# **ROOBUCK**

North American Edition May 2024

# **Product Catalogue**

For Surface Operations and Industrial Applications



# **Company Profile**

# **ROOBUCK**

Roobuck is a leading provider of MineloT Solutions and Devices, Cap Lamps, Safety Lights, and other Explosion-proof Products

#### **Accreditations**

Subject to market and regional requirements, products can comply to:

- Ex Certificates/Approvals: IECEx, MSHA, IA, CNEx
- Ex Quality Standards: ISO/IEC80079-34
- Certification & Compliance Marks: FCC, CE, RCM

#### **Mining IoT Solutions**

- Personnel, Vehicle, Asset Tracking and Emergency/ Evacuation.
- IoT Device/Data Management with Solution Customisation.
- Personnel Sign-In, Sign-Out and/or Assignment of Assets.
- Collision Avoidance and Proximity Detection Systems using a variety of Technologies including DSRC and UWB.
- Intrinsically Safe versions are available using IECEx Certification.

#### **Products**

- Wireless devices Long-Range WiFi Access Point, Cap Lamps, Belt Tags, Badge Tags and Vehicle Tags utilising various wireless technologies including WiFi, BLE, LTE, DSRC, UWB, LoRa, RFID, NFC.
- Cordless Cap Lamps To suit all working conditions and needs. High performance or great value.
   Complete charging facilities and accessories.

#### **R&D Services for Wireless Devices**

Roobuck provides development services for integration with our partners/customers. Roobuck offers expertise and engineering resources for intrinsically safe or industrial device design and manufacture.



#### **R&D Projects**

Industry, Federal and State Government supported MineloT projects in collaboration with world leading universities including CRC-Ps, ARCs, TDRI, ACARP, GGCIP and PSF. Roobuck is constantly bringing cutting edge technology to the METS sector.

#### **Global Reach - Exports from Australia to:**

USA, Canada, NZ, PNG, Mongolia, Uzbekistan, Kazakhstan, UAE, Qatar, Saudi Arabia, Egypt, Indonesia, Singapore, South Africa, Zimbabwe, Peru, Colombia, Chile and Sweden

#### **Customers**

BHP, Rio Tinto, South32, Glencore, petroleum companies, military and government

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### Which Cordless Cap Lamp is best for my needs?

Questions - Do you need	RN3U	RN2T	KH2M-Ex
IECEx Certificate?			✓
A bright light?	✓		
A low cost product?		✓	✓
An angle adjustable cap lamp?	✓		✓
To wear a helmet visor?		✓	
Both focused-beam & spread beam		✓	
Long Duration?			✓
The lightest Cap Lamp in our range?		✓	

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# Cordless Cap Lamp

**Performance series** – for Mining and Industrial Applications without the need for Ex Certificate

#### **Features**



Three operating modes - Main, High Beam, Auxiliary



Adjustable beam angle to point wherever you see



Lightweight, comfortable and ergonomic



Rugged casing made from GERMAN FRAS material for rough handling & wide ambient temperature range



Made from Top Brand, high quality components and parts



Rounded front housing for best impact resistance



#### **Product Specifications**



IP Rating - IP67 Submersible in water up to 1m for 30min



Charging Time 9 h



**Weight** 165 g / 5.82 oz



Illumination 5000 Lx Main Mode 8000 Lx High-Beam Mode



Running Time 16 h Main Mode



# **Chargers - RN3U**

# **ROOBUCK**

### **CB8E Charging Bank**

For 8 Cordless Cap Lamps



#### **Features**

- Portable, Wall Mountable, Vehicle Installation
- Locking Plate is optional extra (CB8(E)-LPU)
- Charging Indicator on Changing Bank
- Charging Indicator on Cap Lamp
- Automatic over-load protection cuts off that circuit when Cap Lamp battery is fully charged

#### **Specifications**

Input 110 VAC or 12-24 VDC

Dimensions 33 x 21 x 5.5 cm/13 x 8.27 x 2.17 in

Weight 1.1 kg / 2.43 lb

### CB35E/CB53E - Charging Banks

#### For 35/53 Cordless Cap Lamps

#### **Features**

- Automatic over-load protection cuts off the circuit when Cap Lamp battery is fully charged
- Label groove
- Padlock bracket
- Charging Indicator on Charging Bank
- Charging Indicator on Cap Lamp
- Includes wall mounting kit
- 2 x foot pads
- Circuits are easily accessible for servicing

#### **Specifications**

Input 110 VAC

Dimensions 84 x 13 x 110 cm/33.07 x 5.12 x 43.31 in

Weight 31 kg / 68.36 lb



## Individual Chargers & Accessories

MCE: Single Mains Charger - AU, EU, UK, USA

**UCE**: Single USB Charger



# **ROOBUCK**

# Cordless Cap Lamp

**Lightweight series** – for Industrial and Surface Mining Applications without the need for Ex Certificate

#### **Features**



Three operating modes – Standard Focus, High-Beam Focus, Spread



Thin design means Cap Lamp fits behind visor allowing up & down action



Lightweight, comfortable and ergonomic



Rugged casing made from GERMAN FRAS material for rough handling & wide ambient temperature range



World's safest and most reliable Panasonic battery



Made from Top Brand, high quality components and parts



#### **Product Specifications**



# IP Rating - IP67 Submersible in water up to 1m for 30min



Charging Time 7 h



**Weight** 97 g / 3.42 oz



# Illumination 2800 Lx Standard Focus 5500 Lx High-Beam Focus



Running Time
13 h Standard Focus



# **Chargers - RN2T**

# **ROOBUCK**

### **CB8T Charging Bank**

For 8 Cordless Cap Lamps



#### **Features**

- Portable, Wall Mountable
- Charging Indicator on Charging Bank
- Charging Indicator on Cap Lamp
- Automatic over-load protection cuts off the circuit when Cap Lamp battery is fully charged

#### **Specifications**

Input 110 VAC

Dimensions 33.4 x 18.2 x 6.6 cm

13.15 x 7.17 x 2.6 in

Weight 860 g/1.9 lb

### **CB28T Charging Bank**

For 28 Cordless Cap Lamps

#### **Features**

- Wall Mountable
- Locking Bar for Cap Lamp safety
- Charging Indicator on Charging Bank
- Charging Indicator on Cap Lamp
- Automatic over-load protection cuts off the circuit when Cap Lamp battery is fully charged
- Space to attach identification label

#### **Specifications**

Input 110 VAC

Dimensions 84 x 60 x 11.5 cm

33.07 x 23.62 x 4.53 in

Weight 9 kg / 19.85 lb



Individual Chargers & Accessories

UCT: Single USB Charger RCB: Angle Adjustable Bracket





# **ROOBUCK**

# Cordless Cap Lamp

# **Lightweight series** – for Petrochemical Environments & Surface Operations

#### **Features**



Two operating modes - Main, Low



Well distributed light pattern



Adjustable beam angle to point wherever you look



Lightweight, comfortable and ergonomic



Made from Top Brand, high quality components and parts



#### **Product Specifications**



#### IP Rating - IP67

Submersible in water up to 1m for 30min



#### **Charging Time**

7 h



#### **Ambient Temperature**

-20°C ≤ Ta ≤ 40°C -4°F ≤ Ta ≤ 104°F



#### Illumination

2000 Lx Main Mode



#### Running Time

20 h Main Mode



#### Weight

119 g / 4.2 oz



#### Certifications:

- Certificate #: IECEx TSA 19.0008
- Ex Marking: Ex ia op is IIB T3 Gb

#### Standard #:

- IEC 60079-0
- IEC 60079-11
- IEC 60079-35-1



# **Chargers - KH2M-Ex**

# **ROOBUCK**

### CB8 Charging Bank

For 8 Cordless Cap Lamps



#### **Features**

- Portable, Wall Mountable, Vehicle Installation
- Locking Plate is optional extra (CB8(E)-LPU)
- Charging Indicator on Charging Bank
- Charging Indicator on Cap Lamp
- Automatic over-load protection cuts off the circuit when Cap Lamp battery is fully charged

#### **Specifications**

Input 110 VAC or 12-24 VDC

Dimensions 33 x 21 x 6 cm

13 x 8.27 x 2.36 in

Weight 1 kg / 2.21 lb

### CB53 - Charging Banks

#### For 53 Cordless Cap Lamps

#### **Features**

- Automatic over-load protection cuts off the circuit when Cap Lamp battery is fully charged
- Label groove
- Padlock bracket
- Charging Indicator on Charging Bank
- Charging Indicator on Cap Lamp
- Includes wall mounting kit

#### **Specifications**

Input 110 VAC

Dimensions 84 x 13 x 110 cm / 33.07 x 5.12 x 43.31 in

Weight 31 kg / 68.36 lb



### Individual Chargers & Accessories

MC: Single Mains Charger - AU, EU, UK, USA

### **Accessories**

# **ROOBUCK**

#### **RRS:** Rubber Ring Sheath

Protect your Performance Series Cordless Cap Lamp with a cost effective, coloured rubber ring.

It can protect the cordless cap lamp when dropped, bumped or from dripping water. Comes in seven colours that can be used for easy identification of position, department or shift.





#### ML: Mining Lanyard

Keep hold of your Cordless Cap Lamp if you drop your helmet. Enables Cordless Cap Lamp to be fastened to your belt or belt loop.

#### **HS:** Head Strap

Fastens your Cap Lamp to hard hats without a mounting bracket. Uses four brim clips to for secure attachment to the helmet.









#### RCB: Angle Adjustable Cap Lamp Bracket

Roobuck's patented Cap Lamp Bracket transforms a fixed Cap Lamp into a flexible one. Move it up and down as you are working or to stop the light from shining in your co-workers eyes.

# **Digital Kiosk**

# **ROOBUCK**

# Personnel Sign-In, Sign-Out &/or Assignment of Assets

#### Increase Safety, Improve Productivity & Operational Efficiency

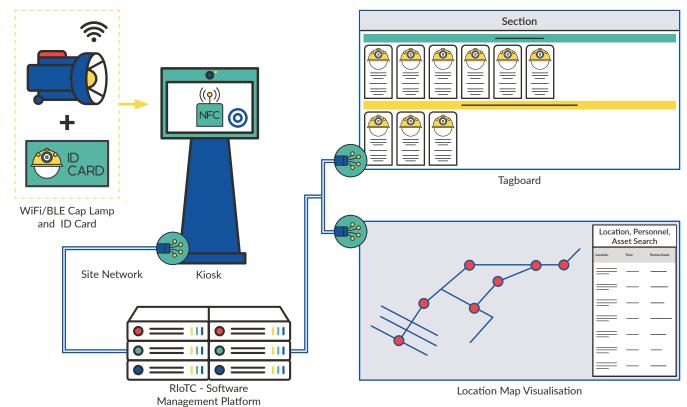
Hand back time to your busy team by implementing an automated sign-in/sign-out solution that is linked to your tracking and asset assignment systems. Avoid human error and equipment misplacement by assigning assets to personnel who sign-in, then track their location underground using WiFi and BLE. IoT Solutions using Intrinsically Safe devices are available.

This solution enables you to:

- Trace who is signed-in & signed-out
- Implement automation tracking
- Automate processes to avoid human error
- Integrate into systems

- Implement asset management
- Comply to safety policies and procedures
- Implement productivity enhancements
- Collect big data for analytics & reporting

Roobuck provides IoT personal devices such as WiFi/BLE cordless cap lamps and belt tags that are designed to be assigned to your staff via a kiosk terminal. Rugged touch screens with NFC scanners run our Digital Kiosk software that allows personnel to scan their ID and IoT devices. These devices then send data to our Roobuck onsite server that can be hosted locally onsite to enable tracking and emergency alert applications. Roobuck has a specialist R&D team that can integrate your existing ID card system into our Digital Kiosk as a customised site specific project.



# **Digital Kiosk**

# **ROOBUCK**

# Digital Kiosk Linked to Live Applications

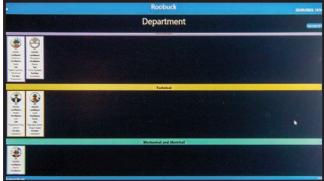
Personnel scan their ID card, then their equipment. Equipment can include a Roobuck IoT device, such as a WiFi/BLE cap lamp or belt tag or any device with an NFC sticker or tag attached. This person is then displayed on the Digital Tagboard and is visible on the Location Map Visualiser in real time. They will also receive emergency alerts sent via the evacuation tool, and can send duress calls, which will be received and displayed on the Tagboard. Emergency Alerts and Duress Calls are simultaneously displayed on operational PCs and tablets.

## Asset Assignments

Equipment such as a hard hat or respirator can be registered into the system database.

- NFC tags or stickers are attached to equipment.
- The equipment is registered using the Tag Configurator Tool
- When a member of your team is signing-in to work, they scan their ID card, IoT device, and any registered equipment they are taking underground.
- If a vital piece of equipment is not scanned as part of sign-in, a digital record is kept and the control room can be alerted. This procedure can be configured to match your current compliance policy system.
- When a signed-in person is selected on the Digital Tagboard, a list of all their equipment is displayed
- Equipment usage data is stored and available for integration into your maintenance cycle system so you can make sure there is a record of all critical equipment going underground.





Tagboard

### **IoT Devices**

## **ROOBUCK**

# Cap Lamps, Belt Tags & Portable Tags

The Mine IoT devices complement our Mine IoT solutions for surface operations. Go to roobuck.com.au for more information.



RN4E-WB WiFi/BLE Cordless Cap Lamp



KC4E-WB-Ex I.S. WiFi/BLE Cordless Cap Lamp



KH4E-WB-Ex I.S. WiFi/BLE Cordless Cap Lamp



**RN8C-WB** WiFi/BLE Corded Cap Lamp **Coming Soon** 



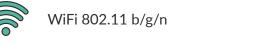
**RBT6A-WB** WiFi/BLE Rechargeable Belt Tag



RPT6A-WB WiFi/BLE Rechargeable Portable Tag

#### **Technology**







13.56 MHz for use with your Kiosk, Digital Tagboard and Inventory solutions



Bluetooth V4.2, BLE



IMU for your movement data collection and personnel safety applications



UHF 860 - 960 MHz RFID can be integrated into tracking, registration & access control systems



Compatible with Roobuck solutions or your choice of enterprise tracking software

Roobuck is developing Cap Lamps, Belt Tags and Portable Tags utilising various wireless technologies including LTE. DSRC. UWB and LoRa.

#### **Emergency Management**

Using the Roobuck Emergency Management System you can dramatically reduce the time it takes to inform personnel underground to evacuate. Roobuck IoT devices such as WiFi/BLE cap lamps or belt tags, that are signed-in using the Digital Kiosk, will respond to emergencies sent from the emergency management system by flashing.

When personnel press the button on their flashing device, they acknowledge receipt of the emergency message. They can also make a Duress Call by holding down the button of their device, prompting the control room to respond and make contact.

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#### **Other North American Catalogues**

Product Catalogue for Underground Hardrock Mines and Tunnels

Product Catalogue IECEx Group II for Petrochemical Environments