

# Boomerang

**Powering the grid from your driveway**

Australia's first 11kW DC bi-directional charger



**V2G**

VEHICLE TO  
GRID

**V2H**

VEHICLE TO  
HOME

**DC**

11KW DC BiDi  
CHARGING

## Specifications

|                                  |                                                                                                                                                                                                                                                   |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Version:                         | 11EU316                                                                                                                                                                                                                                           |
| AC max. power:                   | 11 kVA - 10,7kW charge / 10,4kW discharge                                                                                                                                                                                                         |
| AC Input Voltage level:          | 3 Phases, 230/400V AC (Europe) , 50Hz                                                                                                                                                                                                             |
| AC Input voltage tolerance:      | +/- 10% (Static)                                                                                                                                                                                                                                  |
| Power factor:                    | >= 99%                                                                                                                                                                                                                                            |
| Total Harmonic Distortion (THD): | <= 5%                                                                                                                                                                                                                                             |
| DC Output voltage:               | 150 – 500V DC                                                                                                                                                                                                                                     |
| DC Output current:               | 30A                                                                                                                                                                                                                                               |
| DC Output Current ripple:        | <+-3% max. current                                                                                                                                                                                                                                |
| DC max. power:                   | 10.5kW charge & discharge at 350V                                                                                                                                                                                                                 |
| Topology:                        | Isolated                                                                                                                                                                                                                                          |
| Safety and Protection:           | Galvanic isolation Input to Output<br>Rapid discharge DC Output<br>Over current monitoring<br>Reverse polarity protection<br>DC Output Fuses<br>Temperature monitoring<br>Isolation monitoring<br>6mA DC differential current sensor<br>Self-test |
| Lifetime:                        | 10+ years                                                                                                                                                                                                                                         |
| Standby operation time:          | 100.000 hours                                                                                                                                                                                                                                     |
| Active operation time:           | >21.000 hours (according OEM standard use case)                                                                                                                                                                                                   |
| Communication to car:            | ISO15118-2, ISO15118-20*, DIN SPEC 70121*                                                                                                                                                                                                         |
| Diagnose:                        | Remote, OCCP                                                                                                                                                                                                                                      |
| to Backend/CPO/EMS:              | OCPP1.6J, OCPP2.0.1*, OCPP2.1*, HTTPS (Websockets etc.)*, MQTT*, SmartHome protocols*, Modbus TCP                                                                                                                                                 |
| Data interfaces:                 | Ethernet (LAN), WLAN                                                                                                                                                                                                                              |
| Weight:                          | 27kg (w/o beauty cover and charging cable)                                                                                                                                                                                                        |
| Dimensions:                      | 633mm x 385mm x 230mm                                                                                                                                                                                                                             |
| Operating temperature:           | -20 to +50°C                                                                                                                                                                                                                                      |
| Humidity:                        | Up to 95 %                                                                                                                                                                                                                                        |
| Operation height:                | 2000m over sea level                                                                                                                                                                                                                              |
| Cooling concept                  | active, temperature controlled                                                                                                                                                                                                                    |
| IP Class:                        | IP54 enclosure                                                                                                                                                                                                                                    |
| EMC:                             | According to EN61000-6-2 / EN61000-6-4<br>Norms and Standards: IEC 61851-1, IEC 61851-23, EN 50549, local grid codes (AS/NZS 4777)                                                                                                                |
| Certifications:                  | Australian certification in process                                                                                                                                                                                                               |

## Features

Bidirectional V2G/V2H operation

ISO 15118 compatible

sid-OS Energy Framework

Grid compliant - local grid code certifications

Compatible with CCS2 and ISO 15118-2/-20 communication standards

### Boomerang: The charger that gives power back

In partnership with ambibox, RedEarth is utilising their proven bidirectional charging technology to manufacture Australia's **first certified V2G DC charger**, redefining what's possible for home and vehicle energy use.

Boomerang turns any compatible electric vehicle into a **battery on wheels**, allowing energy to flow both ways between the car, the home, and the grid.

For resellers, it's a new way to deliver value, open new revenue opportunities, and position your business at the forefront of Australia's clean energy transition.

For end-users, Boomerang delivers **lower energy costs, backup power during outages**, and the ability to **support the grid** while staying **future-ready** for emerging energy markets — putting real power and control back into consumer's hands.



Australian-made



Rebate eligible!



Scalable solutions



Energy trading



Control your power

## Need support? No worries.

RedEarth is with you all the way, from technical support during installation, to ongoing monitoring and guidance for your system for years to come. Our Australian-based team is on call to make **powering yourself** as easy as possible.

## Power yourself.

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