THE CAMDENBOSS (CHRONICLE IITH -13TH FEBRUARY 2020 BRINGING INNOVATION TO THE NATION



Pictured: CNMB, X7 series, 91 series, 92 series, BIM box, Smartboxx enclosure, vented room sensor and the 1500 series universal smart enclosures

With the enclosure industry changing at a rapid rate, we're striving to be more environmentally friendly and to source locally produced materials. Our aim is to continue to provide customer driven engineered products at an affordable price.

With that in mind, in today's changing and demanding market, finding the right enclosure is not always a simple task. With many options to choose from and industry standards rising, how do you know you are getting the best enclosure to suit your needs?

Environmental awareness is now a major consideration for many. Customers are looking to source ethical products. Many of our enclosures are manufactured here in the UK, enabling us to reduce our carbon footprint. This is also great for the local economy and allows for tighter control on quality. We are actively striving to ensure our products not only comply with the latest regulations but are designed and manufactured to have customer needs at the forefront. Our newly appointed Quality Manager, Danny Pearson, ensures product testing is up to date and that we hold the appropriate certificates. Combined with our team of enclosure engineers, we are delivering quality assured engineered solutions for today's market.

Electronic infrastructure is growing and enclosures require a more flexible approach. We manufacture a wide range of products, including our X series heavy duty housings with strong impact resistance and high ingress protection ratings, ideal for outdoor environments. Our room sensor and new 1500 series universal smart enclosures have been designed to offer the user useful features for today's domestic smart electronics. With their innovative and well thought out product features, they allow product designers to get the most out of their enclosure. Find out more about these products on pages 4 & 5.

CamdenBoss understands the need for individuality and to stand out from the competition. Not only do we provide a wide selection of off-the-shelf, injection moulded products that can be machined, painted and printed to create that bespoke feel, we also offer the market leading Smartboxx process for tool-free fabricated enclosures. You provide the design specification and our engineers will do the rest! It doesn't matter if you are part way through your design, we will pick up the project at any stage. This fabricated process has seen success stories ranging from small potting box enclosures to large

POS kiosks - all achieved within a short turnaround time. A prototype can be achieved within weeks and the process allows for tweaks to be made before the product goes to market or even between batch runs, giving you unbelievable control to deliver the right product for you.

Find out more on page 2 & 3.





VISIT US ON STAND **G310** TO SOURCE YOUR NEXT ENCLOSURE!



Getting a completely bespoke solution to market can sound daunting, but this is far from the case when using Smartboxx.

You provide the initial specification/ product requirements and Smartboxx's engineers will do the rest. Did we mention no tooling? Every unique

CUSTOM ENCLOSURE SOLUTIONS

solution Smartboxx provides is achieved with no mould tools. Utilising 3D CAD-CAM software, CNC machinery and a team of skilled fabricators, they ensure a service guaranteed to exceed expectation.

Everything Smartboxx does has flexibility in mind. No mould

tools enable design changes to be made at any stage of the product's life cycle with just a few clicks of a button. Flexible calloff orders allow you to hit higher price breaks, while receiving multiple manageable deliveries. A full product 'development' stage allows you and one of their engineers to nail down your custom solution.

With all this provided in Thetford, UK, now has never been a better time to get in touch and get the ball rolling on your unique solution.

GROUND BREAKING NEW ESD CART RANGE

Smartboxx have used their unique fabrication process to manufacture mobile conductive, secure storage systems.

The new range offers a modular approach with customers selecting layout and security features.

- Different drawer and container sizes.
- Levelling feet or lockable castors.
- Binder holders.
- RFID and key lock solutions.
- Optional conductive foam drawer inserts.

NUWCO

RFID locks have been specified and fitted by a major CEM, allowing access to sensitive PCBs to be controlled and monitored utilising an Android app.

Custom cut foam inserts were provided, offering quick visual asset auditing.

Built in document storage can be branded to suit distributor, re-seller or the end users' requirements.

Whilst we offer a standard range (soon to be expanded) we welcome the opportunity to offer bespoke designs where appropriate.

Efficient usage of space, asset security and meeting stringent compliance criteria will always remain at the heart of Smartboxx's new product initiatives and remains committed to its innovative roots.

Call Smartboxx today on 01842 766557

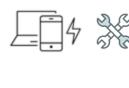






TechGuard Connect

Automatically track your tools or devices, gain complete visibility of your assets.









Multi Device Functionality

Choose between AC, USB or both! TechGuard can allocate the most charged device. Or store tools and PPE with the optional larger bays!

Pick Your Mode

3 advanced modes to suit your deployment; Shared, Assigned or Check-In/Check-Out.

Bretford Connect Cloud Service

Bretford's cloud-based asset management software allows you to remotely provision, access, track and manage usage activity. Available standalone or integrate locker to an Active Directory through API or Webhook.

more or book a FREE DEMO today!

Find out

Call: 01842 751500 Email: sales@nuwco.com

MANAGE YOUR ASSETS, SIMPLIFY YOUR DEPLOYMENTS AND TAKE CHARGE!

INNOVATIVE DESIGN MEETS LOW COST WITH NUWCO'S DEVICE CHARGING SOLUTIONS

Teaming up with Smartboxx allowed Nuwco to utilise their unique and cost-effective fabrication process to it's full potential.

Introducing the Grab and Go 16! Nuwco's cost effective self-serve charging solution for up to 16 tablets or Chromebooks. Grab and Go 16 self-serves 16 devices that can be loaned out to staff throughout the day. Staff can pick up a device and get to work in minutes. When they are done, simply put it back and plug it in, ready and charged for the next user.



Keep mobile devices secure, organised and fully charged all from a single 13 amp socket. It features a robust outer shell and soft foam inserts with cable management, ModBOXX Wall 30 is the perfect solution to easily manage multiple



devices within the workplace.

To find out more about these and our other Nuwco products, visit www.nuwco.com "ModBOXX Wall has improved staff efficiency and really helped the large-scale mobile deployment in our stores, saving us substantial time and money" Nazam Ahmed - Domino's Pizza UK



Call: 01842 751500 Email: sales@nuwco.com

DOUGHNUT MAYHEM

Smartboxx manufacture state-of-the-art drive-thru system for Ireland's first Krispy Kreme restaurant



Smartboxx manufactured a drive-thru system for the Blanchtown Krispy Kreme facility in Ireland.

Consisting of a *'Customer Order Display'* and *'Digital Menu Board'*, the two striking POS units feature 55" interactive displays, speakers, microphones and eye-catching illuminated visuals down each side. Wireless communications between the smart device and the operator at the next window, revolutionise drive-thru systems with the introduction of IoT into the catering industry.

Their full customisation process ensured that the design, development and manufacture of these products was a seamless transition from beginning to end.

Multiple manufacturing processes were used to achieve each unit; including plastic and metal fabrication, joinery and

full assembly work.

The opening night of the Blanchtown drive-thru proved chaotic; with no less than 70 vehicles queuing through the drive-thru at any one time. It appears Ireland's love for doughnuts has been reignited with this impressive venue!

Smartboxx's Commercial Sales Manager, Sam Wain, commented; *"We are sorry to have contributed towards Dublin's traffic chaos!"*

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PRODUCT BRANDING The CamdenBoss digital printing, engraving and labelling service ensures your custom solution is fully branded and market ready.



CUSTOMER DRIVEN MANUFACTURERS

You supply the specification / datasheets, CamdenBoss provide the engineers to turn your ideas into ready-for-market solutions.



TOOL-FREE MANUFACTURING

Want to test the market, or don't have the funding to invest in a mould tool? A custom enclosure is still possible using Smartboxx's tool free, cost effective process. Plastic and sheet metal fabrication, digital printing, gasket seals and assembly are just some of the processes they offer.

CAMDENBOSS PRODUCT REFERENCE GUIDE



1500 series Universal smart enclosure

The first of its kind from CamdenBoss, the 1500 series universal smart enclosure features a 45 degree angled base. This unique feature allows for various mounting options such as corner, or tilted wall mounting opening huge application potential.



General purpose ABS enclosure

Our longest standing enclosure series with a wide variety of colours, sizes and options such as wall mounting flanged bodies and deep profile housings. The BIM2000 series caters for a universal range of electronics.



Room sensor enclosure

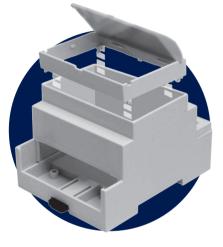
This wall mount enclosure is ideal for controls and sensors, operating within domestic and commercial environments. Offering features such as a cable inlet on the base, the enclosure is capable of mounting to UK single gang back boxes.

Now available in white, grey and black.



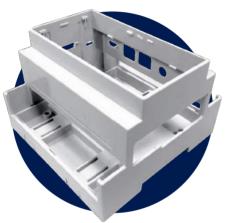
A series Heavy duty enclosure

Built up of three standard product types, the X6, X7 and X8, the X series provides an IP67 rating and strong polycarbonate or ABS moulding. Capable of withstanding indoor or outdoor harsh environments, the X series lends itself to a whole range of smart devices and electronics.



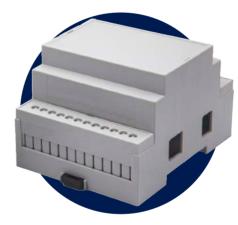
CNMB Modular DIN Rail enclosure

Perfect for centralised systems in factory, domestic and commercial environments. Available in multiple lengths with terminal spaces, which open up a variety of applications such as drives and controls, IoT networking electronics, power management and instrumentation.



Raspberry Pi CNMB DIN Rail enclosure

The Raspberry Pi CNMB enclosure enables the Pi 4 PCB to be mounted directly to a DIN Rail system. Custom designed from a standard enclosure, it is available as a kit with either a solid or clear lid.



Arduino CNMB DIN Rail enclosure

This custom designed CNMB DIN Rail enclosure has been modified to fit the Arduino Uno development board. Supplied as a kit with either a solid grey or clear lid, the enclosure can also be purchased with additional cut outs to accommodate an Arduino ethernet shield PCB.



5000 series Multi-purpose diecast enclosure

This enclosure offers superior protection to electronic assemblies operating in factory applications. It is easily customisable, and makes light work of machinery control systems and monitoring devices. Available in a wide range of colours and sizes.



7000 series Recessed designer case

This all-round multi-purpose enclosure is suitable for wall mount or desktop instrument electronic devices. Featuring a recessed face, the enclosure is perfect for overlays, keypads and display screens. Available in black or grey and in a selection of sizes.



1100 series Stylish ABS case

Suitable for small to medium sized electronic devices for various environments. Impact resistant ABS material provides adequate protection in testing environments. The recessed lid is the ideal space for controls, LCD displays and membrane keypads.



Wall mount enclosure

The heavy duty wall mountable enclosure combines a high IP rating with robust protection to produce an enclosure suitable for industrial environments for electronics such as power distributors and IoT smart factory control panels.

66 series Handheld rubber corner enclosure

This comfort grip handheld is ideal for loT wireless measurement devices for medical or industrial industries. The battery compartment option is ideal for field testing equipment and compact

field testing equipment and compact enough to be portable, whilst offering an IP66 waterproof ingress protection.

SETTING THE BAR HIGH WITH OUR LATEST UNIVERSAL SMART ENCLOSURE

The 1500 Series Universal Smart Enclosure - engineered excellence in a box!! We have set the bar high, offering a wide variety of features and a flexible approach to potential applications.

Available in white, black or grey and as a solid or vented body, this enclosure has an effortless modern appearance.

A recessed lid provides space for keypad overlays or digital LCD screens. With its super fast assembly, the box can be secured with only a single screw. Inside the lid has an impressive two sets of PCB mounts, each at separate levels and positions, providing a choice of size.

The base is where things become interesting...

Two sections have been removed from an otherwise standard enclosure, producing a base with a unique shape. The removed sections provide two 45° angles, increasing the number of usable faces for the design engineer. This allows the 1500 series to be mounted directly into a corner, with the addition of



the 45° mounting bracket. Using the same bracket, it is also possible to position it at 45° to a wall, opening up avenues for security door entry systems, domestic smart devices or temperature controls. Corner mounting electronics camouflage themselves into the room, allowing tasks such as smoke detection or motion monitoring for security, or even audio.

You might think that space is

restricted due to the 45° corners of the base; however, the entire depth has been utilised to provide the maximum amount of internal space. Two sets of PCB mounts are set at different heights, allowing for multiple boards to be used in unison or simply to allow for larger components. The middle set of bosses have been designed to fit development boards, such as the Raspberry Pi amongst others. The 1500 series provides an advanced, engineered solution for designer engineers and deals directly with the requirements they've been looking for in an electronic enclosure.

Future proof, modern and stylistic, all available from your local distributor or directly from CamdenBoss.

www.camdenboss.com/1500-series



DISCOVER THE FULL 1500 SERIES RANGE AT WWW.CAMDENBOSS.COM/1500-SERIES

MEETING INGRESS PROTECTION AND IMPACT COMPLIANCE CRITERIA 'TESTS' SMARTBOXX

CASE STUDY

The Smartboxx design team were recently set a 'testing' compliance conundrum.

A custom designed IP65 rated plastic enclosure to be manufactured in UL94 VO rated materials suitable for long term exposure to UV.

The team first set out to accommodate their customer's component layout and build procedures whilst ensuring all regulatory requirements were met.

Material suppliers were brought on board at an early stage, resulting in additional UV resistance being 'batched in'. New methods allowed the application of a fixed gasket which again, is UL94 VO compliant whilst being CNC controlled.

The Smartboxx engineer built in features including cable entry 'knockouts' and a modular approach, providing the ability to select differing display components.

The display area is protected by a polycarbonate panel ensuring IP and impact resistance in the harsh working environment specified.

In this instance, we're showing a generic finish to the enclosure, the design team were able to utilise their branding skills to apply digital printed 'logos' and part numbers, the addition of an LED back



Pictured: Smartboxx designed and manufactured vehicle charging enclosure

illuminated logo is represented by the CamdenBoss graphic.

The team are always aware that the product needs to allow a quick, effective installation methods. This has been achieved with a two-part design allowing fixing and wiring connections followed by a simple fixing of the cover. Two variants are currently in production, in areas where high ambient temperatures can be experienced. Additional heat sink features can be included in the same enclosure design, reducing stock commitments.

Call Smartboxx today on 01842 766557



SOUTHERN

Farnborough International Exhibition Centre

Manufacturing

& Electronics



SMARTBOXX PRESENTS...

their brand new range of ESD storage solutions on stand G310.

Be the first to see the **NEW** mobile/static modular **ESD storage solutions,** designed to transform your EPA area.

To find out more call us on **01842 766557**







THE PERFECT DIN RAIL SOLUTION FOR A BUSY FACTORY

CASE STUDY

Our bestselling CNMB DIN Rail modular enclosure was designed to work in busy factory environments for monitoring and control automation purposes.

The enclosure needed to be DIN Rail mountable, as the module had to be located away from the centralised control areas within warehouses and factories. The housing needed to feature open terminal sections, to enable wire to board connections to be made using PCB terminal blocks. The customer chose our CNMB modular housing which was the ideal enclosure for their requirements. The CNMB/12/2 was used, along with a CNMB/12PG solid lid. They also chose one of our terminal blocks, making the sourcing quicker and easier.

The module designed provides a wide range of uses, with potential to control up to 12 light circuits, four of which are dimmable through a built-in feature. There are 16 entries for push buttons and movement detectors; what's more you can also control on screen, a roller shutter or gate. An integrated 12V DC power supply enables the user to power movement detectors, primarily for smart security systems around the home. Not only that, the device also allows two temperature sensors to be connected.



The automation module is also equipped with a network interface, enabling the user to connect up to five smart devices such as: smartphones, tablets, control points, thermostats etc. The configuration is limited to filling out the IP address to connect with the system, and that's it, everything else runs on autopilot.

If you are interested in discussing your next design project, or have a similar idea in mind that would benefit from the features found on our CNMB series, call us today on 01638 716101.

CamdenBoss consistently drive quality and innovation to enable the customer to stand out from the crowd. Hosting a wide variety of electrical mechanical components such as terminal blocks and circuit protection fuses, to electronic enclosures, purpose built for many environments and applications such as factory drives and controls, automation or networking. Alongside standard off the shelf moulded product, a custom fabrication method is available using Smartboxx technology. In house customisation is available adding value to your design through digital printing and CNC machining slots and cut outs for component mounting.

Giving customers engineered solutions and modern products, all designed around today's market.



TERMINAL BLOCKS & STRIPS



SWITCHES & INDICATORS



METAL ENCLOSURES











CAMDENBOSS*

A PERFECT CONNECTION

CamdenBoss' fully comprehensive selection of compliant, industry standard terminal blocks include: standard, screwless, pluggable and DIN Rail terminal blocks, which are fully stocked and ready to ship today!

Find out more at **WWW.CAMDENBOSS.COM**

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CamdenBoss.Ltd WWW.CAMDENBOSS.COM

MATCHING ELECTRICAL WITH PRACTICAL

It's inevitable that electronics will continue to grow throughout 2020 and we can expect to see smarter, increasingly efficient devices installed all around us, from factories to remote mountains.

Outdoor specified enclosures for medium to high power electrical circuits require a relatively high degree of IP protection and security. For instance, our X series range of IP67 heavy duty electrical enclosures are designed for outdoor or indoor applications making them ideal for an IoT hub or electrical panel builds within factories. The series offers a large internal space, with plenty of mounting capabilities.

To see more of our electrical range, visit the CamdenBoss website.



Terminal strip

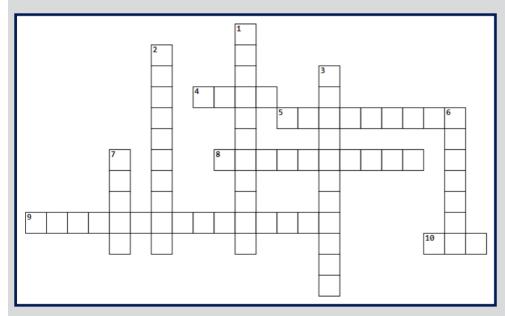
Push button electrical enclosur

CAMDENBOSS® CONNECT. ENCLOSE. INNOVATE.

COME AND SEE US AT ELECTRONICA 2020



CAMDENBOSS CROSSWORD



Across

- 4. Which CamdenBoss product was designed in to work in busy factory environments for monitoring and control automation purposes? (4)
- Which division of CamdenBoss are custom design enclosure specialists? (9)
- 8. What is CamdenBoss bringing back to our nation? (10)
- 9. What is the topic of the article on page 6? (7, 8)
- Smartboxx are showcasing their brand new range of what storage solutions at Southern Manufacturing this year? (3)

Down

- Which CamdenBoss product is now available in black, white and grey? (4, 7)
- 2. What is the name of the new universal smart enclosure from CamdenBoss? (4, 6)
- ... is the name of Nuwco's self serve charging solution for up to 16 tablets or Chromebooks. (4, 3, 2, 2)
- 6. What is the name of CamdenBoss' range of heavy duty enclosures?(1, 6)
- Which division of CamdenBoss are charging trolley specialists? (5)

Please note: Letters and numbers are part of the CamdenBoss crossword

SMARTBOXX	CAMDENBOSS	CAMDENBOSS
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Crossword Solution - Across: 4. CMMB, 5. Smartboxx, 8. Innovation, 9. Vehicle Charging, 10. ESD Down: 1. room sensors, 2. 1500 series, 3. Grab and go 16, 6. X series, 7. Nuwco

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CAMDENBOSS[®]

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NUWCO

CHARGING TROLLEY SPECIALISTS

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