



TUF-R is a compact yet powerful mobile and tablet charging module with the unique advantage of being upgradeable / replaceable. TUF modules will fit most OE Elsafe products.

TUF-R modules are quick and simple to replace without the need to turn off the power or call an electrician. The unique and patented benefit of being replaceable makes TUF-R perfect for areas of high traffic, such as public spaces, education, and hospitality, where if damaged through misuse, TUF-R can quickly be replaced.

Replacing or upgrading the TUF-R module and not the whole product saves time, resources, and reduces waste.

[CLICK](#) to see how easy TUF-R is to replace.



#### FEATURES:

- TUF-R charges smartphones and tablets
- TUF modules are upgradeable or replaceable extending the life of the product
- All TUF modules include OE's unique reversible type A-Port
- Developed by the OE Group, incorporating advanced USB technologies



# TUF-R TECHNICAL



TUF-R and TUF-R HP are quick and simple to replace without the need for an electrician or turning off the power. The unique and patented benefit of being replaceable makes TUF-R perfect for areas of high usage.

**CLICK** to see how quick and easy TUF-R / TUF-R HP is to replace.

Upgrading or replacing the TUF-R module and not the whole product saves time, money, and significantly reduces waste.

Being replaceable also allows TUF-R to be upgraded in the future to incorporate the latest technologies.



TUF replacing tool.



Insert the 'snake eye' bit into the tool as shown.



Use the tool to unscrew the 'snake eye' screws.



Lift off the TUF fascia



Insert the second part of the TUF replacing tool into the TUF as shown, until a click is heard.



Pull the TUF cartridge out from the unit.



Unwrap and insert the new TUF cartridge, paying close attention to the orientation of the cartridge to the blue housing.



Push the cartridge into the blue housing until a click is heard.



Place the TUF fascia back into position.



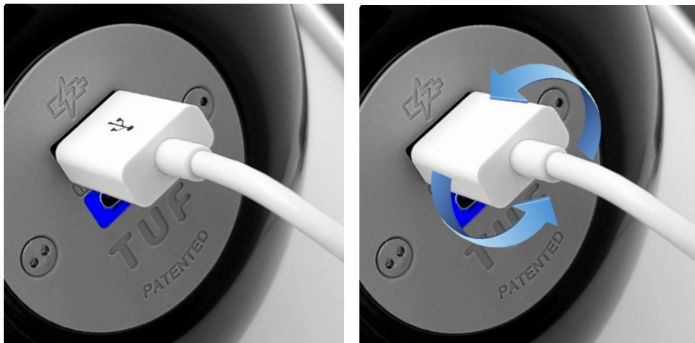
Using the TUF replacing tool and 'snake eye' bit, screw the snake eye screws back into place

# TUF-R TECHNICAL

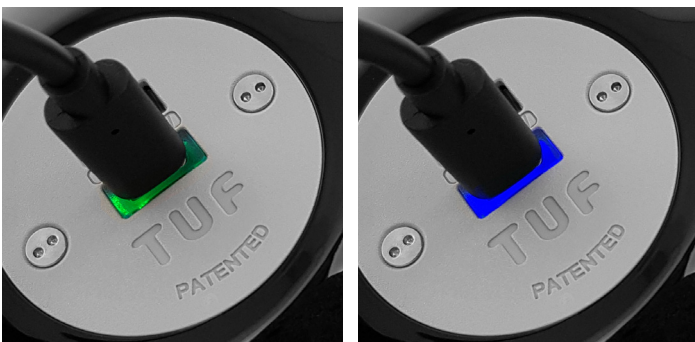
Specifications	
USB charging outlets	1 x type A female (reversible)
	1 x type C female (reversible)
Charging current	Type C: 5V/3A, 9V/2.22A, 15V/1.7A, 20V/1.2A (PD3.0)  Type A: 5V/3A, 9V/2A, 12V/1.5A, (QC3.0/QC2.0) Combined (A+C) : 5V/4.0A (MAX)
Rated total output power	TUF-R 25W MAX
AC voltage range	100-240VAC at 50/60Hz
AC input current (full load)	Maximum 0.6A
Efficiency	Up to 90%
Environment	0-25°C
Standby power	0.05W

TUF R is designed and intended for commercial use.

Features	
Internal over temp protection	Yes, auto reset Blue and Green LED Flash
Internal over voltage protection	Yes, auto reset
Output over current protection	Yes, self limiting Type C - Flash Green Type A - Flash Blue
Short circuit protection	Yes, self resetting
Power indicator	Blue LED Standard Voltage Green LED Higher Voltage (PD/QC)
USB Sockets	Gold plated for improved contact. Type A and Type C manufactured for minimum 10,000 insertions. .
Charge Standards	(IDR) - Intelligent Device Recognition, PD3.0; QC2/QC3
Standards	Certified to IEC 62368-1 : 2014 (safety) and EN61204 : 2000 (EMC)



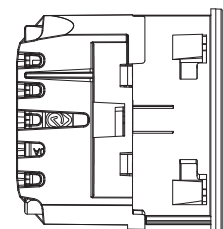
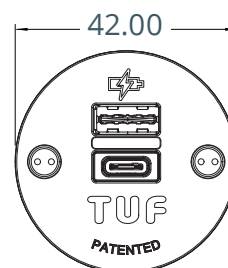
Unique to OE Elsafe is the reversible Type A port, which will ensure a first-time connection - every time. USB charging cord connectors can now be inserted both ways, cutting down on wear or damage from incorrect attempts and maximising the working life of the power module.



GREEN LED = Boost,  
Super Fast PD Charging

BLUE LED = Fast  
Charging

## TUF-R CANISTER DIMENSIONS



TUF-R Canister  
replaceable tool  
View [HERE](#) to see  
how easy it is to  
replace TUF-R HP.