Autonomous iot™
Creating The Future

CASE STUDY

Martec Engineering

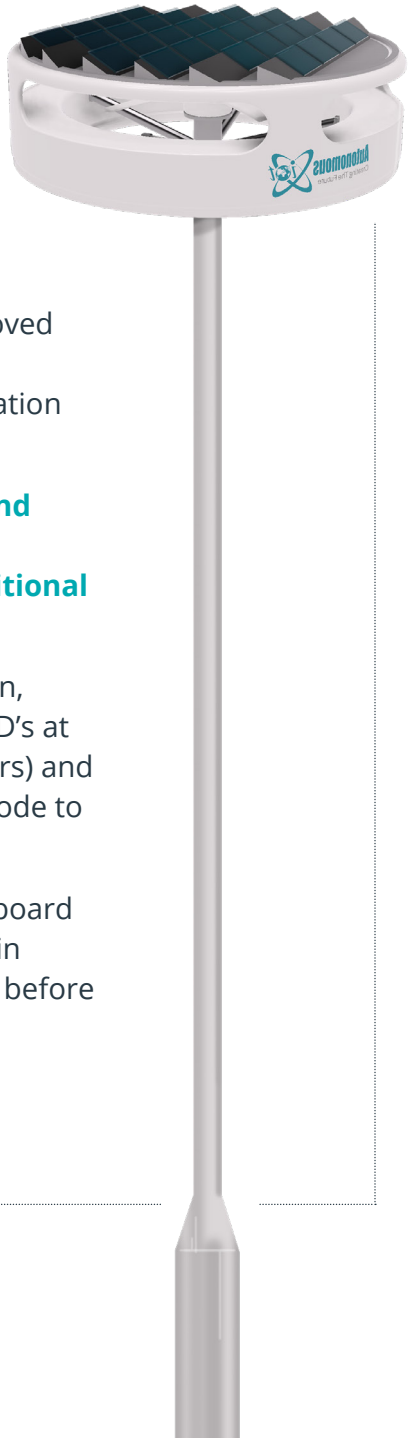
The **Customer**

Martec Engineering specialises in the design, manufacture and installation of bespoke architectural metalwork and glazing systems. https://www.martecengineering.co.uk

The company headquarters is based in Glasgow, UK.

Martec | **Problem Statement**

Martec's lighting infrastructure consisted of 290-Watt high pressure sodium lamps and individual standalone fixed cameras (Hanwha Techwin PNO-A9081R) for security. The customer required a compact solution to replace this ageing infrastructure with a cost saving, energy efficient, lighting and security solution that also reduces their carbon footprint.



Autonomous iOt | **Solution**

The Autonomous iOt design team, in conjunction with their approved reseller DM Integrated, worked closely with Martec on their requirements. DMi managed and coordinated the product installation at Martec.

The Autonomous iOt solution consisted of **two AIOT-S-C4 (LED and CCTV), intelligent lighting products with CCTV with software dashboard to assist with existing lighting and to provide additional CCTV coverage.**

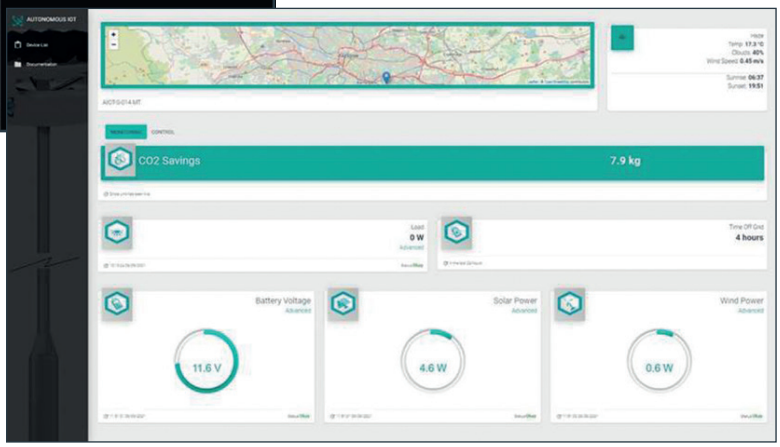
The grid connected security solution was installed on a 6m column, configured to work on motion detection which illuminated the LED's at full intensity when motion is detected (via the unit's built in sensors) and when no motion is present will reduce the intensity to standby mode to conserve energy while still providing sufficient area lighting.

The AIOT-S-C4 unit has 4 built in IP Based CCTV cameras with on board storage to view 360-degree coverage to cover the front of the main building, entrances and car park areas. Recordings last for 7 days before overwriting and can be retrieved via Wi-Fi locally.

Customer **Results**

Martec saw an immediate carbon reduction and cost saving of the Autonomous iOt intelligent hybrid solution, that helps towards the Net-Zero Government goal.

360-degree coverage daylight and nightime CCTV security.



Customer Dashboard

Product Model No. AIOT-S-C4
(with IP 4xHD cameras, WIFI, 4G Router),
Customer Dashboard

Solar – 56W p-p , Turbine- 300W @ 10ms
Battery – 70Ah, 840Wh Lead Crystal
Lighting – 5700 Lumen, 15 LED Array

"The units installed look excellent and are already saving my company money on a daily basis. Along with being solar and wind powered this intelligent hybrid lighting with CCTV monitoring is the future and will help in the fight against climate change."

Martin McHugh, Chairman of Martec Engineering

*Carbon Emissions Source: www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021
*Historical Weather (Wind/Solar) – Government Met Office Source: https://www.metoffice.gov.uk/

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About Autonomous iOt

Within our tailored R&D and manufacturing base in Central Scotland our dedicated team of innovators, businesspeople and support professionals combine the latest technologies and systems to produce innovative, environmentally conscious products powered by the sun and wind. Reducing our carbon footprint and helping to address climate change and environmental damage are key drivers in our product development.

By harnessing solar and wind power our core product is able to provide LED street lighting, managed by a smart controller, and integral wireless surveillance and monitoring services as additional features. The autonomous design of our product opens up an extendable platform for applications such as: communication; smart-city connectivity; emergency alert systems; utility power access; electric transport charging; analytics and many more developing and future technologies.

For more details and to find the ideal solution for you:

Call us on 0800 689 1041

or go to our website: autonomous-iot.com
and click on Ask Autonomous