# Increasing industrial machine availability with Secure Remote Access

BL Monitor & Control AB www.bl-mc.se

#### The production nightmare

You run your automated production line 24/7

One of your key machines breaks down in the middle of the night and could cause you significant delays and costs

Time is running and you need to get the machine back to operation asap!





# You need to start troubleshooting but...

It's a complex machine and your internal maintenance team needs external support from the experts

For security reasons, you can't give your experts remote access to your machine

Now, the experts have to drive in off-hours to identify and fix the problem

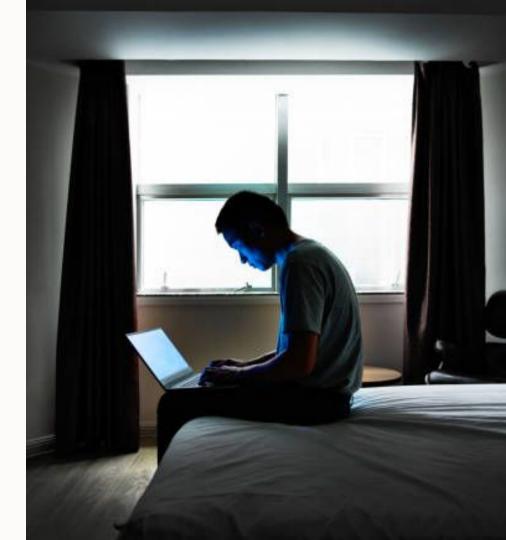
Meanwhile, you're losing money

#### But, what if...

you could give the experts really secure access to only this particular machine from anywhere in the world, without compromising your existing control system?

What if the experts could see the system parameters long before a breakdown?

What if they could safely read out parameters and alarm lists, make changes to the system, view settings logs remotely?

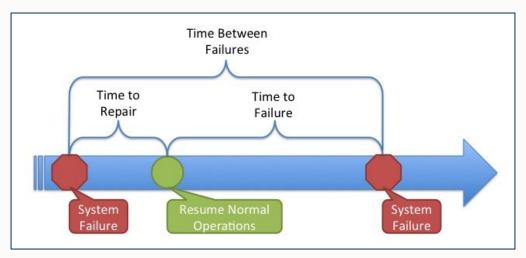


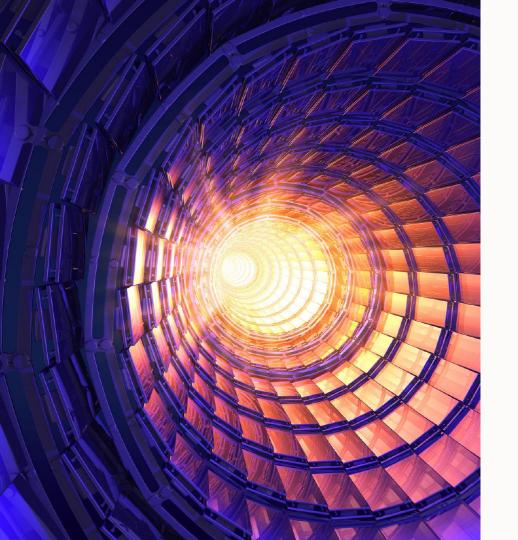
#### A proactive approach

to troubleshooting using secure remote access could drastically increase meantime between failures (MTBF) while reducing the mean time to repair (MTTR)

which both contribute to increasing your plant availability

#### and to your bottom line





#### Our approach

We are not rocket scientists but we are accelerator engineers who have been building atom smashers around the world for the past 25 years

In the world of complex and costly particle accelerators, we have a strong 24/7 maintenance mindset in place

It is essential for us to always understand the state of a machine remotely and to be able to securely troubleshoot it efficiently from anywhere in the world at any time

That's why we developed Blinky-Lite<sup>TM</sup>

# What makes Blinky-Lite<sup>TM</sup> so different?

- Mobility
- Security
- Flexibility
- Services
- Open source





## Blinky-Lite<sup>TM</sup> mobility

Most other control platforms sit behind a firewall and remote access is an afterthought

Not with us. Secure remote access was the paramount requirement from the start.

All our applications are web apps that can be securely accessed from anywhere in the world.

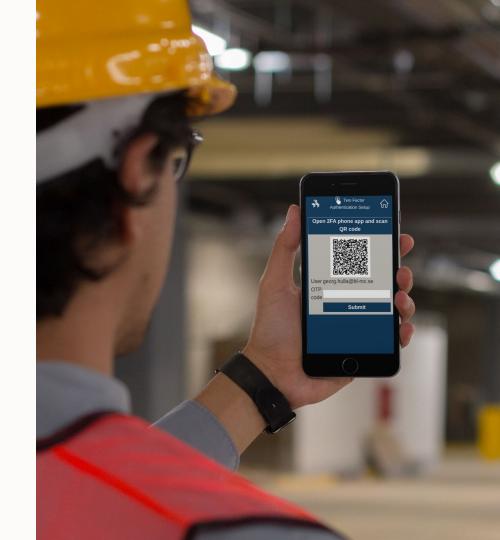
Web apps require no installation and you are always guaranteed to get the latest version.

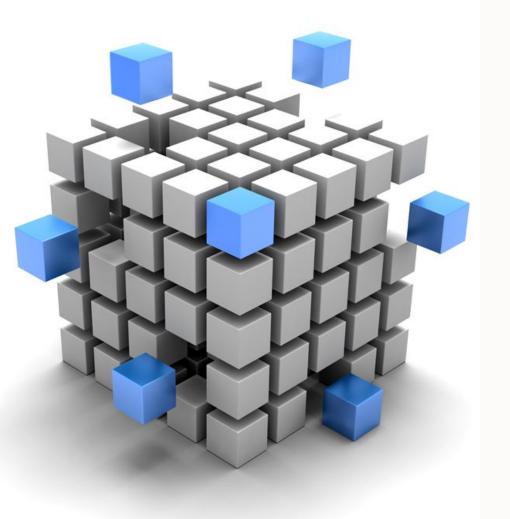
## Blinky-Lite<sup>TM</sup> security

Our machine connections are always initiated from within your facility - not from the outside

- providing secure information flow from you to the machine/sensor and back.

All our mobile apps require two factor authentication, ensuring that only the right people have access.





## Blinky-Lite<sup>TM</sup> flexibility

You spent a lot of money on automating your plant. You don't have to start over

Blinky-Lite<sup>TM</sup> can be added independently or on top of any existing control system

It is full stack from the beginning. It comes with all the necessary features that makes it extremely easy to use

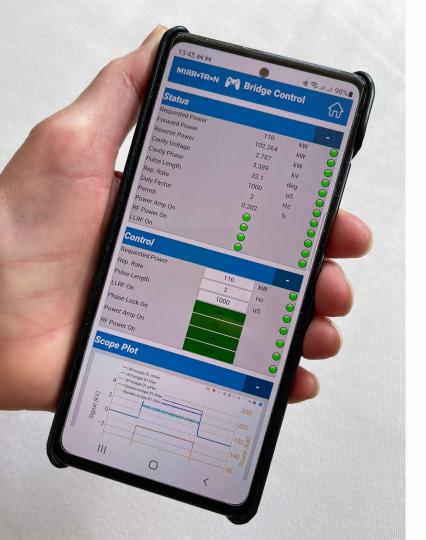
Blinky-Lite can integrate with many different communication protocols from Modbus to SCPI to S7 over many different types of communication technologies from WLAN, 5G or LoRa

## Blinky-Lite<sup>TM</sup> services

Most other control platforms only offer a communication protocol, but Blinky-Lite<sup>TM</sup> out of the box provides

- Alarm Scanning
- SMS Alarm messaging
- Data Logging
- Access Logging
- Settings Logging
- Application role based access
- Data stream role based access
- Zero-code application builder
- Device-side restricted messaging
- Scalar plotting
- Vector plotting
- User customized app launcher
- User customized device viewers
- Two factor authentication





#### Blinky-Lite<sup>TM</sup> open-source code

Every single line of the Blinky-Lite<sup>TM</sup> codebase is version-controlled and open to you.

No license fees No proprietary software

Blinky-Lite<sup>TM</sup> can be with you forever and can grow with your facility, with or without us.

## Use Cases



#### A non-profit auto museum

The Autoseum in Simrishamn (Sweden) has over 200 antique cars climate controlled by a 80kW heat pump

With the current energy crisis, the museum struggled to pay its power bill

We built remote interface that enabled the heat pump manufacturer to optimize and correct heat pump performance

We implemented a switching system for electric spot price control that saved the museum up to 8300 €/month on their electricity bill















## A high power radio frequency transmitter

A compact neutron source is being constructed for boron neutron capture cancer therapy in Hungary

The source is powered by a commercial 300 kW solid-state radio frequency transmitter

The transmitter costs over 1 M€ and has over 1000 parameters to control

## A high power radio frequency transmitter

We added hardware to enable secure, remote control via Blinky-Lite<sup>TM</sup>

#### Enabling

- the service people of the facility to remotely access and control the power amplifier 24/7 via their mobile app from Hungary
- the supplier to remotely access machine status and operating parameters from Japan
- remote expert control from Sweden



Secure remote access via Blinky-Lite<sup>TM</sup> gives your experts the information they need to maximize your plant availability and your bottom line



#### Come talk to us

to find out more about how secure remote access with Blinky-Lite<sup>TM</sup> can increase your machine availability and bottom line

#### Contact:

Georg Hulla (CEO) georg.hulla@bl-mc.se +46 760 22 41 99