INTRODUCTION









LOGIC PLUS™

ELEMENTS

EDGE™

ALBANY PLUS™



MK Electric USB charging solutions are also designed with inherent safety features such as overload protection and automatic disconnect on the modular product when the cable is removed.

In addition, users can benefit from a fixed installation USB charger by requiring just one charging cable to be used for multiple devices, which avoids the need to carry a variety of bulky adaptors for different devices. The MK Electric solution is also designed to provide optimal charging performance, enhancing the user experience by delivering fast charging solutions.

The recent advances in Smartphones and tablets, means that many of us now depend upon them to keep in contact in both our personal and professional lives. A recent study by Forbes suggested that by 2017, 87% of the worldwide smart connected device market will be tablets and Smartphones and the need to keep the integral batteries charged and the devices functional has never been greater.

In 2013 MK Electric was one of the first UK manufacturers to introduce a range of award winning USB charging modules, and now this technology is being integrated into our market leading twin socket. The USB charging capability will now be integral within 6 MK Electric wiring device ranges – Logic Plus, Metalclad Plus, Albany Plus, Edge, Aspect and the newly introduced Elements, offering the widest choice and flexibility to suit any application.

Fixed installation USB chargers remove the need for continual PAT testing of adaptors and takes away the risk of unapproved chargers being used, which can lead to damage of devices.



Airports, hotels, universities, schools, retail outlets and any other environment that regularly host visitors with a mobile device, would benefit from the USB charging solutions which MK Electric can provide.



USB INTEGRATED SOCKET - FEATURES AND BENEFITS

As 2014 marked the UK production of the 100 millionth socket for MK Electric at its Southend site, it also signified a milestone change in the way devices will be powered and charged in the future. With USB charging capability being built into the most iconic product within the MK Electric portfolio, USB adoption is well and truly here to stay.

Yet whilst building innovation into our core, we have stayed true to our heartland in ensuring that safety, quality and reliability are at the forefront of everything we design.

3-Pin "Child Resistant Shutter System"

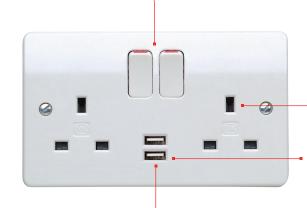
Designed to inhibit access to the electricity supply, unless all 3 pins of a standard British 13A plug are in position

Double Pole Switching

Neutral makes first, breaks last

3mm Minimum Switch Contact Gap

Eliminates possibility of circuit forming when in the off position



Vertically stacked central USB ports

Access to USB ports is not restricted when using virtually any standard 13A plug, including moulded plugs

Two 5V Outlets With A Combined Total Of 2A Charging

To provide optimal charging capacity 2A can be drawn fully from one port when one device is charging or split between ports when devices are charging simultaneously

Dynamic Device Recognition

By detecting the nuances between the differing charging configurations tablet manufacturers use, the product can react accordingly for optimal charging efficiency

Electrically Protected Against An Overload Or Short Circuit

Prevents damage to the socket and provides safety to the user in the event of an overload or short circuit conditions

Backed Out Terminal Screws Kept Captive Within The Terminal Housing

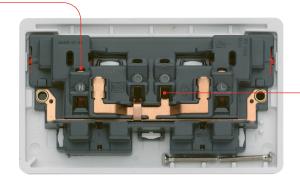
Aids, and makes installation faster

In Line Terminals

Allows wire to be cut stripped to the same length for faster and easier installation

Funnel Entrance To Terminals

Terminals are upward facing to make installation easier



Dual Earth Terminals

For high integrity earthing







What charging capacity does the socket provide?

The MK Electric USB Integrated socket provides a total of 2A charging capacity. This means that if only one device is connected, the total rated output current of 2A is available from either port. In the event that both ports are connected, the total rated current will be divided between the two ports.

MK's dynamic device recognition detects differing charging configurations and requirements and reacts accordingly, for example if two devices were charging simultaneously, more current will be diverted to the device with the least charge and the biggest demand.

What is Dynamic device recognition?

Tablet manufacturers have each adopted differing configurations for charging their devices. The MK Electric USB Integrated socket has 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?

The MK Electric USB Integrated socket is 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.

How can I be sure my device will be compatible?

MK Electric has undertaken extensive compatibility testing and found that numerous devices from various manufacturers are compatible.

Which standards do your products conform to?

The MK Electric USB charging socket holds the CE mark as it conforms to all the safety certification and approvals applicable for a 13A socket including BS5733, BS1363-2 and 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).

What back box depth will I need?

All products will fit into a 35mm back box, with the exception of the Edge[™] range which requires a 47mm back box. For extra wiring space we would recommend the use of a 47mm back box for Aspect products, in line with current practice. We will also be offering a 10mm moulded pattress to allow retrofit into a shallower box.

Why are your USB ports vertically stacked in the centre of the socket?

The MK Electric USB charging socket has its USB ports aligned under the rockers to ensure the least disruption to the 13A plug space. When larger transformer type plugs are used on the 13A outlets, there is the risk that they will cover the USB ports and make them inaccessible if they are located elsewhere on the socket. Locating them in the way that we do allows for all four outlets to be used simultaneously.



Two 5V outlets with a combined total of 2A charging

To provide optimal charging capacity

2A can be drawn fully from one port when one device is charging or split between ports when devices are charging simultaneously

Standard snapfit Euro Module Design

Fits into any standard Euro frontplate with a 50 x 50mm aperture

Ultimate flexibility of application with a selection of frontplate options as well as custom combination plates

Dust proof USB port shutter

Zero standby power consumption, auto disconnect when plug removed

Can be installed into a standard 35mm backbox

Ideal for retrofit installations

TECHNICAL SPECIFICATION	DESCRIPTION
USB Charging Module	2A, 5V d.c. USB Charging Module for portable electronic devices
ELECTRICAL SPECIFICATION	DESCRIPTION
Voltage Rating	220-240Vac / 50-60Hz
Current Rating	2A
Terminal Capacity	3 x 2.5mm ²
PHYSICAL SPECIFICATION	DESCRIPTION
Dimensions	50 x 50mm
Ambient operating temperature	0°C to 45°C
Maximum installation altitude	2000 metres

MK Electric offer a wide range of frontplates in a variety of finishes as exemplified here.

Our Design Service also allows you to create your own bespoke combinations.

For the full range or more information visit information visit www.mkelectric.co.uk







EDGE™ LOGIC™ PLUS