

NO-BREAK POWER SUPPLY

DESCRIPTION

DC BOX Smart is an integrated non-break DC uninterruptible power supply. DC BOX supports clean energy sources such as solar and wind power. DC BOX does not have switching systems, and the output is not interrupted at any time.

Due to its internal topology, it is suitable for use in low or medium power applications with long autonomy. DCBOX supports integration with external IoT devices and message relaying to other platforms.

APPLICATIONS

- Radio links
- PAYG systems
- Communication Shelters
- Security cameras
- PLCs
- Emergency lighting
- Park lighting
- Rural lighting
- Bus stops
- Signalling beacons
- Access points
- SOS systems
- Alarm systems
- Electrical manoeuvring
- SOHO connectivity
- Off-grid IoT systems
- Public signage
- Domotics
- Traffic lights
- Speed cameras
- etc.

FEATURES

- Multiple input types
- MPPT for solar panels
- Support for wind generators
- Configurable 12/24VDC output
- Analogue and digital inputs and outputs
- Overload and short circuit protection
- Internal voltage, temperature and current monitoring
- Remote management: Wi-Fi, Ethernet.
- Intelligent output management: load balancing
- Support for intelligent lighting
- Support for lead-acid, Lithium and custom batteries
- Natural cooling (fanless)



SPECIFICATIONS

| PARAMETERS | | DC-BOX SMART |
|---------------------|----------------------|----------------------------------|
| Inputs | MPPT/DC | 18-60Vdc / <=480W (1) |
| Regulated outputs | Output | 12/24Vdc <=150W |
| | Rated current @12Vdc | 13A |
| | Rated current @24Vdc | 6.5A |
| | Regulation | Vdc +/- 1% |
| | Ripple | +/- 200mv |
| Battery Charger | Charging modes | Float / 3 stages |
| | Nominal Voltage | 12/24Vdc |
| | Current | <=20A/h |
| Battery | Type | Pb-Ac/Li-Ion/LiFePO4/Custom |
| | Nominal voltage (2) | 12/24Vdc |
| Protections | Inputs | Current limit |
| | Outputs | Short-circuit and over current |
| | Battery | Under voltage |
| | Temperature | Device critical |
| | Energy | End of power |
| Digital I/O | Input | 1 Digital |
| | | 1 Temperature sensor |
| | Output | 1 PWM/Digital |
| Communications | | Wi-Fi, Bluetooth, Ethernet |
| Measurements | Inputs | Voltage and Current |
| | Outputs | Voltage and Current |
| | Battery | Voltage and Current |
| | Input Power | Calculated |
| | Output Power | Calculated |
| Reset | Output | Watchdog/Remote |
| Working environment | Humidity | 20- 90% Non-cond. RH |
| | Temperature | -30 to +70°C |
| Mechanical | Enclosure Material | Anodized aluminium |
| | Dimensions | W x H x D (mm) 192 x 38 x 142 |
| | Weight | 950g |

(1) Panels can be placed even in series or parallel, as long as the open circuit voltage does not exceed 60Vdc.

(2) Due to the current limit, to achieve maximum charging power it is recommended to use nominal 24Vdc battery banks.