# THE CAMDENBOSS CHRONICLE

25th-26th April 2019

KRISPY KREME

DOUGHNUT MAYHEM

SOLVING SPACE ISSUES
FOR AN IOT HUB

WIN A CAMDEN WATCH



COME AND SEE US ON STAND

179

# HOUSING TOMORROW'S TECHNOLOGY

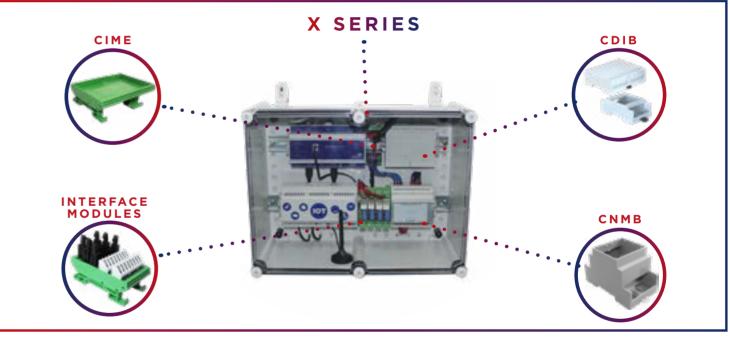
# CAMDENBOSS YOUR IOT E-MECH PARTNER

With expansion of the IoT and Industry 4.0 markets, it's vital you have the right enclosure to house your smart technology.

We all know your IoT hub is an integral part of your project. Our extensive X series range of heavy duty electrical enclosures are designed for outdoor, harsh and electrical applications making them ideal for your IoT hub.

With additional accessories available such as mounting brackets, vents, dual doors, mounting plates and locks, you can really tailor the X series range to suit you.

As well as our X series hub, our DIN Rail mounted interface modules and supports are the solution to flexible



wiring applications, featuring a variety of connectors and components. We also have an impressive range of DIN Rail modular and instrument enclosures - providing you with everything you need to complete your IoT project! See pages 4 & 5 for more details.

If you need advice on what enclosure or

e-mech product would be best for you, call our experienced sales and technical teams on 01638 716101.

We'd love to hear from you!



SEE PAGES
4 & 5
FOR YOUR
PULL OUT
REFERENCE
GUIDE



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# CAMDENBOSS ONE-STOP SHOP

Finding the right enclosure for your IoT hubs and nodes can be daunting. Here at CamdenBoss we continue to lead the market in standard 'off the shelf' and custom design enclosures; making us the perfect partner for your next smart project.

# OFF THE SHELF **ENCLOSURES**

Our enclosures are ideal for many IoT applications, whatever the industry. These include handhelds, desktop, metal or DIN Rail enclosures and are categorised to enable engineers to easily visualise which enclosure is going to be suitable for their needs. Our 'off the shelf' enclosures are ready for anyone building and designing the newest innovative products.





such as the X series, offer the perfect all-round solution to indoor or outdoor applications such as IoT distribution 'hubs', high voltage power sources or diagnostic sensory equipment. The 1100 series, with a sleek and contemporary design is an ideal electronics housing for nodes around the home and office whilst the 5000 series diecast enclosure provides a more robust shell for industrial applications.

CNMB DIN Rail enclosures, with their modular characteristics,



create an enclosure of choice for service room electrical systems whilst compact enough to be mounted within larger enclosures as industry 4.0 systems.

selection of enclosures but we also have a comprehensive range of components necessary for your design. Be sure to check out our product range on page 7 and take advantage of the 'one-stop

Not only do we offer a vast

MAKE YOUR NEXT IOT

**PROJECT STAND OUT** 

FROM THE COMPETITION

Our range of enclosures can also be customised with vents, slots, holes and more through our in-house CNC processes. We also offer in-house digital printing using the latest technology to provide high quality finishes.

From tiny potting boxes to large electrical enclosures and even bigger trolleys and POS kiosks...CamdenBoss and Smartboxx create the 'one-stop shop' solution.

## **CUSTOM DESIGN**

Smartboxx custom design service is exactly how it sounds - design engineers smartly taking enclosures from product briefs to concept and design, through to small and large-scale manufacture. It may be that standard off the shelf enclosures don't meet your exact needs or perhaps you want something to make you stand out from your competition. This is where Smartboxx can help.

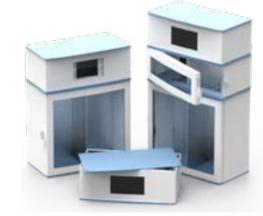
solution for rapid turnaround on complete product design, prototypes and start ups for low to medium quantities.



Custom enclosures are the perfect Utilising 3D CAD-CAM software, CNC machinery and a team of skilled fabricators, we ensure a service level guaranteed to exceed expectation. From the beginning of your project you will deal directly with a dedicated and experienced design engineer, progressing your design right through to production. Your development can be taken on at any stage,

whether its a 3D model or existing

These are manufactured without tooling, enabling us to provide



you with enclosures that are costeffective and delivered within a short timeframe. We pride ourselves on our ability to provide excellent customer service and custom fabricated enclosures. With all of this available under one roof, now has never been a better time to get in touch and learn exactly how we can help you with your next project.



# **CAMDENBOSS CHRONICLE** PRODUCT FEATURE

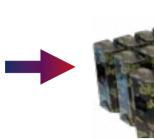












**VOLUME MANUFACTURE** 



Need product branding? CamdenBoss offer in house printing facilities, engraving, and the ability to designin various features into your product. Ensuring your enclosure meets your exact expectations and requirements

# **DOUGHNUT MAYHEM**

CamdenBoss manufacture state-of-the-art drive-thru

system for Ireland's first Krispy Kreme restaurant



**CamdenBoss recently** manufactured a drive-thru system for the new 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, speaker, microphone 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.

amdenBoss' full customisa 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!

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



Cost effective, fully customised enclosures, with a process driven by you. You supply the components/ datasheets/specification, CamdenBoss provide the engineers to take your ideas and turn them into ready-formarket, fully branded solutions.



Don't want the high initial investment of creating a mould tool? CamdenBoss provide a tool-free manufacturing **solution.** Their fabrication process offers flexibility from the word go, with design changes achievable, all the way through your product's life cycle.

#### **CAMDENBOSS HELPS** PREVENT PREMATURE **BALDNESS**



DESIGN ENGINEERS, don't let forgetting to design your IoT enclosure cause early onset baldness. Prototypes are cheaper than a hair transplant! Our tool-free process can have your project through compliance testing and into production in record time.

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# CAMDENBOSS IOT STAND REFERENCE GUIDE



#### 1100 series Stylish ABS cases

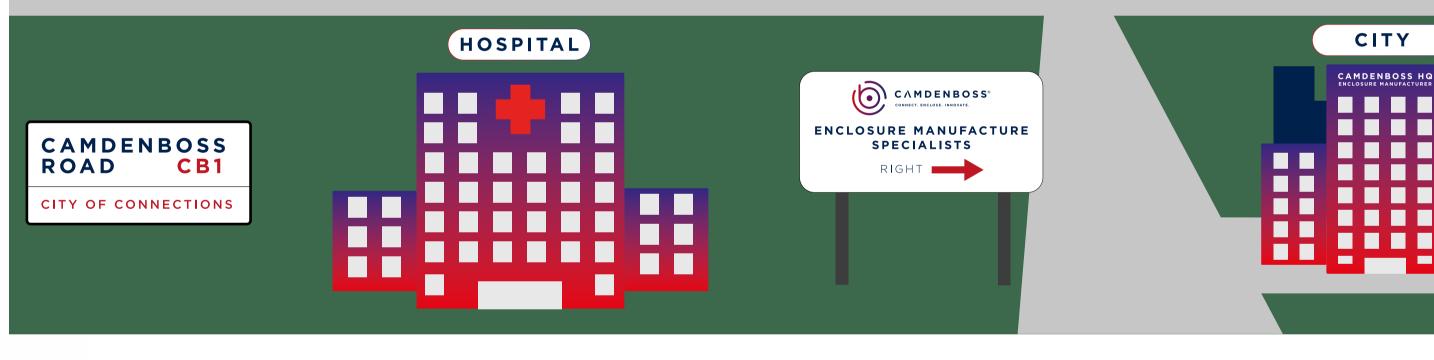
Suitable for small to medium sized smart devices situated in the home or office. Its aesthetic features and sleek design make it ideal for Wi-Fi equipment, heating sensory devices and control enclosures.



66 series **Handheld rubber corner enclosures** 

This comfort grip handheld case is ideal for IoT wireless measurement devices as well as a wide range of other industry equipment. The battery compartment option makes it ideal for field testing equipment.

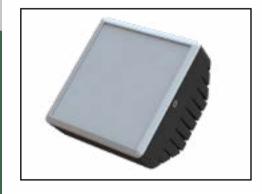




### YOUR PULL OUT REFERENCE GUIDE

This reference guide is a great reminder of CamdenBoss and the industries that our products can be used for. We've provided you with the names and suggested uses of the products on display at the IoT Tech Expo.

If you require any further information on our products then please visit our website www.camdenboss.com or call us on 01638 716101.



1500 series **Versatile IoT enclosure** 

The unique shape of the housing makes it possible to mount at 90 or 45 degree angles to a wall, operating as either door entry systems or smart room control panels. The shape also allows it to be mounted directly to the corner of a room, if used as a monitoring or sensor device.



#### 5000 series Multi-purpose diecast enclosure

These enclosures offer superior protection to sensitive devices operating in smart factory applications. Easily customisable, the 5000 series would make light work of machinery control systems or monitoring devices.



7000 series **Recessed designer cases** 

This all-round multi-purpose enclosure, is suitable for wall mount or desktop type instrument housings. You can even use it for operating blockchain node systems.



**Room sensor enclosure** 

The single gang wall mount enclosure is the ideal housing for smart home temperature, lighting control systems or security devices. The back plate features pre-cut holes for easy



94 series Flanged comms boxes

This stylish enclosure is ideal for comms boxes and network modules. Its surface mounting flanges make it suitable for wall mounted control systems.



**Custom design Raspberry Pi enclosure** 

Custom build, fabricated enclosures to house your very own raspberry pi modules.



X6 series **Electrical knockout enclosure** 

This heavy duty enclosure can be used in machine to machine electronics. Its cable knockouts makes it ideal for use as a junction enclosure.



CITY

X7 series **Electrical heavy duty enclosure** 

The rigid corners makes it perfect for keeping your industrial relay boxes, control switches and distribution applications secured against impact. It is suitable for indoor and outdoor



X8 series Hinged lid electrical enclosure

This extensive range of heavy duty enclosures are designed for outdoor, harsh and electrical applications, making it ideal for your IoT hub. It features a hinged lid which allows quick and easy access without having to remove screws.

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# **CUSTOMISED SOLUTIONS**

# THAT SAVE YOU TIME AND MONEY







CABLES

CHOICES

COATING



**OPTIONS** 



**ENGRAVING** 



MACHINING & **FEATURES** 

## **CASE STUDY**

CamdenBoss continues to push the boundaries on delivering customer driven solutions. Re-purposing modern CNC machinery and additional investment in digital printing capacity has seen a reduction in lead times and increased production flexibility.

For the Capelec project, CamdenBoss worked closely with the customer to deliver the enclosure solution they needed. The standard 'off the shelf' 66 series enclosure was chosen for its robust, soft touch feel, and easily customisable features.

The enclosure was CNC customised on three faces, cable and connector holes were added in the top and bottom faces and LCD aperture in the front. The LCD aperture was fortified with a transparent acrylic window, solvent welded in by CamdenBoss. The front face was then printed directly onto the enclosure using a full colour high resolution digital printer. Soft touch corners are available in a variety of colours as standard but, in this instance, they were manufactured as 'custom coloured corners' to match the product's corporate identity. 'Custom colour corners' are available in batches of 500 sets of four. The inside of the enclosure was spray coated with a nickel-based paint for RFI / EMC requirements.

Our client's handheld device was designed and manufactured as a vehicle instrument device to measure the speed and rotation of the internal combustion engines crankshaft. This smart device utilises a Bluetooth emitter that can communicate with given systems up to 100m. The Tachometer Device is just one example of how CamdenBoss supports the design and assembly of IoT devices within any industry.

As well providing internal components on the PCB, CamdenBoss also provided the IP66 cable gland fitted in the bottom of the enclosure.

With CamdenBoss being able

to offer so many services, this

customer had one reliable source for completing the major part of their system, without the need to rely on other sub contractors for such things as CNC machining, printing, window assembly and EMC coating. With CamdenBoss the future is exciting, with more to offer the customer than ever before.

# WIN A CAMDEN WATCH



**ENTER NOW FOR YOUR** CHANCE TO WIN A CAMDEN WATCH OF YOUR CHOICE UP TO THE VALUE OF £89

#### **COMPETITION RULES**

- Automated entries, bulk entries or third party entries will be disqualified.
- No cash prize alternative is available.
- Winners will be chosen from all valid entries. The Judge's decision is final and no correspondence will be entered into.
- 5. The competition will close on 3rd May 2019. The prize will be sent to the winner by
- post by the end of June 2019.
- 6. By entering this prize draw, you will be subscribed to our mailing list and can unsubscribe at any time.
- 7. By submitting your entry you consent to CamdenBoss using your photograph for publicity purposes.
- 8. CamdenBoss is compliant with the data protection act. Our policy is such that we will not pass on your details to any third party without your prior consent. A copy of our policy is available on our website.



# **SOLVING SPACE ISSUES** FOR AN IOT HUB

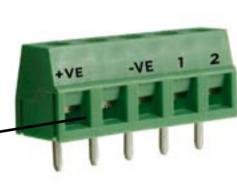
# **CASE STUDY**

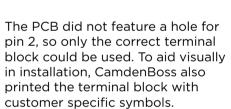
# **CUSTOMER USES CAMDENBOSS' LOW-PROFILE** DIN RAIL ENCLOSURE FOR AN IOT HUB

A low profile enclosure was required fitted incorrectly onto the PCB. due to space constraints. Our CDIB DIN Rail instrument enclosure was ideal for this application. The customer had issues with wiring errors during installation and needed both wire to board and pluggable connections. They also had assembly errors where terminal blocks were

To solve the confined space issue, CamdenBoss provided a low-profile terminal block (CTBP0508). To prevent wire to board terminal blocks being fitted in place of the pluggable headers, they provided custom terminal blocks with one pole removed.







For the pluggable solution CamdenBoss provided right angled headers (CTBP9350) and plugs in both standard and reverse keying to ensure mis-connections could not be made.



# **CAMDENBOSS PRODUCT RANGE**



TERMINAL STRIPS

Used by electricians everywhere this handy product is often found in the toolbox of any good sparky! Use CamdenBoss for your wiring necessities.



**IP68 CONNECTORS** 

If it's getting wet then we have solutions to keep your connections dry. Keep singing in the rain with our wide range of IP68 connectors.



Switch on with our control solutions! Ou offering is the one that can really send the signal you need. All you need do? Press Go!



**DIECAST CONTROL ENCLOSURES** those tough environments. Box in where



#### TERMINAL BLOCKS

Make the connections that count with our comprehensive offering. A full range of solutions for all your electronic connection needs.



Our modular CNMB range offers a flexible solution for today's IoT market. Ideal for DIN Rail mounted PCB's data loggers & IoT modules



applications. With our custom options, 1100 series adds personality to your business.



#### CIME

This PCB DIN Rail interface support is available in modular or custom lengths Manufactured to the length of your PCB.







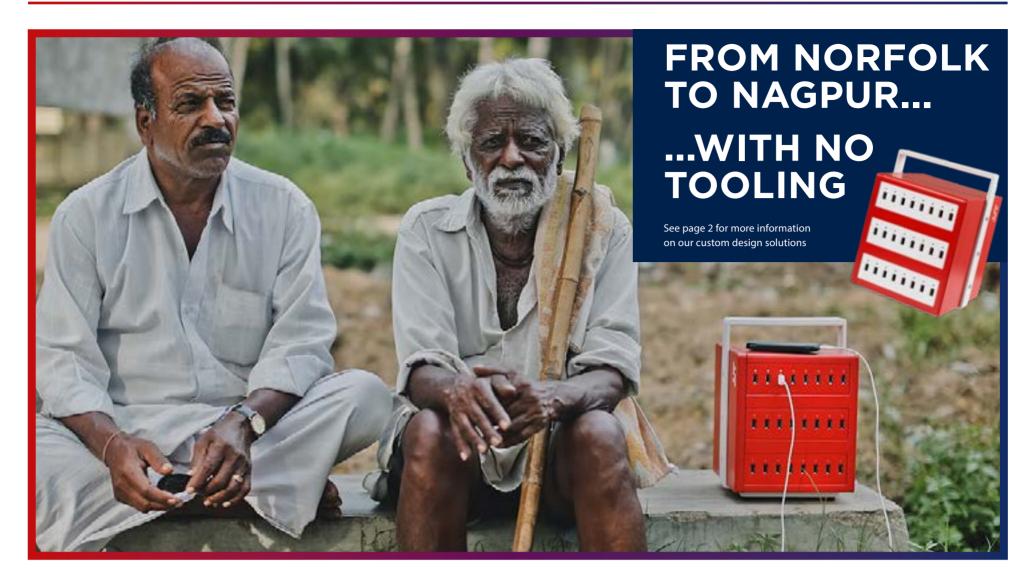
## **NOW WITH ADDED WHITENER!**

Our flagship BIM 2000 range of stylish and high-quality boxes are now available in bright white\*.

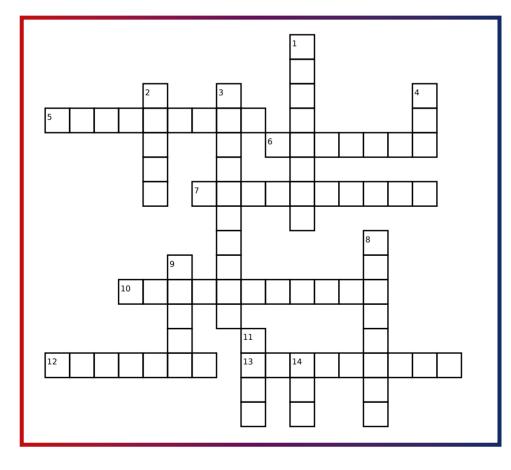
These versatile boxes can be fully customised without restrictions, making them the perfect choice for your next project.

\*Other colours are also available

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## **CAMDENBOSS CROSSWORD**



# Test your IoT / CamdenBoss knowledge by completing our CamdenBoss crossword.

#### Down:

- 1. ......4.0 is the name given to automation within manufacturing industries (8)
- 2. Ask Sam, our Sales Manager on our stand what his favourite food is. (5)
- 3. CamdenBoss specialise in these products that you need to house your IoT tech (10)
- 4. Each of the three CamdenBoss X series ranges are available in either polycarbonate or.... (3)
- 8. Our IoT stand focused on four industries: Factory, Home, City and which other? (8)
- 9. What country is Nagpur in? (5)
- 11. .....is the name of our DIN Rail instrument enclosures (4)
- 14. What is the new section on the CamdenBoss website that the bus advert on our stand graphics reveals? (3)

#### Across:

- 5. How many products do we have attached to our stands wall (9)
- 6. Which of our products makes the perfect IoT hub (7)
- 7. This type of CDIB DIN Rail enclosure can be used to save space in an IoT hub (3,7)
- 10. On our IoT stand, the city is called the 'City of ......' (11)
- 12 This interface support is available in either custom extruded length or ....... (7)
- 13. Earlier on in the newspaper, it was announced that CamdenBoss have manufactured a state-of-the-art...... system for Ireland's first Krispy Kreme restaurant (5,4)

Crossword Solution

Across: 5. TWENTYONE, 6. XSERIES, 7. LOWPROFILE, 10. CONNECTIONS, 12. MODULAR, 13. DRIVETHRU

DOWN: 1. INDUSTRY, 2. STEAK, 3. ENCLOSURES, 4. ABS, 8. HOSPITAL, 9. INDIA, 11. CDIB, 14. IOT



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