



Sirius-LUX Cap Lamps

A new generation of cap lamp is here...



sirius-LUX



MineARC Systems - Built for Safety.

www.minearc.com



Company Profile

MineARC Systems is the global leader in the manufacture and supply of emergency safe refuge solutions for the mining, tunnelling, chemical processing and disaster relief industries.

With over 20 years' experience, our dedication to ongoing research and development is driven by our key focus to continually offer the best and most advanced safety solutions on the market.

Our team of qualified engineers, electrical designers and technical experts form a global network across several international locations including;

- Perth, Western Australia
- Johannesburg, South Africa
- Dallas, Texas
- Santiago, Chile
- León, Mexico
- Beijing, China
- Reading, UK

This allows MineARC to provide 24 hour service and engineering support to our expanding list of clients in over 60 countries across the globe.

All MineARC Refuge Chambers and Safe Havens comply with the highest international regulations and recognised 'world's best practice' industry guidelines. Our key focus on quality control and product advancement has meant that MineARC Refuge Chambers have successfully saved lives in multiple real life industrial emergencies around the globe.

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Bureau Veritas ISO
9001:2008 Quality
Management Systems



ISO 9001 Quality Rating

SiriUS-LUX Cap Lamps

A reliable light source is of utmost importance in an underground environment, with personnel dependent on clear visibility to operate safely.

Defining the future of the humble cap lamp, the SiriUS-LUX Cap Lamp range offers greater efficiency, interchangeable batteries, improved illumination and the choice of light intensity and attachment styles to suit your working conditions.

- ✓ Improved illumination
- ✓ Sophisticated battery charging
- ✓ Power-saving mode
- ✓ Tracking options available



SiriUS Selector

MineARC's SiriUS and SiriUS-LUX Cap Lamps are designed to improve visibility across a range of activities including underground mining, tunnelling and emergency response.

With corded and semi-corded models available across the range, and charging racks to suit, SiriUS-LUX Cap Lamps provide a quality and reliable lighting solution.

With a range of features and lighting options designed to meet industry needs, there is a SiriUS-LUX Cap Lamp to meet all site and task requirements.

The table below provides a selection tool to find the cap lamp to suit your work conditions.

SiriUS Cap Lamp Range	Tracking (Optional)	Gas Sensor (Optional)	Unique Feature	Max. Lux (BOOST)	LED Angle	Mod. Battery	Max. Duration
SiriUS Corded (Yellow) <i>See SiriUS brochure</i>	X	X	Economy Range	9,406 lux	2° (spot) 110° (wide)	X	15 hours
SiriUS Cordless (Yellow) <i>See SiriUS brochure</i>	X	X	Economy Range	9,221 lux	2° (spot) 110° (wide)	X	15 hours
SiriUS ATEX Corded (Yellow) <i>See SiriUS brochure</i>	X	X	ATEX Rated	9,406 lux	2° (spot) 110° (wide)	X	15 hours
SiriUS ATEX Cordless (Yellow) <i>See SiriUS brochure</i>	X	X	ATEX Rated	9,221 lux	2° (spot) 110° (wide)	X	15 hours
SiriUS-LUX L3 Corded (Green)	✓	✓	Defined Spot	13,007 lux	3° (spot) 110° (wide)	✓	18 hours
SiriUS-LUX L3 Semi-Corded (Green)	✓	✓	Defined Spot	13,007 lux	3° (spot) 110° (wide)	X	12 hours
SiriUS-LUX L3 Corded (Pink)	✓	✓	Support Breast Cancer	13,007 lux	3° (spot) 110° (wide)	✓	18 hours
SiriUS-LUX L3 Semi-Corded (Pink)	✓	✓	Support Breast Cancer	13,007 lux	3° (spot) 110° (wide)	X	12 hours
SiriUS-LUX L5 Corded (Orange)	✓	✓	Flood Light Effect	5,442 lux	5° (spot) 110° (wide)	✓	18 hours
SiriUS-LUX L5 Semi-Corded (Orange)	✓	✓	Flood Light Effect	5,442 lux	5° (spot) 110° (wide)	X	12 hours



SiriUS-LUX Illumination

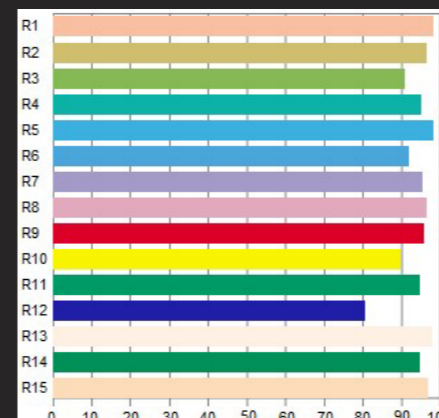
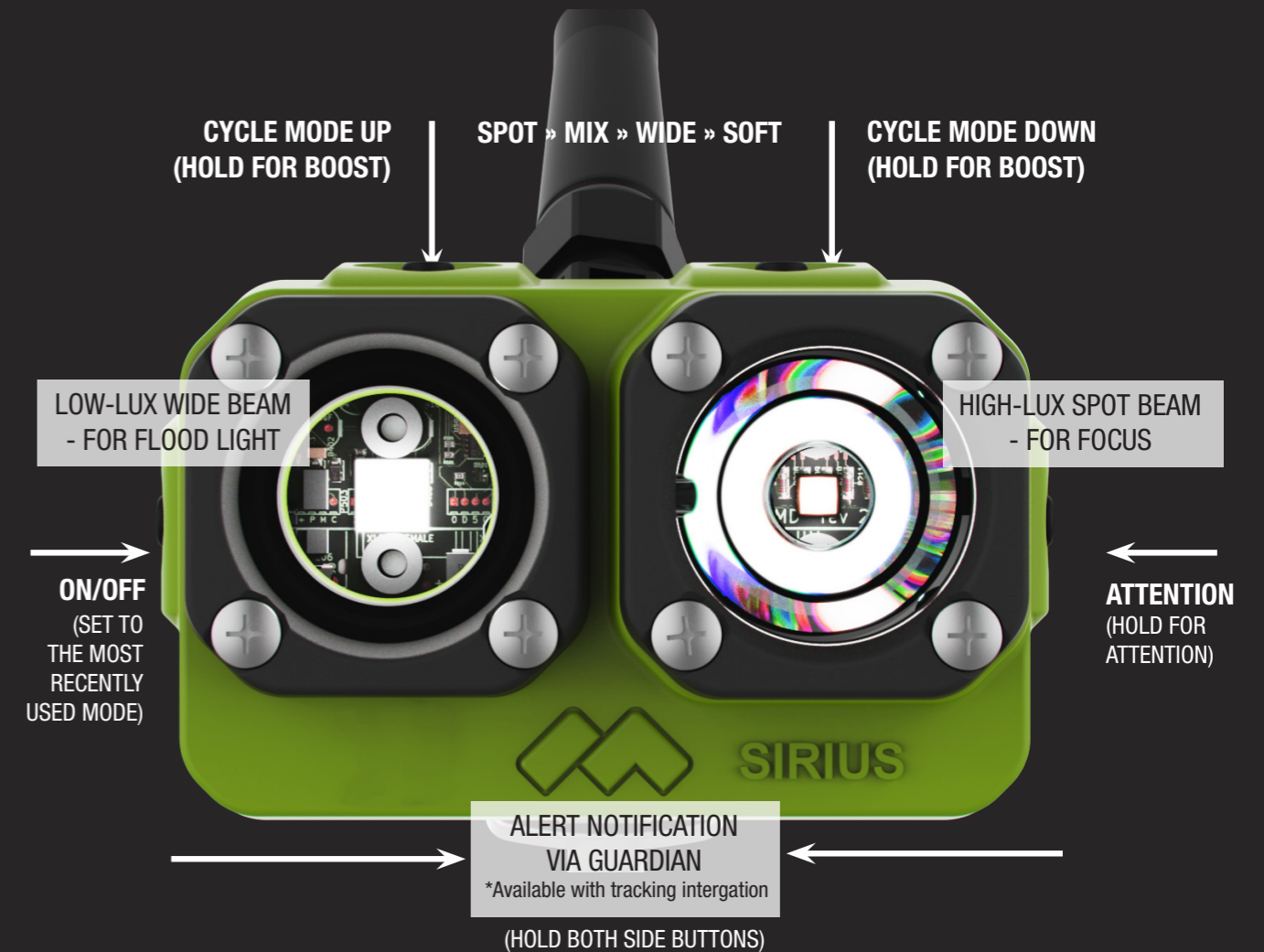
The SiriUS-LUX Cap Lamp features two unique beams; working in tandem to deliver a better field of vision for personnel.

- A high-lux, intense spot beam provides focus
- A lower-lux wide beam provides a more dispersed, further-reaching flood light

The dual-beam operation ensures a crisper and more natural light is projected, with various mixed beam options available.

The inclusion of a 'BOOST' mode allows for short-term, high intensity LED light. BOOST mode provides a powerful light for a short period of time if required, without completely draining the battery.

In addition, 'ATTENTION' mode results in a continuous light pulse; designed to provide a clear visual alert.



The SiriUS-LUX Cap Lamp boasts an impressive improvement to the Colour Rendering Index rating. Colour Rendering Index (CRI) measures - on a scale of 1-100 - the ability of a light source to accurately render frequencies of the colour spectrum, compared to daylight.

Existing cap lamps in the market have an approximate CRI of 70 colour accuracy, however SiriUS-LUX features a CRI of over 90*.

- This improved CRI rating allows for a more comfortable user experience.
- This is most beneficial to those relied upon to detect subtle changes in colour, such as those in the geology or electrical field of work.

SiriUS-LUX aims to emulate natural daylight as closely as possible.

*Dependent on mode.

SiriUS-LUX MineARC's Premium Range

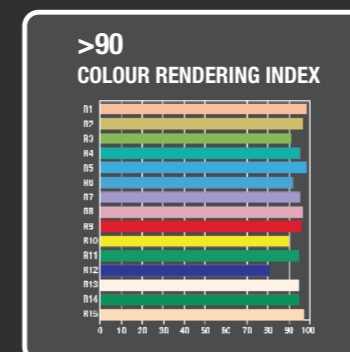
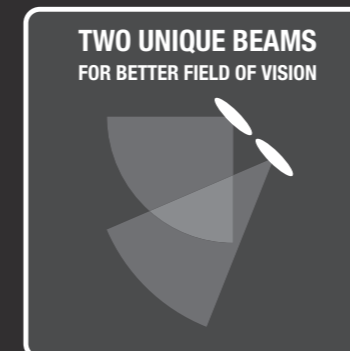
MineARC's premium SiriUS-LUX Cap Lamp range redefines wearable lighting designed for underground environments.

Benefits of the SiriUS-LUX range include a unique modular battery and a range of tracking and gas monitoring options.



SiriUS-LUX

A new generation of cap lamp



SiriUS-LUX Gas Monitoring Upgrades

Too often, personnel are exposed to harmful gases (such as carbon monoxide) because proper early-warning systems are not made use of. The latest feature of the SiriUS-LUX cap lamp now includes gas monitoring upgrades specifically with these types of emergency situations in mind.

With the new built-in gas monitoring options, the SiriUS-LUX combines the functionality of a hand-held gas monitor, with existing PPE requirements in the form of a cap lamp.

With its unique battery design, the SiriUS-LUX allows for gas tracking to take place without compromising the overall duration of the lamp - a minimum of 12-hours.

While gas monitoring is implemented, the SiriUS-LUX makes use of various tiered alarm systems to notify the wearer of any harmful gases that may disperse in the immediate environment.



Gas Monitoring Upgrade Features

COMPATIBLE WITH
SIRIUS-LUX TRACKING

12 HOUR MINIMUM
DURATION

BUILT-IN
GAS SENSOR

SENSORY
ALARM SEQUENCING

DATA LOGGING &
REAL-TIME ALERTS



SiriUS-LUX Gas Monitoring Upgrades

Alarm Sequencing



The SiriUS-LUX provides three different alarm types to ensure that at least one sensory response is triggered; including:

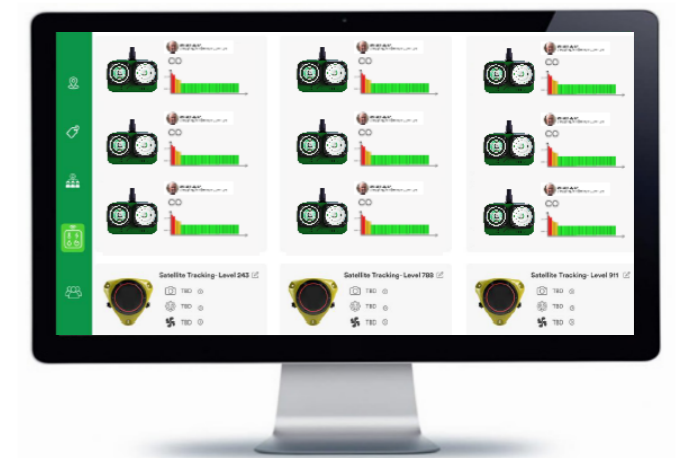
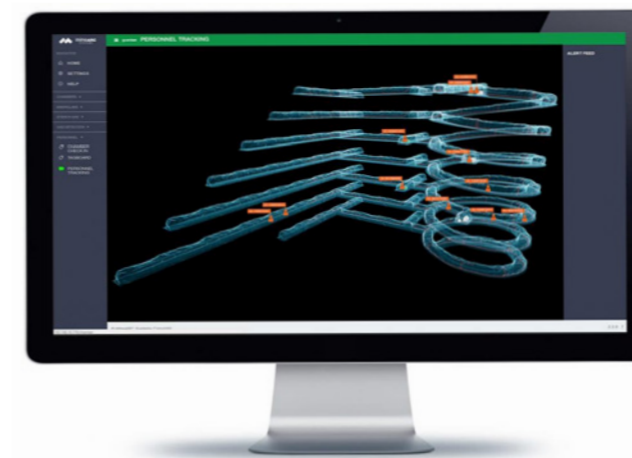
- audible alarm
- vibration
- visual flashing

All alarms will increase in frequency depending on the gas level and resulting danger within the area.

GuardIAN Integration

With tracking already playing an important role in our GuardIAN IoT network, the amalgamation of the SiriUS-LUX with gas sensor is a natural pairing to the GuardIAN system. By combining these two products, it allows sites that have underground connectivity to optimise the live dashboard feature and monitor real-time gas reports.

Along with these live reports, the additional feature of logging each cap lamp's data will assist sites in monitoring personnel exposure levels to various gases. For sites where IOT and personnel tracking are not implemented, the cap lamps can easily be plugged into a desktop or laptop to view gas monitoring levels recorded via the lamp.



SiriUS-LUX Tracking Upgrades

Upgrade your SiriUS-LUX Cap Lamps with tracking capabilities to improve on-site safety by calculating the current location of personnel or assets.

Monitor personnel throughout varied scenarios to support more efficient operations and emergency response. Location tags transmit the information as each device or person is scanned by receivers. All location information can be recorded and viewable through the Guardian dashboard when utilising compatible tracking technology.



Tracking Chip Options



All SiriUS-LUX Cap Lamps are supplied with an RFID Chip, allowing sites to utilise this wearable device as part of a greater tagging system.

In addition, SiriUS-LUX Cap Lamps can be fitted with a number of different tracking technologies that allow for more accurate location tracking and can be easily integrating into existing site infrastructure.

Please note that consultation may be required to ensure integration with site.



UWB
(INTEGRATES
WITH GUARDIAN)



WI-FI



BLUETOOTH



AEROSCOUT



CISCO



LTE
COMING SOON



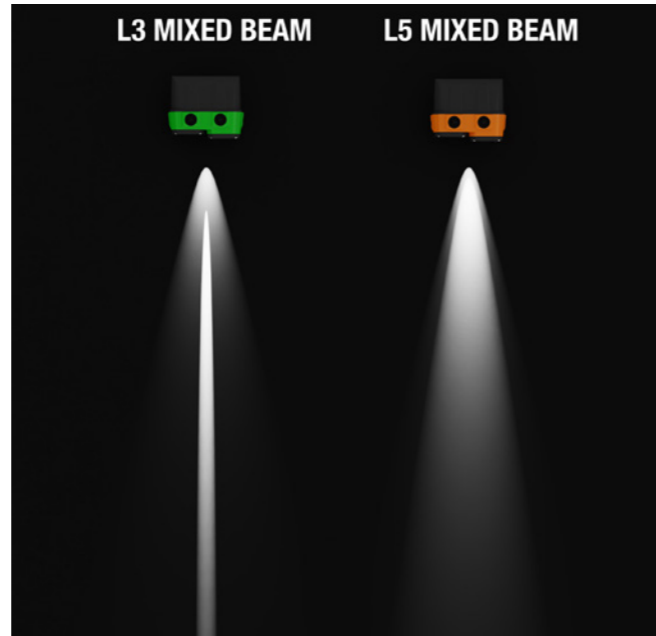
SiriUS-LUX Corded Cap Lamps

SiriUS-LUX Corded Cap Lamps

The SiriUS-LUX Corded Cap Lamps are available in two models - L3 and L5. The **Green L3** and **Pink L3** Corded Cap Lamps produce a sharp spot for concentrated light in mixed mode. The **Orange L5** Corded Cap Lamp produces a broad reaching, high intensity flood light effect with improved dispersion in mixed mode.

Standard Features

- Dual beams for a variety of modes and functions; including spot, wide and mixed
- > 90 Colour Rendering Index
- Boost mode for short-term, high intensity light
- Low power mode at 80% depletion for longer battery life
- Lightweight curly cord that reduces risk of pull
- Universal cap lamp attachment
- 10.4Ah modular, quick connect battery included (spare batteries available)
- Can be charged by included USB cable and wall adaptor (included)
- RFID tracking chip included (13.56MHz. ISO 15693 & ISO 18000-3)
- Optional: Real-time tracking upgrades available



Duration	Up to 18 hours
Charge Time	Maximum 8 hours
Colour Render Index	CRI 80 (spot) / CRI 90 (wide)
LEDs	XP-E2 (spot) / XP-G2 (wide)
L3 LED LIGHT / L3 LED LIGHT	3° (spot) / 110° (wide) Sharp spot effect (mixed beam) 2,873 lux (mixed beam) 5,861 lux (spot beam)
L5 LED LIGHT	5° (spot) / 110° (wide) Flood light effect (mixed beam) 1,263 lux (mixed beam) 2,627 lux (spot beam)
Buttons	4
Cable Length	1m (1.5m when stretched)
Electronic/PCB Manufacture	Australia
IP Rating	IP 67
Battery	4 x 18650 Li-Ion, 9.62Wh @ 3.7V
Weight	Approx 160g
Rated Capacity	10.4Ah
Rated Voltage	3.7V
Rated Current	2A

SiriUS-LUX Corded Cap Lamps

Battery Charging

SiriUS-LUX Corded Cap Lamps provide on-going cost saving benefits to sites, thanks to the unique charging solution.

Existing cap lamp designs are tied – quite literally – to the charging racks, with the lamp unable to be used until the battery is adequately charged. This reduces the usability of the lamp, resulting in large quantities of spare cap lamps being required on hand at all times.

A modular quick-connect battery responds to this inflexibility; allowing maximum versatility for users in a robust design that is both water and dust proof.

- Clip-in battery system allows for independent charging of batteries, negating the need for the lamp module to be present during the charging process; resulting in a significantly more compact charging rack system.
- Additional spare batteries can be kept on hand, equipping personnel with the resources to maintain productivity and ensure safety on the job.



Power-Saving Mode



A 'low power' mode is a major functional feature of the SiriUS-LUX Corded Cap Lamp. When the lamp battery reaches 80% depletion, the lamp will flash; indicating it has entered 'low power' mode. The lamp will then dim; using less power and extending the lamp's life span by an expected two hours – more than enough time for personnel to swap over to a fully charged battery.



SiriUS-LUX Pink Edition

sirius-LUX
LIMITED EDITION



MineARC is 'SiriUS' about supporting breast cancer research.

\$20.00 from each unit sold will go to the National Breast Cancer Foundation of Australia.



SiriUS-LUX Semi-Corded Cap Lamps



SiriUS-LUX Semi-Corded Cap Lamps

The SiriUS-LUX Semi-Corded Cap Lamp offers the best of both worlds when it comes to choosing between a corded and cordless cap lamp.

Engineered and manufactured in Australia, it combines dual beams, superior colour rendering and tracking compatibility; all packaged into a semi-corded design that is perfectly balanced on the hard hat in regards to front and rear weight.

Standard Features

- Dual beams for a variety of modes and functions; including spot, wide and mixed
- Mixed beam option for more general lighting
- > 90 Colour Rendering Index
- Boost mode for short-term, high intensity light
- Low power mode at 80% depletion for longer battery life
- Universal cap lamp attachment
- Silicone strap included for additional redundancy and stabilisation
- Secure battery attachment to the rear of the hard hat
- Can be charged by included USB cable and wall adaptor (included)
- RFID tracking chip included (13.56MHz. ISO 15693 & ISO 18000-3)
- Optional: Real-time tracking upgrades available
- Optional: Gas Monitoring upgrades available

The SiriUS-LUX Semi-Corded Cap Lamps are available in two models - L3 and L5.

The **Green L3** Semi-Corded Cap Lamp produces a sharp spot for concentrated light in mixed mode. The **Orange L5** Semi-Corded Cap Lamp produces a broad reaching, high intensity flood light effect with improved dispersion in mixed mode.

Duration	Minimum of 12 hours
Charge Time	Maximum 8 hours
Colour Render Index	CRI 80 (spot) / CRI 90 (wide)
LEDs	XP-E2 (spot) / XP-G2 (wide)
L3 LED LIGHT	3° (spot) / 110° (wide) Sharp spot effect (mixed beam) 2,873 lux (mixed beam) 5,861 lux (spot beam)
L5 LED LIGHT	5° (spot) / 110° (wide) Flood light effect (mixed beam) 1,263 lux (mixed beam) 2,627 lux (spot beam)
Buttons	4
Cable Length	340mm
Electronic/PCB Manufacture	Australia
IP Rating	IP 67
Battery	4 x 18650 Li-Ion, 9.62Wh @ 3.7V
Weight	Approx 160g
Rated Capacity	10.4Ah
Rated Voltage	3.7V
Rated Current	2A



SiriUS-LUX Semi-Corded Cap Lamps



The SiriUS-LUX Semi-Corded Cap Lamp features a generic hardhat clip means that it can be secured to all standard hard hats and helmets.

A silicone strap secures the rear battery pack to the helmet, ensuring the cap lamp is kept in place throughout the shift, no matter the task.

MineARC Charger Rack



**MIXED RACK CONFIGURATIONS
2- and 3-MODULE OPTIONS**

Constructed from robust, hard-wearing powder coated steel, the new MineARC Charger Rack's unique design offers optimal flexibility; allowing you to order a rack specific to your needs and products on site.

The option of a double-sided rack is available, or alternatively, multiple racks can sit flush side-by-side for a larger charging station.

Mix and match your modules to suit a variety of MineARC devices, or choose from the standard configurations shown below. Charging modules are also available for MineARC's Aura-PT handheld gas monitor.

SIRIUS-LUX CORDED (BATTERIES)

- Batteries per row: 8
- Single sided max: 40
- Double sided max: 80

SIRIUS-LUX SEMI-CORDED

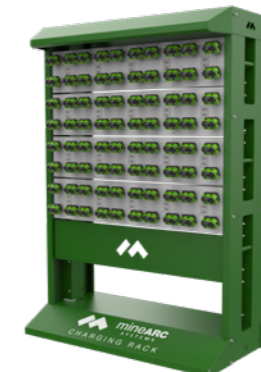
- Cap lamps per row: 6
- Single sided max: 30
- Double sided max: 60

SIRIUS CORDLESS

- Cap lamps per row: 20
- Single sided max: 100
- Double sided max: 200

SIRIUS CORDED

- Monitors per row: 8
- Single sided max: 40
- Double sided max: 80



Cap Lamp Charger Racks





MineARC Systems - Built for Safety.

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mineARC
SYSTEMS