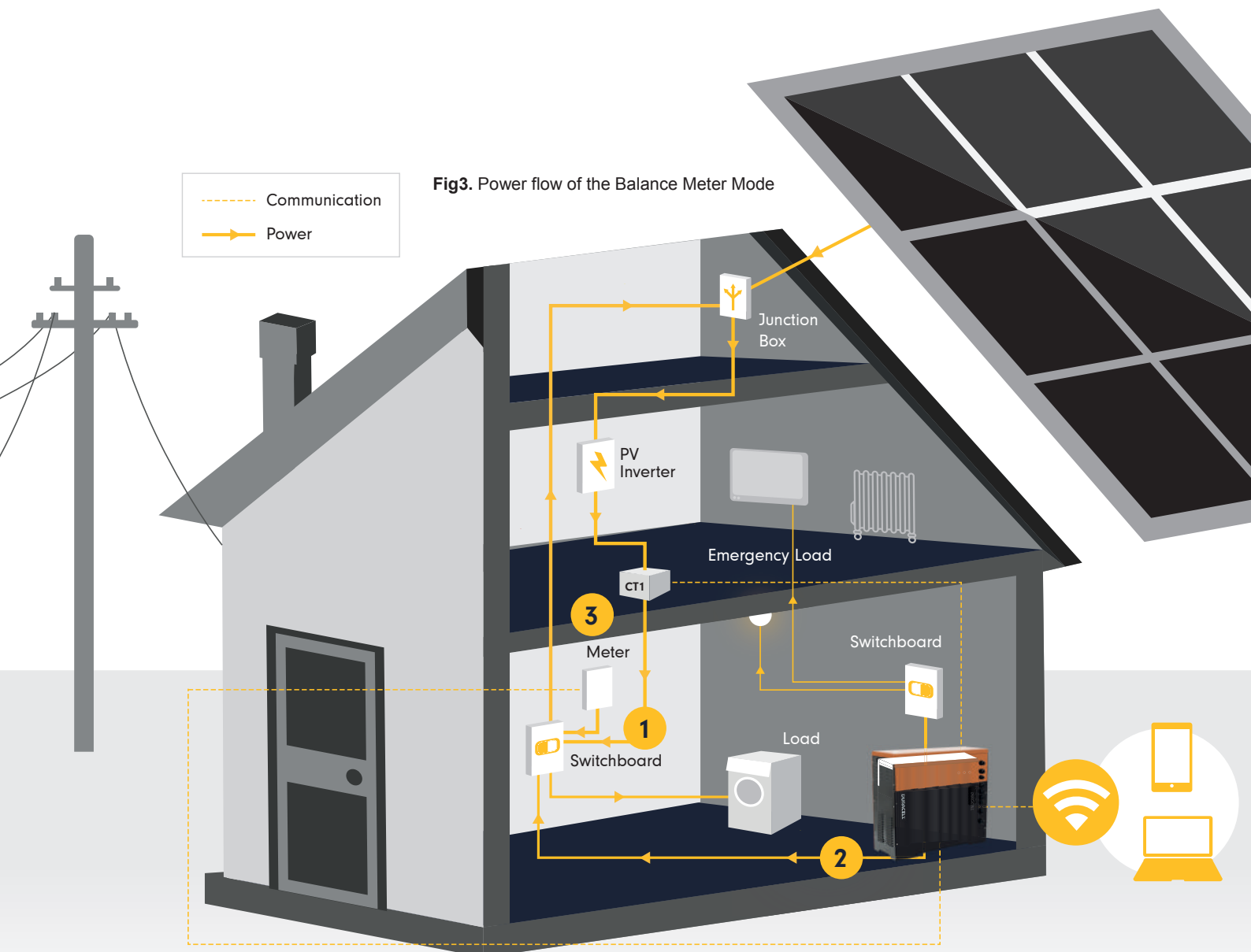
- ✓ Strong adaptability for the power grid and the environment.
- ✓ Advantages of high power, high density and high conversion efficiency.
- ✓ Low harmonic content and small harmonic pollution, which can improve the safety and reliability of the whole system.
- ✓ High power and small size.

ENERGY Bank

Balance Meter

Under balance meter mode, the Energy Bank can balance the three phase load, and reduce the amount of electricity that you buy from the grid.

- 1 PV Supply For The Load
- 2 Duracell Energy Bank Supply For The Load
- 3 Grid Supply For The Load



ENERGY Bank

Product Dimensions

