

**M2M TECH LTD**  
CONNECTING THE FUTURE



## Document Control

Version	Date	Author	
1.0	06-07-18	MS	
Version	Date	Edited by	Description of Changes
1.1	08-08-18	TW	Text Modification

**Eclipse System** – Patent Pending No. 1605790.3

**Quattro Post** – Design Right No. 5000538

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## SOLAR ECLIPSE KIOSK DISPLAY





## SOLAR PANEL

We use the latest industry technology to ensure maximum solar harvesting and reliability from our panels - guaranteed power output of 90% for 12 years and 80% for 25 years. Our panels are mounted to the top of our Quattro post, a post specifically designed to handle the weight and wind loadings for the UK harshest weather.

## BATTERY

SEC Batteries have been used in the industrial battery market for nearly 30 years. SEC's high quality, long design life, reliable AGM technology lead acid batteries have a proven record. They comply with the new IEC 60896-21/22 – 2004 standard BS 6290 Part 4, UL certified components in an ISO 9001-ISO 14001 manufacturing facility.

## CONTROLLER

Our MPPT Solar charge controller & control algorithm can quickly and accurately track the best maximum power point (MPP) of photovoltaic array, in order to obtain the maximum Solar energy in time, which improves energy efficiency. Using the latest, fastest technology, it maximises this energy-harvest, driving it intelligently to achieve full charge in the shortest possible time. It also maintains battery health, thus extending its overall life.

## PANEL ARTICULATION

To compensate for the sun's lower trajectory in the late autumn through to early spring months, we have designed the mounting for the Solar panel to articulate to approx. 17 degrees through the darker months and then return to 45 degrees for the summer months – this ensures we harvest the maximum amount of energy available to us.



## REMOTE MONITORING AND CONTROL


Remotely control and monitor the extensive features of the controller charger with built-in Bluetooth by pairing it with your smartphone. Once connected to the internet, a portal provides access to the full power of your MPPT controller, anytime, anywhere. By constantly monitoring the voltage and current output of your solar (PV) panels, MPPT technology ensures that all available power is extracted from the solar panels, and harvested for storage. The advantage of this is most noticeable when the sky is partially clouded, and light intensity is constantly changing.

## ACCESSORIES

The wide channel on each of the Quattro posts 4 faces allows us to securely mount a variety of displays onto the post. We can supply a variety of Bus Stop Infrastructure onto each of the 4 faces from Bus Stop Flags to TRO plates or a selection of Timetable Cases. In addition to these we can also supply the appropriate brackets to fit 3<sup>rd</sup> party infrastructure to the Quattro post. If required, we are able to design and supply flags with digitally printed and laminated route flag graphics.

## BRANDING & LIVERY

Through using local authorities, bus operators or private sector branding, a stop can be transformed into a highly visible and attractive information point which makes the use of the service and easier and more enjoyable experience for the user. There are a number of options to allow routes and services to be colour coded, or simply just to brand the colour scheme to match the environment its in making them both distinctive and recognisable. The screen and optional bus stop infrastructure can all be customised to the colour of your choice.

03 May 2016		
01:25 PM		
		
Service	Destination	Expected
PR1	Tregurra Park and Ride	2min
304	Truro	9min
PR1	Tregurra Park and Ride	17min
PR1	Tregurra Park and Ride	32min
Museum Bus Stop		

## QUATTRO POST & ACCESSORIES

The Quattro post is the first commonly available “Transportation Infrastructure Post” that is specifically designed to take large format digital displays, whilst still being able to accommodate traditional Bus Stop Flags, Timetable Cases and TRO Plates.

The Solar Eclipse enclosure is specifically designed to be mounted on to the M2M Tech Quattro post. Manufactured from high grade aluminium and finished in a modern looking anodised AA25 finish, the Quattro post utilises the industry standard ‘wide channel’ to allow a variety of different manufactures infrastructure to be fitted easily without the need for expensive and complicated bracketry.



## STRUCTURAL TESTING & WIND LOADINGS

The Quattro post has been tested to ensure it complies with Eurocodes including BS EN 12767 'Passive safety of support structures for road equipment'

We aim to use NAL sockets where possible to ensure that in the unfortunate event of an RTC, the post remains attached, with the socket remaining securely in the ground. This allows for the post to be removed and a new one installed, without the need for extensive ground works, therefore limiting the amount of downtime and disruption to bus passengers.





**TECHNICAL SPECIFICATION**

<b>DISPLAY INFORMATION</b>	
Housing	Rigid 3 mm fabricated aluminum profile to IP65
Facing	Single Sided Unit
Access	6mm hidden tie-rod anti-tamper
Assembly	TFT Panel mounted on removable electronics gear tray
Paint	Powder Coated Black RAL 9005 (unless specified)
Front Screen	5mm Lexan Anti-Scratch
Hanging Methods	RTI industry wide channel
Dimensions	646 x 279 x 77 (H x L x D)
Weight	9kg
Resolution	10.4" 1024 x 768 pixel
Aspect Ratio	4:3
Viewing Angle	70°
Brightness Level	1000 Nits
Temperature	-25 to + 60°C
Humidity	5% to 95% without Condensation
Power / Consumption	12v dc / 12 Watts
Communications	GPRS / 3G
Options	Custom graphics, Branded infill strips, Optional post in RAL colour of choice

## GET IN TOUCH



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