

# ALFACHARGE WIRELESS CHARGER ALR3-V

## 24VDC WIRELESS CHARGER MODULE

### PASSENGER ACCESSIBLE WIRELESS CHARGERS FOR ROLLING STOCK INSTALLATIONS

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 ALR3-V wireless charger is designed for installation into table tops on rolling stock to allow passengers the ability to charge their devices on the move. The unit is installed through an 80.0mm hole in the table and secured underneath, providing an unobtrusive and functional enhancement of the passenger experience. These units make a complementary addition to the ALR1-H integrated charger modules, and can be installed at the vehicle build stage or as part of a retrofit activity, as required.

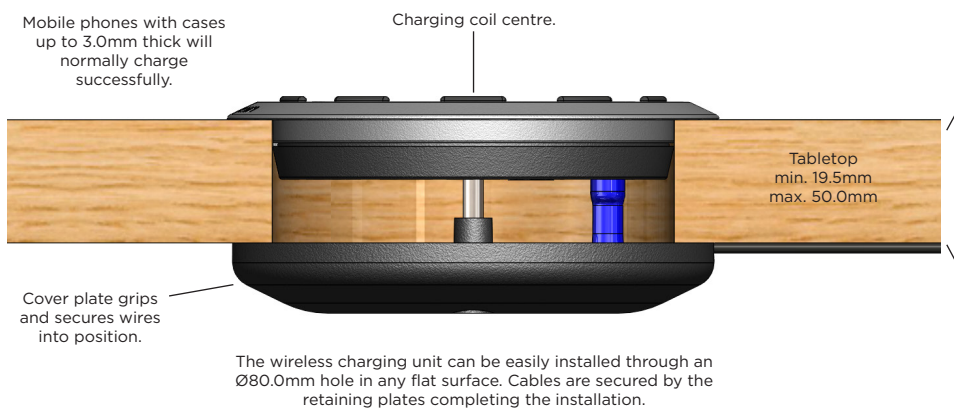
The wireless receiver of the charging unit will automatically detect the presence of suitably enabled mobile devices and will typically charge through a case up to 3.0mm thick.



### THE RANGE

The Alfaccharge range has been designed to meet the rigorous standards required and is CE marked. The casings are made from V0-rated (self-extinguishing) high impact polycarbonate and the PCB is populated by computer-controlled SMT for maximum accuracy and durability.

#### Alfatronix wireless charging module ALR3-V



Designed for integration into passenger vehicles.

Certified for 24Vdc.

- Designed to EN50121-3, tested to ISO7637-2 and CE marked.
- Phone communicates every second to establish correct charge.
- Foreign object detection & activation.
- Convenient wide input of 9-32Vdc in one standard casing.
- LED to confirm correct operation.



It is recommended that these units are fused individually with a 1Amp fuse (24V systems) or a 2Amp fuse (12V Systems). Suitable in-line fuses are available.

### WARRANTY

The ALR3 Series of wireless 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.

# ALFACHARGE PART SELECTION

Part Number	Description	Dimensions (mm)	Weight
ALR3-V	Integrated wireless phone charger	Ø98.0 x 15.3; Hole Ø80.0	160g

## TECHNICAL DATA

Input voltage range	9-32Vdc (Rail Approved @ 24Vdc +/- 30%)
Output power	Nominal 5W
Application	Charging of wireless enabled devices
Transient voltage protection	EN50121-3-2 and 61000-4-4
Tx-Range	Nominal 5mm
Off load current (quiescent current)	6mA
Power conversion efficiency	50% - 60%
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 Output: Wireless transmission <200kHz
Output indicator	Blue LED power indication
Mounting method	Enclosure with underside securing plate into Ø80.0mm hole
Safe area protection:	Over Current Limited by current sensing circuit
	Over heat Limited by temperature sensing circuit
	Overvoltage and Undervoltage Limited by sensing circuit
	Reverse Polarity Limited by sensing circuit
	Transients Protected by filters and rugged component selection
	Catastrophic protection Internal fuse
Declarations	93/68/EEC CE marking directive 2014/30/EU The general EMC directive 2014/53/EU RED directive
Tested to	EN50155, EN50121-3-2, EN61373, EN45545, EN301-489-1, EN300-330, EN62311 & EN62368
Markings	CE and UKCA
IP Rating:	IP65 when installed correctly

