

# **ALFACHARGE WIRELESS CHARGER AL2** 12/24VDC COMBINED WIRELESS AND USB CHARGER

## **AL2 SERIES WIRELESS CHARGER PODSOLE FOR INTEGRATION INTO VEHICLE EQUIPMENT**

Wireless charging is increasingly becoming the preferred method of maintaining battery power in mobile devices, with most of the latest designs from the major manufacturers including wireless charging as standard.

The AL2 series Podsole has been elegantly designed to allow passengers to charge both wireless and USB charging devices on the move. The two retaining clips and non-slip buttons secure the device into place permitting the wireless charging of all wireless enabled smart devices, whilst the USB connector can charge another device like a phone or tablet simultaneously.

The Podsole is extremely versatile and can be connected to both 12Vdc and 24Vdc electrical systems without adjustment. It has also been designed for both OEM and retrofit applications and can be mounted to any seat back using 4 screws which are hidden behind tamperproof covers. Due to the durable polyurethane compound encompassing the electronic components, comprehensive protection is provided against dust and liquid ingress to IP65.

The advanced electronic design will detect the charge status of the device and alter the charging process accordingly. This ensures that whatever device is connected, be it Apple, Android, phone or tablet, it will always be charged as fully as time and capacity allow. Two LEDs indicate the chargers are operational.



Designed for integration into passenger vehicles.

Accepts both 12Vdc and 24Vdc.

- Approved to EN50498, EN50155 & ISO7637-2. E marked (Reg10) and CE marked.
- Phone power communicates every millisecond to establish correct charge.
- Foreign object detection & activation.
- Convenient wide input of 9-32Vdc for wireless and USB charging in one extrusion.
- LED to confirm correct operation.



## **THE RANGE**

The Alfacharge range has been designed to meet the rigorous standards required for on board commercial vehicle applications including EN50498, EN50155 & ISO7637-2, and is both CE and E marked (Reg10). The casings are made from VO-rated (self-extinguishing) high impact polycarbonate and the PCB is populated by computer-controlled SMT for maximum accuracy and durability.

## **WARRANTY**

The AL2 Podsole Series of combined wireless chargers and USB Chargers are manufactured using rugged components to provide years of service in demanding commercial environments and are covered by a three year return to base warranty.

It is recommended that these units are fused individually with a 2Amp fuse (24V systems) or a 3Amp fuse (12V systems).

# ALFACHARGE PART SELECTION

| Part Number | Description                       | Dimensions (mm) | Weight |
|-------------|-----------------------------------|-----------------|--------|
| AL2-WS      | Combined Wireless and USB Charger | 187 x 122 x 26  | 225g   |

*Other configurations are available, please speak to our sales team*

## TECHNICAL DATA

|                                      |                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input voltage range                  | 9-32Vdc                                                                                                                                                                                                                                                                                                                  |
| Output power                         | Wireless Charger: Nominal 5W; USB Charger: 10W for BC1.2 and 12W for Q.C 3.0                                                                                                                                                                                                                                             |
| Application                          | Wireless Charger: Charges wireless enabled devices; USB Charger: Charges all USB devices inc. Apple and Android                                                                                                                                                                                                          |
| Transient voltage protection         | Meets ISO7637-2 International standard for 12/24V vehicles and EN61000.4.4 and 4.5 for rail                                                                                                                                                                                                                              |
| Tx-Range                             | Nominal 5mm                                                                                                                                                                                                                                                                                                              |
| Off load current (quiescent current) | Combined 10mA                                                                                                                                                                                                                                                                                                            |
| Power conversion efficiency          | Wireless Charger: 50% - 60%; USB Charger: 90%                                                                                                                                                                                                                                                                            |
| Operating temperature                | -25°C to +40°C                                                                                                                                                                                                                                                                                                           |
| Storage temperature                  | -25°C to +100°C                                                                                                                                                                                                                                                                                                          |
| Operating humidity                   | 95% max., non-condensing                                                                                                                                                                                                                                                                                                 |
| Casework                             | Grey polycarbonate body                                                                                                                                                                                                                                                                                                  |
| Connections                          | Input: 6.3mm push-in flat blade connectors<br>Output: USB type 'A' single socket - tested to 10,000 mating cycles                                                                                                                                                                                                        |
| Output indicator                     | Green/blue LED output indication                                                                                                                                                                                                                                                                                         |
| Mounting method                      | Box with mounting screw holes - screws provided. Can also be installed by clips or other bespoke method                                                                                                                                                                                                                  |
| Safe area protection:                | Over Current Limited by current sensing circuit<br>Over heat Limited by temperature sensing circuit<br>Overvoltage and Undervoltage Limited by sensing circuit<br>Reverse Polarity Limited by sensing circuit<br>Transients Protected by filters and rugged component selection<br>Catastrophic protection Internal fuse |
| Approvals                            | 2014/30/EU The general EMC directive<br>Regulation 10 The automotive directive<br>93/68/EEC The CE marking directive                                                                                                                                                                                                     |
| Designed to                          | EN50498, EN61373, EN50155, EN45545, ISO 7637-2 & R118                                                                                                                                                                                                                                                                    |
| Markings                             | CE and E marked                                                                                                                                                                                                                                                                                                          |
| IP Rating:                           | IP65 (Not USB connector)                                                                                                                                                                                                                                                                                                 |

