



POWERVERTER PVPRO-AC

12/24VDC USB TYPE A AND C CHARGER

USB POWER WITH BOTH USB TYPE A & C CONNECTOR POINTS TO CHARGE MORE DEVICES

As technology advances, the widespread use of smartphones, tablets and laptops has created an increasing need for user accessible, on the move charging systems. The PowerVerter PVPRO-AC USB chargers can be easily installed onto any vehicle and permit both drivers and passengers to readily access power to charge any device connected via the USB-A or USB-C lead.

This type of system has the distinct advantage of largely negating the need for mains electricity on vehicles. The 5Volt DC power is much safer than mains, so installation is quick and simple. Passengers can access the charging facility directly and power their equipment simply through the USB charging lead which is supplied with all such products.

The PVPro-AC can be connected directly to both 12Vdc and 24Vdc electrical systems without adjustment. This ensures that whatever device is connected, be it Apple, Android, iPad, phone or tablet, it will always be charged as communication with the device will be supplied to the maximum current it requests.

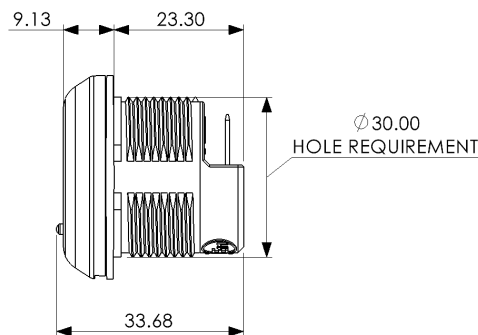
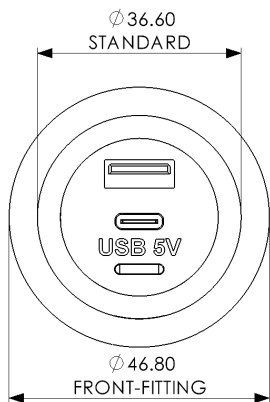


The unit has the following key benefits:

- Type-A and type-C ports
- 5V 1.5A for A port (7.5W)
- 5V 2.5A C port (12.5W)
- Quick and easy to connect
- Switch mode design with efficiency typically 90%
- Low quiescent current (<2mA)
- Internal protection against input over voltage and output short current and overheating.
- Compact size for location in vehicle seats



PVPro-ACFf, front fitting version can be screwed in place, then covered with attractive ring to avoid tampering.



THE RANGE

The PVPRO-AC series has been designed and developed for a variety of applications to include the PVPWP-AC which is IP65 (except aperture) for installation into harsh environments where dust and moisture are prevalent, in addition to the PV65R-AC which is approved for use in the rail industry.

COMMERCIAL INSTALLATIONS

The PowerVerter USB chargers offer an advanced design that effectively counteracts the voltage drop common when output currents vary as different devices charge at different rates. This avoids the common problem of the phone or tablet indicating it is charging when in fact very little current is being supplied. They also have an exceptionally low quiescent current of less than 2mA meaning that multiple devices can safely be installed throughout buses and coaches without materially discharging the battery.

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 PVPro-AC range of 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 guarantee.

POWERVERTER PVPRO-AC

Part Number	Description	Dimensions (mm)	Weight
PVPro-AC	Single output 12/24-5VDC A/C Charger 1.5A/2.5A	Ø37 x 33; Hole Ø30	21g
PVPro-AC-FF	Single output 12/24-5VDC A/C Charger 1.5A/2.5A Front Fitting	Ø47 x 33; Hole Ø30	24g

TECHNICAL DATA

Input voltage range	12 or 24Vdc nominal (9.0V-32.0V)
Output voltage	5.0Vdc +/- 2%
Continuous Current Rating A port	5V output rated at 1.5A continuous
Continuous Current Rating C port	5V output rated at 2.5A continuous.
Transient voltage protection	Meets ISO7637-2 International standard for 12/24V vehicles
Electrostatic voltage protection	Meets ISO10605, >8kV contact, 15kV discharge
Output noise	<50mV pk-pk
Off load current (quiescent current)	<2mA at 27V
Power conversion efficiency	Typically: 90%
Operating temperature	-25°C to +55°C to meet this specification table
Storage temperature	-25°C to +100°C
Operating humidity	95% max., non-condensing
Casework	Black polycarbonate body
Connections	Input 6.3mm push-on flat blade connectors Output single USB "A" and single USB "C". Rated to 10,000 mating cycles
Output indicator	Blue LED
Mounting method	30mm diameter hole with or without bezel. Securing nut behind or front fit ring.
Weight & Dimensions	Weight: 21g. Dimensions: Ø37 x 33 mm or Ø47 x 33 mm Front Fit installation bezel
Safe area protection:	<ul style="list-style-type: none"> Over Current Limited by current sensing circuit and output short circuit protection Over heat Limited by temperature sensing circuit Input over voltage & reverse connection Over-voltage and Reverse polarity protection circuit Transients Protected by filters and rugged component selection Catastrophic protection Protected by internal input and output fuses - external system fuses recommended
Approvals	2014/30/EU The general EMC directive, E marking pending 93/68/EEC The CE marking directive
IP Rating:	IP30