



**POWERING
THE FUTURE**

TECHNICAL FAQ FOR MK'S EURO MODULE USB A+C 18W PD CHARGER

WHAT CHARGING CAPACITY DOES THE NEW USB TYPE-C 18W CHARGER PROVIDE?

The MK Electric USB Integrated socket with 1x USB Type-C and 1x Type A port provides a 18W charging capacity.

This means that if only one device is connected, the total output power 18W is available from either port. When both A & C ports are in use, the output voltage is 5V with combined total current and power of 3A and 15W respectively.

This prevents overload and excessive currents being provided to connectors, cables and devices which could generate a safety issue.

WHAT IS POWER DELIVERY (PD) CHARGING?

Power delivery is also called PD. The PD protocol enables the charger to communicate with connected electronic devices using PD protocol to negotiate charging parameters (current/voltage), in order to optimize charging speed and also protect the battery health.

WHAT IS DYNAMIC DEVICE RECOGNITION?

Manufacturers have each adopted differing configurations for charging their devices. MK's USB Integrated sockets have been designed such that it understands and recognises this nuance and is designed to react accordingly, rather than be aligned to one specific charging configuration. This ensures we provide the optimum charging compatibility across a broad range of devices.

CAN I CHARGE TWO DIFFERENT DEVICES FROM TWO DIFFERENT MANUFACTURERS AT THE SAME TIME?

Yes, MK's USB Integrated sockets are designed such that the dynamic device recognition is unique to each USB port which means that different manufacturers devices can be charged simultaneously without any impairment to the other. As well as different manufacturers, each port can also charge different types of devices at the same time i.e. the ports are not allocated to specific devices such as tablets or phones.

WHICH STANDARDS DO YOUR PRODUCTS CONFORM TO?

The range holds the CE mark as it conforms to all the safety certification and approvals applicable for 18W euro module including IEC 61558-2-16. MK Electric prides itself on delivering the safest solution to our customers, which is why we also have conformity to the relevant directives applicable to electronic products and which should be mandatory for this type of product. This includes IEC 61000-6-1 and IEC 61000-6-3 which covers Electromagnetic compatibility (EMC).

THE FRONT OF THE PRODUCT BECOMES WARM IN USE, IS THIS NORMAL?

Yes it is usual and expected for the front surface of the product to become warm in use. This is the case on all chargers and power supplies. However the MK charger is very efficient so this warming will be kept to a minimum.

WHAT BACK BOX DEPTH WILL I NEED?

The Euro module USB A+C 18W PD charger fit into a minimum 46mm back box.

HOW IS THE CHARGERS OUTPUT PROTECTED?

The USB output is fully protected against overload and short circuit conditions. In the event of a short circuit the output will completely shut down. When the short circuit is removed the output will recover back to its normal level and continue to operate normally. If more than the rated charging current is attempted to be drawn from the product the charger will enter into a constant current operating mode. The current will remain constant but the voltage will drop as the over-load increases. Eventually the overload will be seen as a short circuit and the output will completely shut down.

CAN I UNDERTAKE AN INSTALLATION COMMISSIONING TEST WITH THE PRODUCT WIRED INTO CIRCUIT?

No, the USB charger should be removed from the circuit before undertaking an Insulation Resistance (Mega) test between Line and Neutral on the wiring installation.

However, If the product is accidentally left in circuit, then it will not be damaged by a 500V IR test.

WHY MY DEVICE ONLY GETS SLOW CHARGING?

If charge device is charged slowly, it might depend on multi factors like cable used, battery health and PD protocol support etc. If you still have more question, please advise customer support team for detail.

WHY CAN'T MY DEVICE TRIGGER FAST SPEED CHARGING?

Whether the connected devices can trigger fast charge or not, it depends on multi factors, such as cable used, device statement, battery health and protocol that the device support etc. Majority new electronic devices made from 2019 onwards support the PD fast charging. If you still have issues, please contact our customer support team for details.

IS THE PRODUCT SUSTAINABLE?

Eco design with standby power <100mW.

Adoption of Type -C to reduce e-waste.