

BELIMO x GITHARD

Global Leader In HVAC Control Devices.

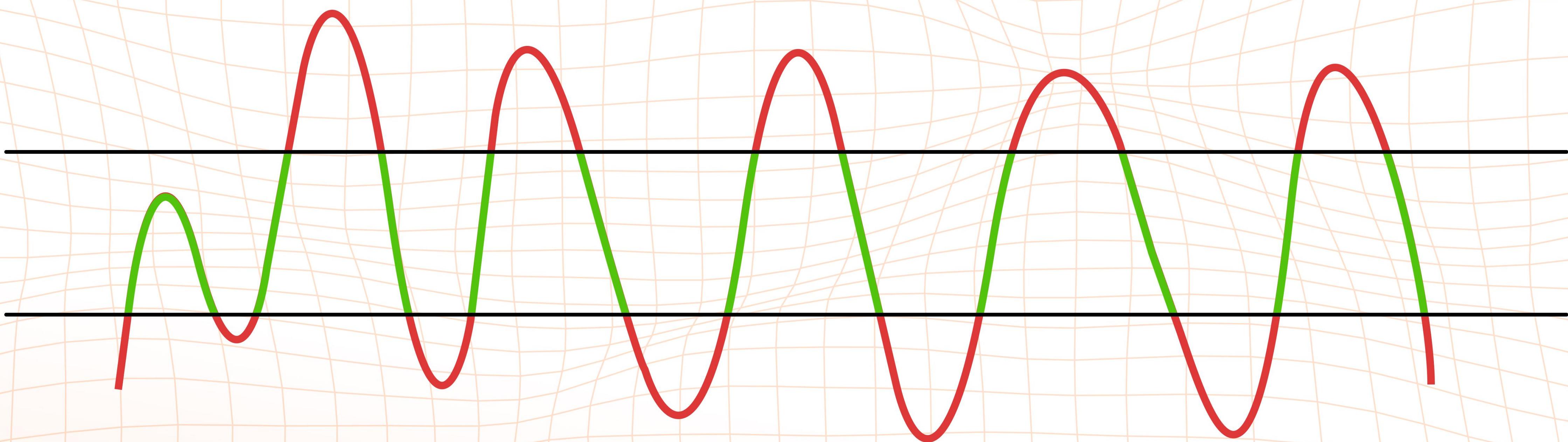
PROBLEM

**MILLIONS OF BUILDINGS
WASTE ENERGY AND
BURN MONEY.**

PROBLEM

**EVERY SECOND HEATING
AND COOLING SYSTEMS
FIGHT AN INVISIBLE WAR.**

PROBLEM

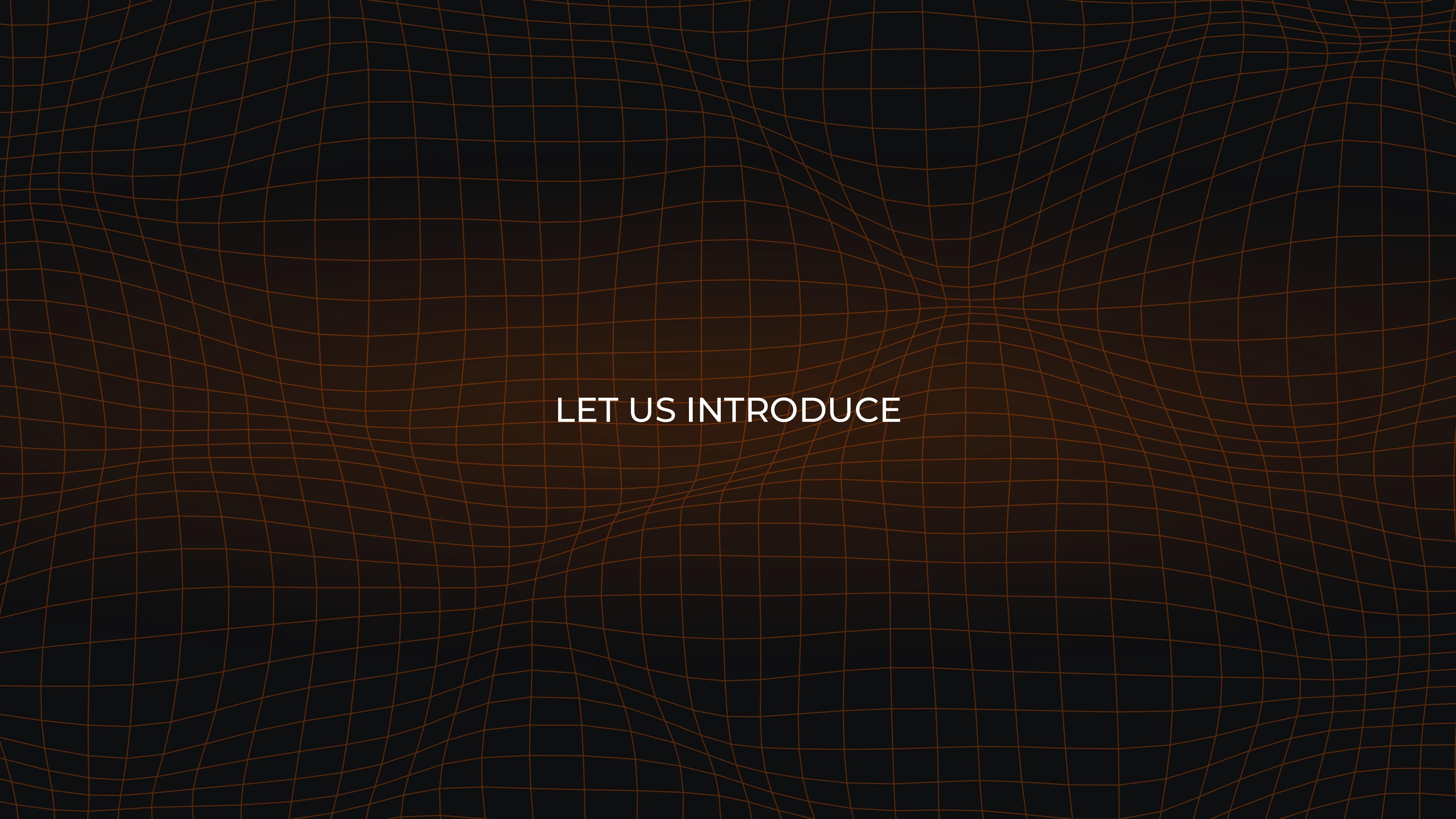


BELIMO

**GLOBAL LEADER WITH
DEVICES IN COMMERCIAL
BUILDINGS WORLDWIDE.**

BELIMO

**THE DATA TO SOLVE THIS
PROBLEM ALREADY EXISTS...**



LET US INTRODUCE



BELIMO SMARTSENSE™

BELIMO SMARTSENSE™

DASHBOARD DATA PARAMETERS REPORT

LOGOUT

BELIMO SMART SENSE

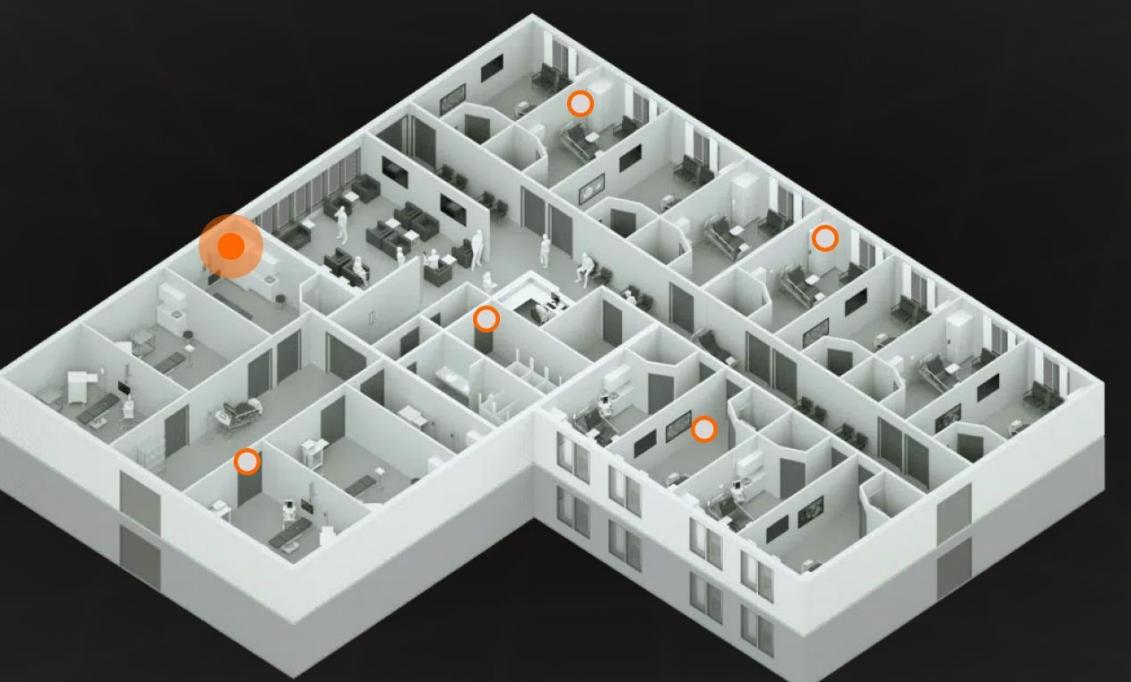
SIEMENS OFFICE BUILDING ZH3

- 1ST FLOOR PLAN
- BELIMO ACTUMOTION 500 – ID: BAM-101X
- BELIMO ACTUMOTION 500 – ID: BAM-102X
- BELIMO ACTUMOTION 500 – ID: BAM-103X
- BELIMO ACTUMOTION 500 – ID: BAM-104X
- BELIMO ACTUMOTION 500 – ID: BAM-105X

2ND FLOOR PLAN

- BELIMO ACTUMOTION 500 – ID: BAM-201X
- BELIMO ACTUMOTION 500 – ID: BAM-202X
- BELIMO ACTUMOTION 500 – ID: BAM-203X
- BELIMO ACTUMOTION 500 – ID: BAM-204X
- BELIMO ACTUMOTION 500 – ID: BAM-205X
- BELIMO ACTUMOTION 500 – ID: BAM-206X

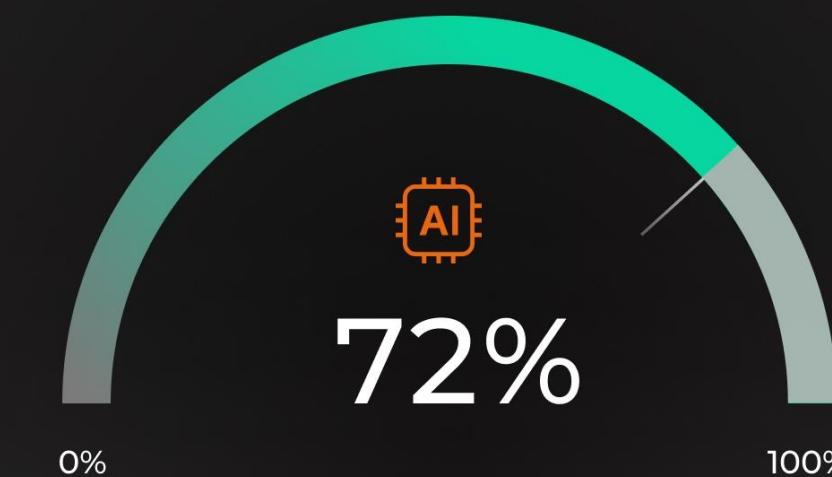
3RD FLOOR PLAN



2ND FLOOR



OPTIMISATION INDEX



0%

100%

ANALYSE

OPTIMISE

PUSH OPTIMISATION TO DEVICES

>> ALERT: TEMPERATURE FLUCTUATION DETECTED! <<

ZONE: 2ND FLOOR | OFFICE SPACE

DEVIATION: $\pm 3.5^\circ\text{C}$

CAUSE ANALYSIS:

[1] AIRFLOW OVERCOMPENSATION DUE TO EXTERNAL TEMP SHIFTS.

[2] INCREASED OCCUPANCY TRIGGERING EXCESSIVE COOLING.

BELIMO SMART SENSE

SIEMENS OFFICE BUILDING ZH5

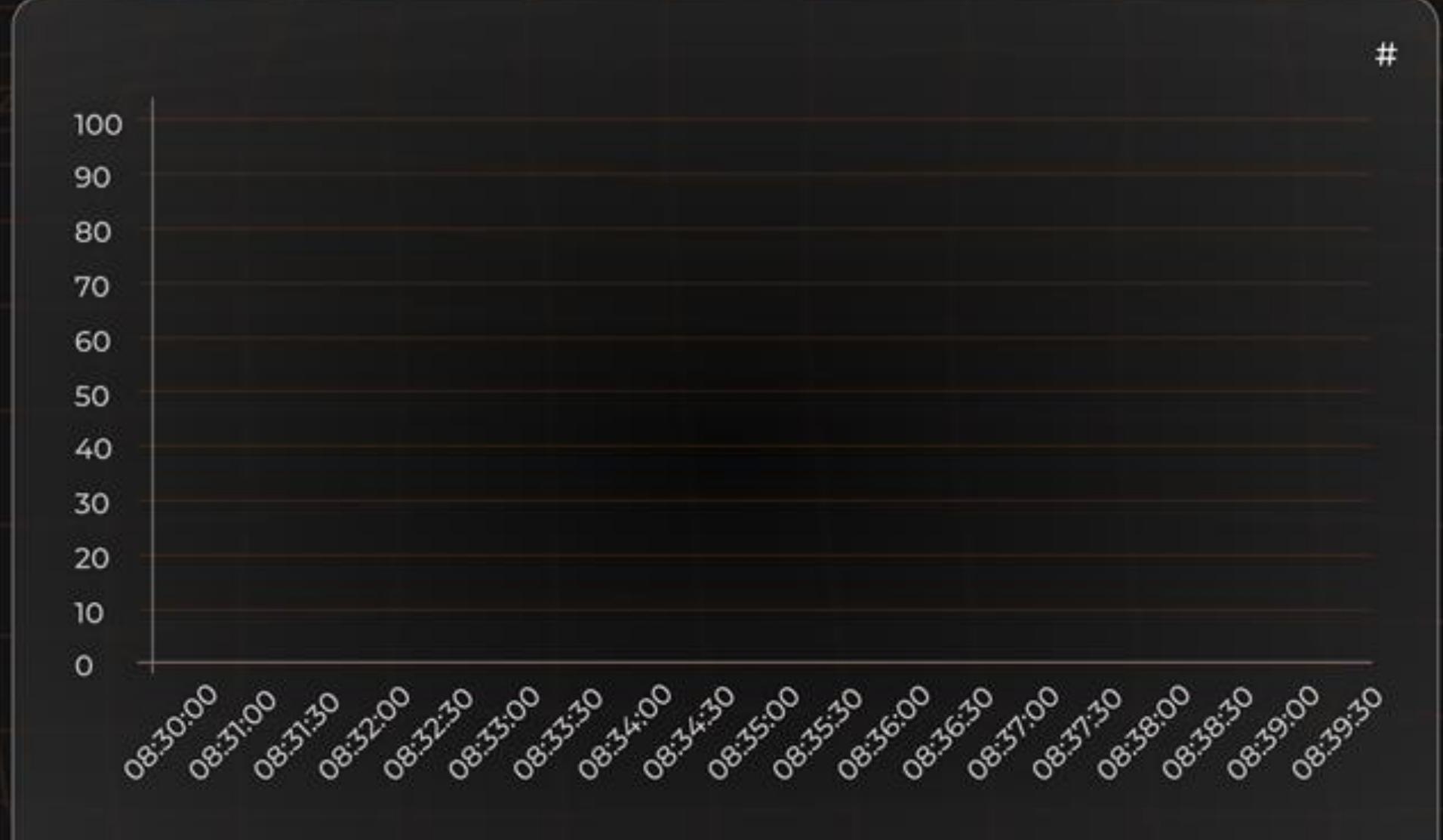
- 1ST FLOOR PLAN
- BELIMO ACTUMOTION 500 – ID: BAM-500X

- 2ND FLOOR PLAN
- BELIMO ACTUMOTION 500 – ID: BAM-500X

- 3RD FLOOR PLAN
- BELIMO ACTUMOTION 500 – ID: BAM-500X
- BELIMO ACTUMOTION 500 – ID: BAM-500X
- BELIMO ACTUMOTION 500 – ID: BAM-500X



2ND FLOOR



OPTIMISATION INDEX



ANALYSE

OPTIMISE

PUSH OPTIMISATION TO DEVICES



BELIMO SMART SENSORS

SIEMENS OFFICE BUILDING ZH5

- 1ST FLOOR PLAN
 - BELIMO ACTUMOTION 500 - ID: BAM-500X
 - BELIMO ACTUMOTION 500 - ID: BAM-500X
- 2ND FLOOR PLAN
 - BELIMO ACTUMOTION 500 - ID: BAM-500X
 - BELIMO ACTUMOTION 500 - ID: BAM-500X
- 3RD FLOOR PLAN
 - BELIMO ACTUMOTION 500 - ID: BAM-500X
 - BELIMO ACTUMOTION 500 - ID: BAM-500X
 - BELIMO ACTUMOTION 500 - ID: BAM-500X

2ND FLOOR

OPTIMISATION INDEX

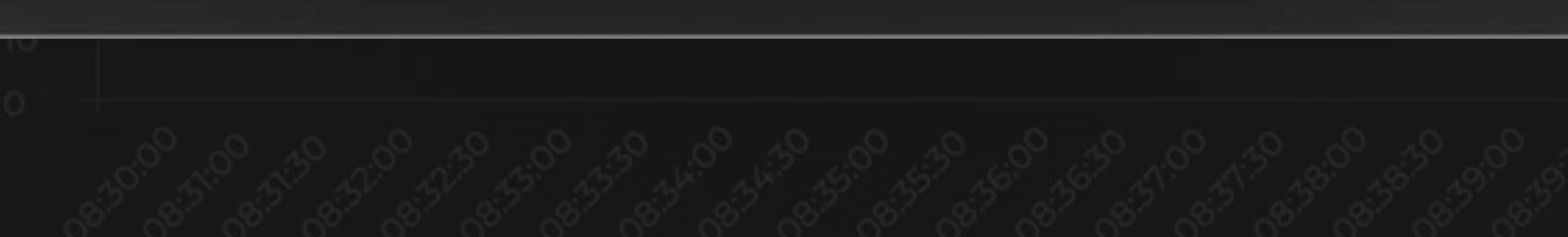
2ND FLOOR



ANALYSE

OPTIMISE

OPTIMISATION TO DEVICES

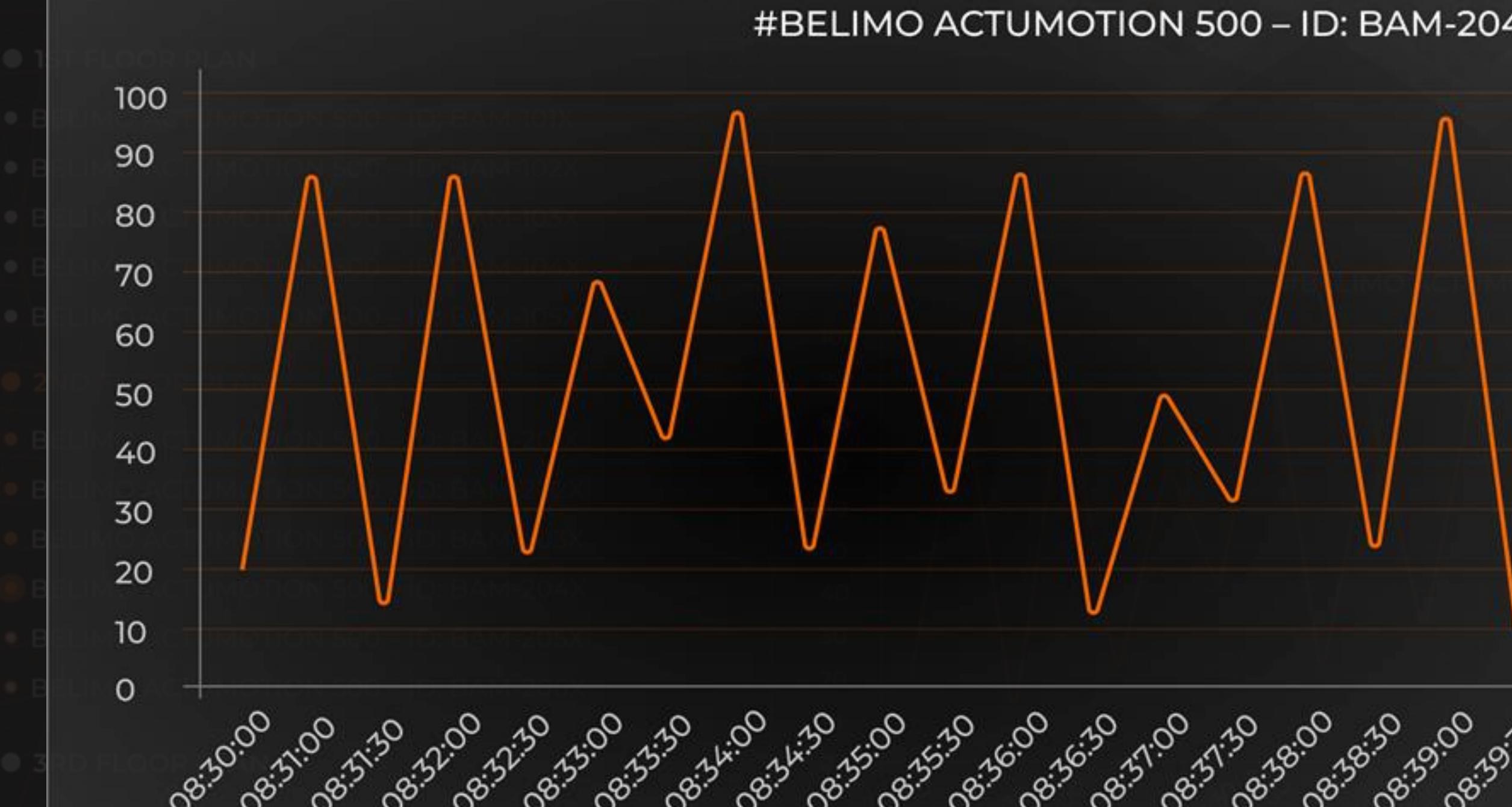


...



BELIMO SMART SENCE

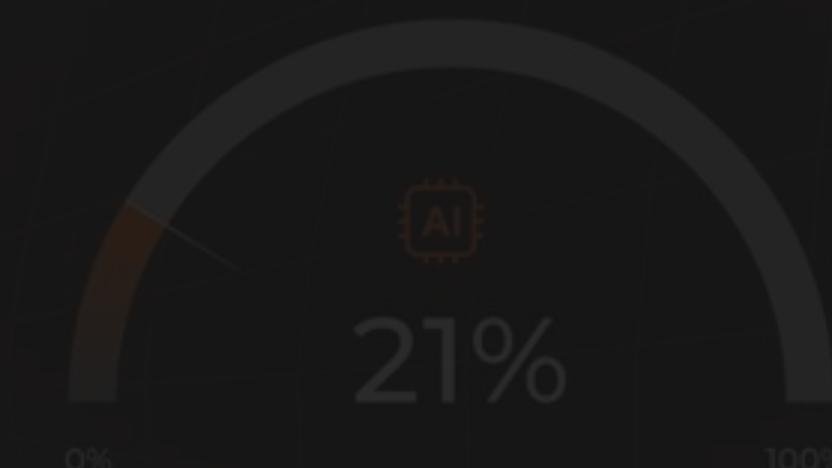
SIEMENS OFFICE BUILDING ZH3



ANALYZING ...

2ND FLOOR

OPTIMISATION INDEX



ANALYSE

OPTIMISE

>> ALERT: TEMPERATURE FLUCTUATION DETECTED! <<

ZONE: 2ND FLOOR | OFFICE SPACE

DEVIATION: $\pm 3.5^\circ\text{C}$

CAUSE ANALYSIS:

[1] AIRFLOW OVERCOMPENSATION DUE TO EXTERNAL TEMP SHIFTS.

[2] INCREASED OCCUPANCY TRIGGERING EXCESSIVE COOLING.

[3] POSSIBLE DELAY IN ACTUATOR RESPONSE (DEVICE ID: BVA-20B).

SUGGESTED FIX:

>> ADJUST DAMPER RESPONSE DELAY BY 0.8S

>> RECALIBRATE VALVE FLOW



BELIMO SMART SENCE

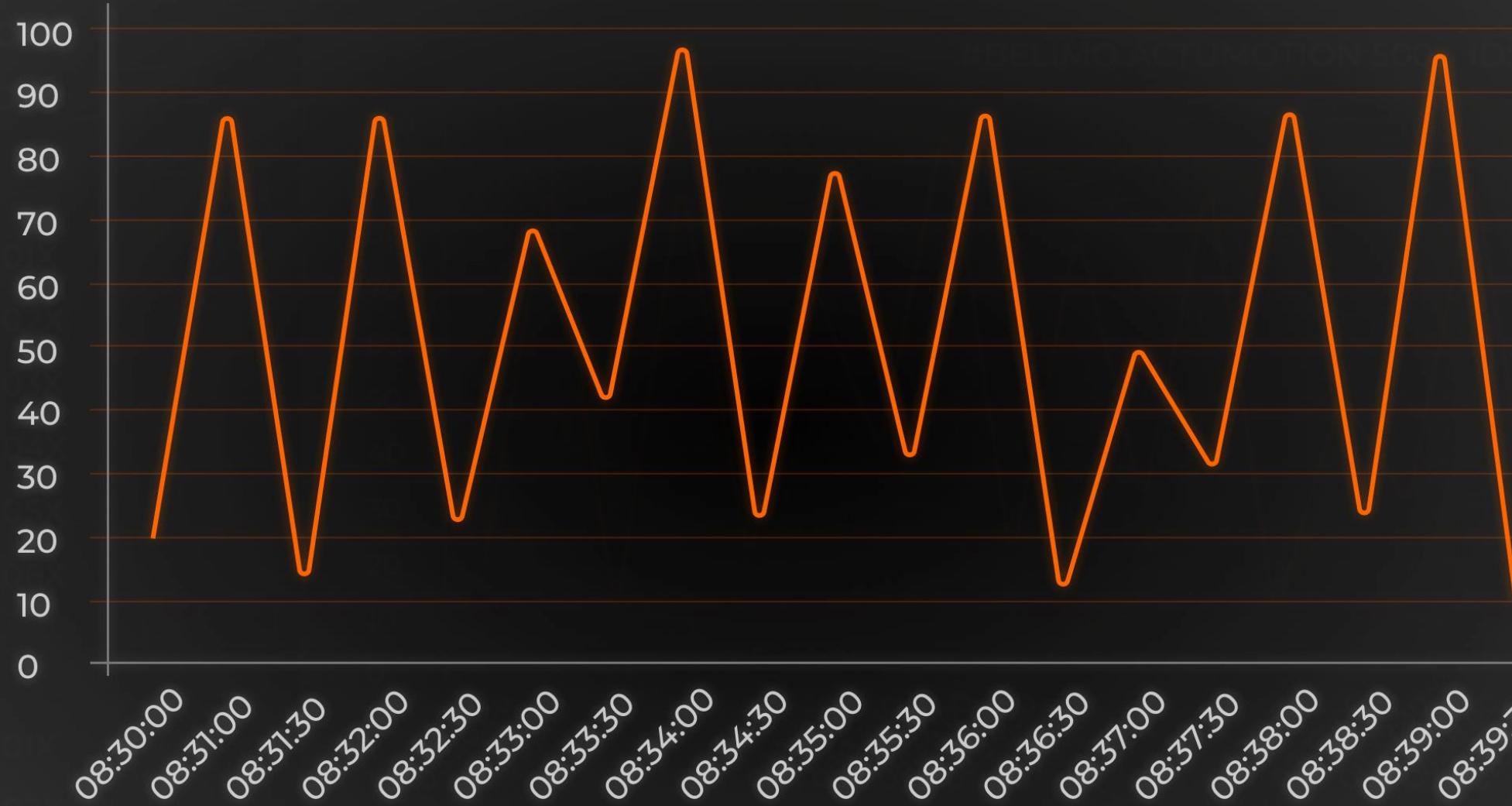
SIEMENS OFFICE BUILDING ZH3

- 1ST FLOOR PLAN
- BELIMO ACTUMOTION 500 – ID: BAM-101X
- BELIMO ACTUMOTION 500 – ID: BAM-102X
- BELIMO ACTUMOTION 500 – ID: BAM-103X
- BELIMO ACTUMOTION 500 – ID: BAM-104X
- BELIMO ACTUMOTION 500 – ID: BAM-105X
- BELIMO ACTUMOTION 500 – ID: BAM-106X
- BELIMO ACTUMOTION 500 – ID: BAM-107X
- BELIMO ACTUMOTION 500 – ID: BAM-108X
- BELIMO ACTUMOTION 500 – ID: BAM-109X
- 2ND FLOOR PLAN
- BELIMO ACTUMOTION 500 – ID: BAM-201X
- BELIMO ACTUMOTION 500 – ID: BAM-202X
- BELIMO ACTUMOTION 500 – ID: BAM-203X
- BELIMO ACTUMOTION 500 – ID: BAM-204X
- BELIMO ACTUMOTION 500 – ID: BAM-205X
- BELIMO ACTUMOTION 500 – ID: BAM-206X
- BELIMO ACTUMOTION 500 – ID: BAM-207X
- BELIMO ACTUMOTION 500 – ID: BAM-208X
- BELIMO ACTUMOTION 500 – ID: BAM-209X
- 3RD FLOOR PLAN
- BELIMO ACTUMOTION 500 – ID: BAM-301X
- BELIMO ACTUMOTION 500 – ID: BAM-302X
- BELIMO ACTUMOTION 500 – ID: BAM-303X



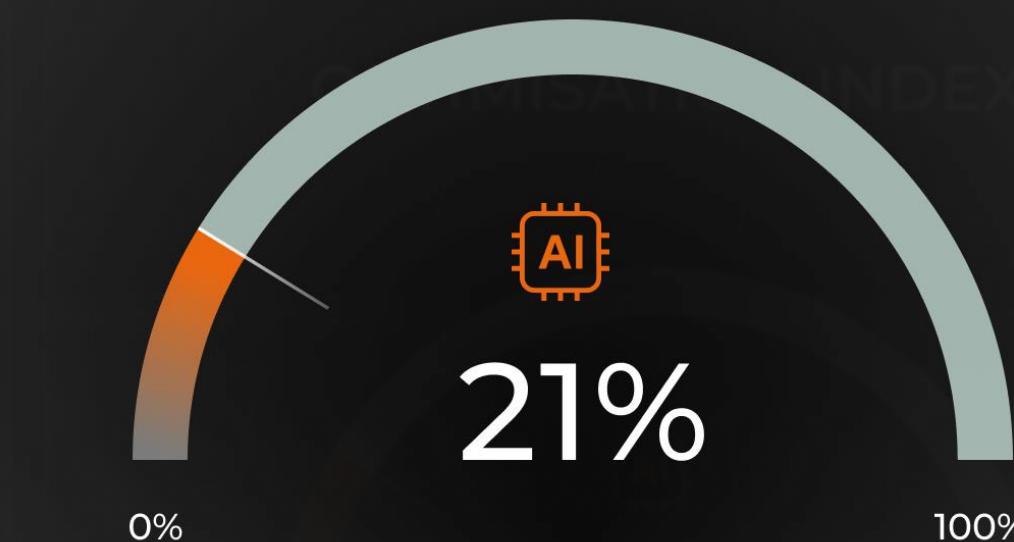
2ND FLOOR

#BELIMO ACTUMOTION 500 – ID: BAM-204X



ANALYZING ...

OPTIMISATION INDEX



ANALYSE

OPTIMISE

PUSH OPTIMISATION TO DEVICES

>> ALERT: TEMPERATURE FLUCTUATION DETECTED! <<

ZONE: 2ND FLOOR | OFFICE SPACE

DEVIATION: ±3.5°C

CAUSE ANALYSIS:

[1] AIRFLOW OVERCOMPENSATION DUE TO EXTERNAL TEMP SHIFTS.

[2] INCREASED OCCUPANCY TRIGGERING EXCESSIVE COOLING.

[3] POSSIBLE DELAY IN ACTUATOR RESPONSE (DEVICE ID: BVA-20B).

SUGGESTED FIX:

>> ADJUST DAMPER RESPONSE DELAY BY 0.8S

>> RECALIBRATE VALVE FLOW



BELIMO SMART SENSE

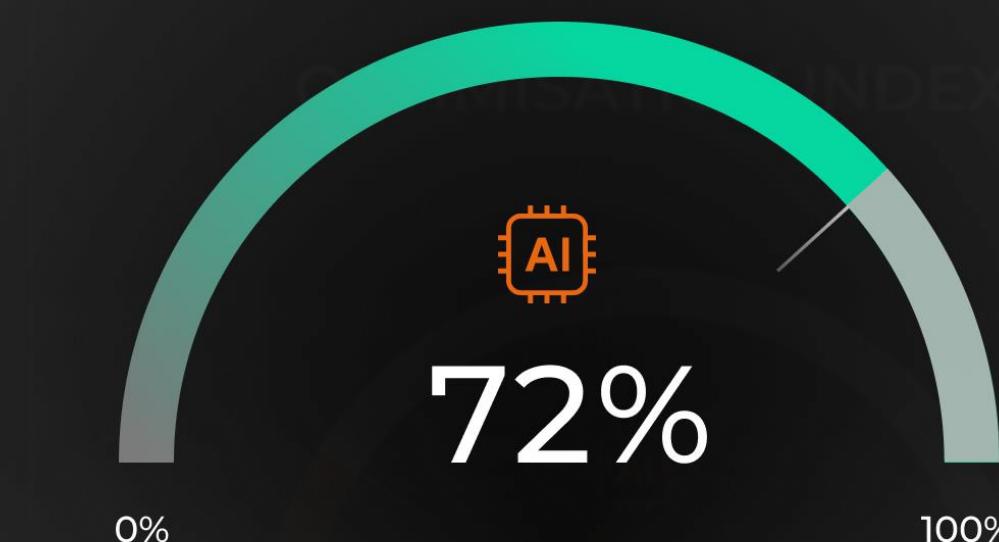
SIEMENS OFFICE BUILDING ZH3

- 1ST FLOOR PLAN
- BELIMO ACTUMOTION 500 – ID: BAM-101X
- BELIMO ACTUMOTION 500 – ID: BAM-102X
- BELIMO ACTUMOTION 500 – ID: BAM-103X
- BELIMO ACTUMOTION 500 – ID: BAM-104X
- BELIMO ACTUMOTION 500 – ID: BAM-105X
- BELIMO ACTUMOTION 500 – ID: BAM-106X
- BELIMO ACTUMOTION 500 – ID: BAM-107X
- BELIMO ACTUMOTION 500 – ID: BAM-108X
- BELIMO ACTUMOTION 500 – ID: BAM-109X
- BELIMO ACTUMOTION 500 – ID: BAM-110X
- BELIMO ACTUMOTION 500 – ID: BAM-111X
- BELIMO ACTUMOTION 500 – ID: BAM-112X
- BELIMO ACTUMOTION 500 – ID: BAM-113X
- BELIMO ACTUMOTION 500 – ID: BAM-114X
- BELIMO ACTUMOTION 500 – ID: BAM-115X
- BELIMO ACTUMOTION 500 – ID: BAM-116X
- BELIMO ACTUMOTION 500 – ID: BAM-117X
- BELIMO ACTUMOTION 500 – ID: BAM-118X
- BELIMO ACTUMOTION 500 – ID: BAM-119X
- BELIMO ACTUMOTION 500 – ID: BAM-120X
- 2ND FLOOR PLAN
- BELIMO ACTUMOTION 500 – ID: BAM-201X
- BELIMO ACTUMOTION 500 – ID: BAM-202X
- BELIMO ACTUMOTION 500 – ID: BAM-203X
- BELIMO ACTUMOTION 500 – ID: BAM-204X
- BELIMO ACTUMOTION 500 – ID: BAM-205X
- BELIMO ACTUMOTION 500 – ID: BAM-206X
- BELIMO ACTUMOTION 500 – ID: BAM-207X
- BELIMO ACTUMOTION 500 – ID: BAM-208X
- BELIMO ACTUMOTION 500 – ID: BAM-209X
- BELIMO ACTUMOTION 500 – ID: BAM-210X
- BELIMO ACTUMOTION 500 – ID: BAM-211X
- BELIMO ACTUMOTION 500 – ID: BAM-212X
- BELIMO ACTUMOTION 500 – ID: BAM-213X
- BELIMO ACTUMOTION 500 – ID: BAM-214X
- BELIMO ACTUMOTION 500 – ID: BAM-215X
- BELIMO ACTUMOTION 500 – ID: BAM-216X
- BELIMO ACTUMOTION 500 – ID: BAM-217X
- BELIMO ACTUMOTION 500 – ID: BAM-218X
- BELIMO ACTUMOTION 500 – ID: BAM-219X
- BELIMO ACTUMOTION 500 – ID: BAM-220X
- 3RD FLOOR PLAN
- BELIMO ACTUMOTION 500 – ID: BAM-301X
- BELIMO ACTUMOTION 500 – ID: BAM-302X
- BELIMO ACTUMOTION 500 – ID: BAM-303X
- BELIMO ACTUMOTION 500 – ID: BAM-304X
- BELIMO ACTUMOTION 500 – ID: BAM-305X
- BELIMO ACTUMOTION 500 – ID: BAM-306X
- BELIMO ACTUMOTION 500 – ID: BAM-307X
- BELIMO ACTUMOTION 500 – ID: BAM-308X
- BELIMO ACTUMOTION 500 – ID: BAM-309X
- BELIMO ACTUMOTION 500 – ID: BAM-310X
- BELIMO ACTUMOTION 500 – ID: BAM-311X
- BELIMO ACTUMOTION 500 – ID: BAM-312X
- BELIMO ACTUMOTION 500 – ID: BAM-313X
- BELIMO ACTUMOTION 500 – ID: BAM-314X
- BELIMO ACTUMOTION 500 – ID: BAM-315X
- BELIMO ACTUMOTION 500 – ID: BAM-316X
- BELIMO ACTUMOTION 500 – ID: BAM-317X
- BELIMO ACTUMOTION 500 – ID: BAM-318X
- BELIMO ACTUMOTION 500 – ID: BAM-319X
- BELIMO ACTUMOTION 500 – ID: BAM-320X



2ND FLOOR

OPTIMISATION INDEX



72%

0%

100%

ANALYSE

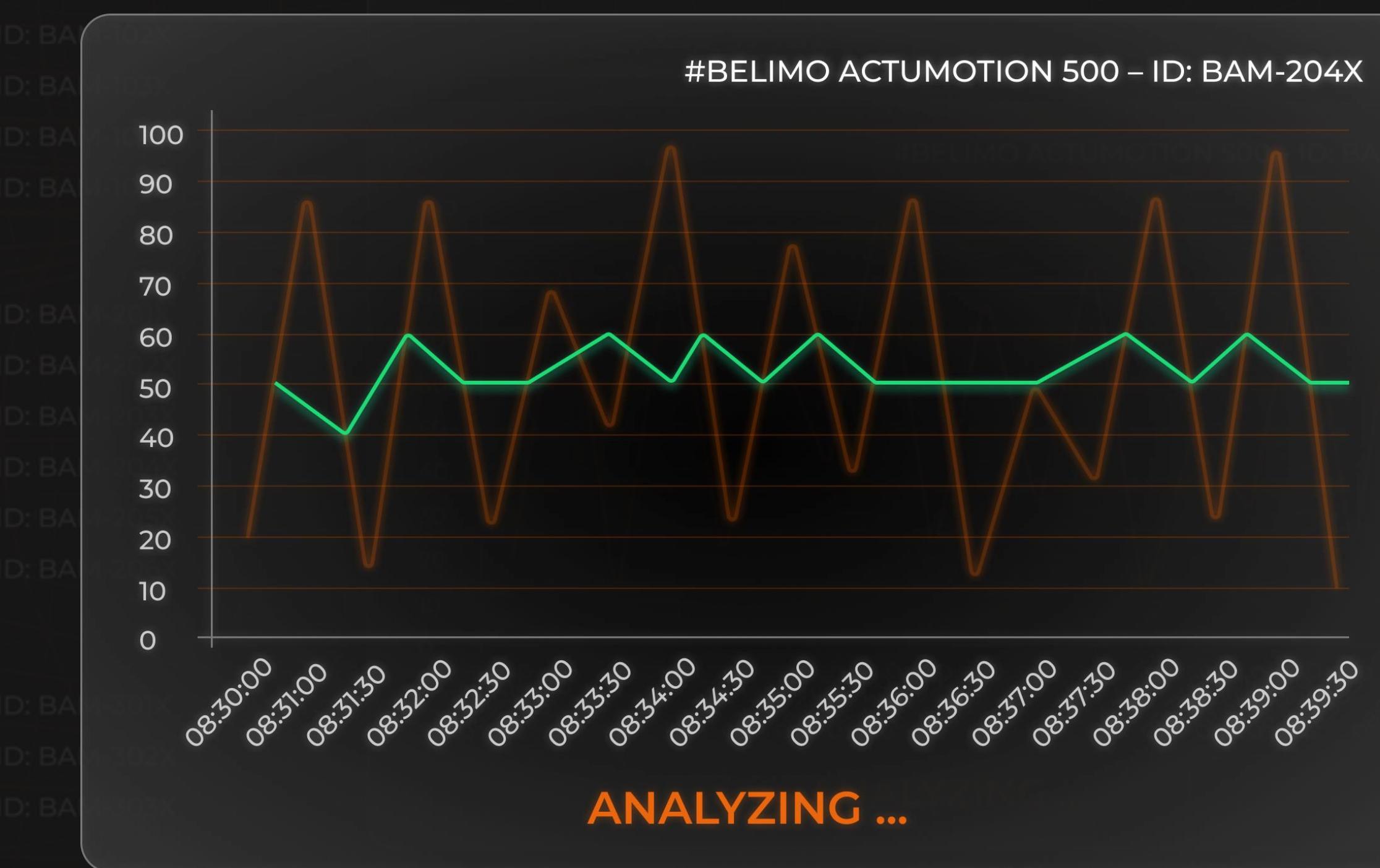
OPTIMISE

PUSH OPTIMISATION TO DEVICES

>> ALERT: TEMPERATURE FLUCTUATION DETECTED! <<
ZONE: 2ND FLOOR | OFFICE SPACE
DEVIATION: ±3.5°C
CAUSE ANALYSIS:
[1] AIRFLOW OVERCOMPENSATION DUE TO EXTERNAL TEMP SHIFTS.
[2] INCREASED OCCUPANCY TRIGGERING EXCESSIVE COOLING.
[3] POSSIBLE DELAY IN ACTUATOR RESPONSE (DEVICE ID: BVA-20B).
SUGGESTED FIX:
>> ADJUST DAMPER RESPONSE DELAY BY 0.8S
>> RECALIBRATE VALVE FLOW



ANALYZING ...



BELIMO SMART SENCE

SIEMENS OFFICE

- 1ST FLOOR PLAN
- BELIMO ACTUMOTION 500 – ID: BAM-201X
- BELIMO ACTUMOTION 500 – ID: BAM-202X
- BELIMO ACTUMOTION 500 – ID: BAM-203X
- BELIMO ACTUMOTION 500 – ID: BAM-204X
- BELIMO ACTUMOTION 500 – ID: BAM-205X
- BELIMO ACTUMOTION 500 – ID: BAM-206X

● 2ND FLOOR PLAN

- BELIMO ACTUMOTION 500 – ID: BAM-201X
- BELIMO ACTUMOTION 500 – ID: BAM-202X
- BELIMO ACTUMOTION 500 – ID: BAM-203X
- BELIMO ACTUMOTION 500 – ID: BAM-204X
- BELIMO ACTUMOTION 500 – ID: BAM-205X
- BELIMO ACTUMOTION 500 – ID: BAM-206X

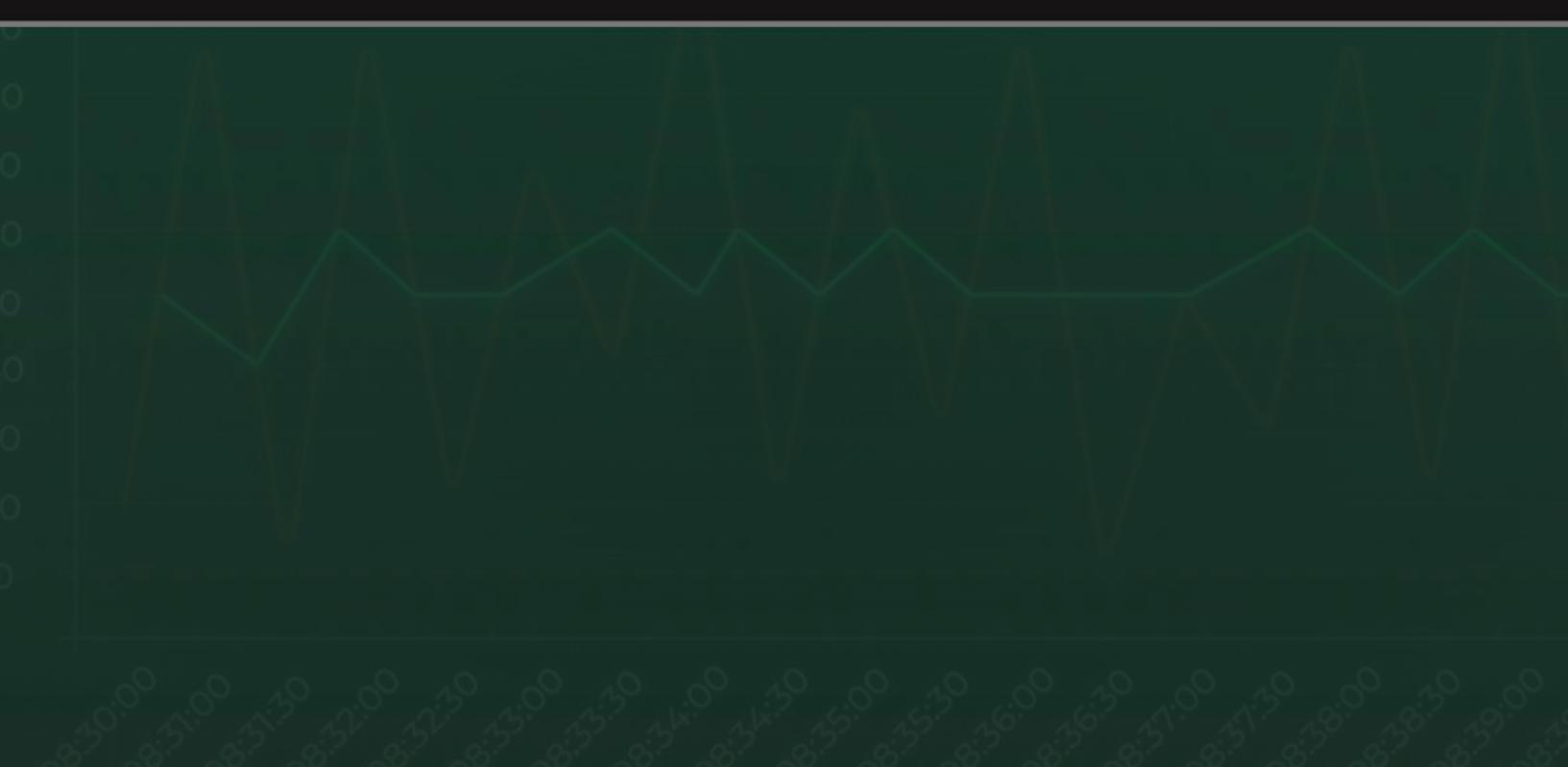
● 3RD FLOOR PLAN

- BELIMO ACTUMOTION 500 – ID: BAM-301X
- BELIMO ACTUMOTION 500 – ID: BAM-302X
- BELIMO ACTUMOTION 500 – ID: BAM-303X

2ND FLOOR

OPTIMISATION INDEX

YOUR DEVICES HAVE BEEN OPTIMIZED!



ANALYZING ...

PUSH OPTIMISATION TO DEVICES

>> ALERT: TEMPERATURE FLUCTUATION DETECTED! <<
ZONE: 2ND FLOOR | OFFICE SPACE
DEVIATION: ±3.5°C
CAUSE ANALYSIS:
[1] AIRFLOW OVERCOMPENSATION DUE TO EXTERNAL TEMP SHIFTS.
[2] INCREASED OCCUPANCY TRIGGERING EXCESSIVE COOLING.
[3] POSSIBLE DELAY IN ACTUATOR RESPONSE (DEVICE ID: BVA-20B).
SUGGESTED FIX:
>> ADJUST DAMPER RESPONSE DELAY BY 0.8s
>> RECALIBRATE VALVE FLOW





What's the Business Case?

What's the Business Case?



VALUE PROPOSITION

USE AI AND 9 YEARS OF DATA TO OPTIMIZE HVAC, **CUTTING COSTS, PREVENTING FAILURES, AND MAXIMIZING EFFICIENCY.**



CUSTOMER

BUILDING OWNERS

LOWER COSTS & MEET SUSTAINABILITY GOALS

HVAC SERVICE PROVIDERS

PREDICTIVE MAINTENANCE & FEWER FAILURES

FACILITY MANAGERS

LIVE MONITORING & EFFICIENCY INSIGHTS



MONETIZATION STRATEGIES

PERFORMANCE-BASED PRICING (SAVINGS SHARING)
CARBON CREDIT PROGRAMS
WHITE-LABEL LICENSING & API SALES



POTENTIAL ENERGY SAVING IN CHF

POTENTIAL **3.6 TO 15 MILLION** CHF ANNUAL SAVINGS PER OPERATOR !!

ASSUMING:

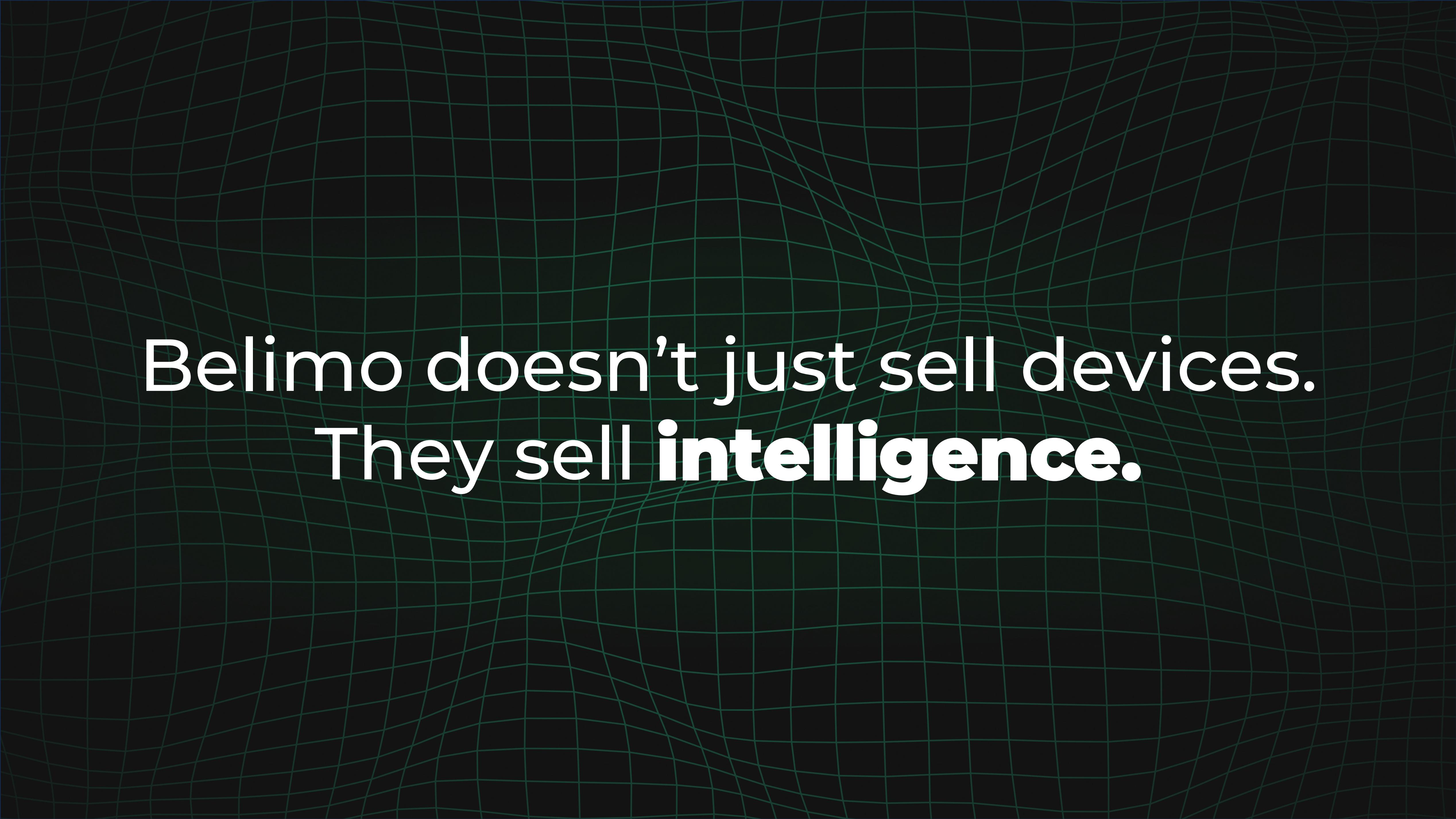
0.5% ENERGY SAVINGS

115 BELIMO DEVICES (5-20 PER SYSTEM)

2 KW ENERGY CONSUMPTION PER DEVICE

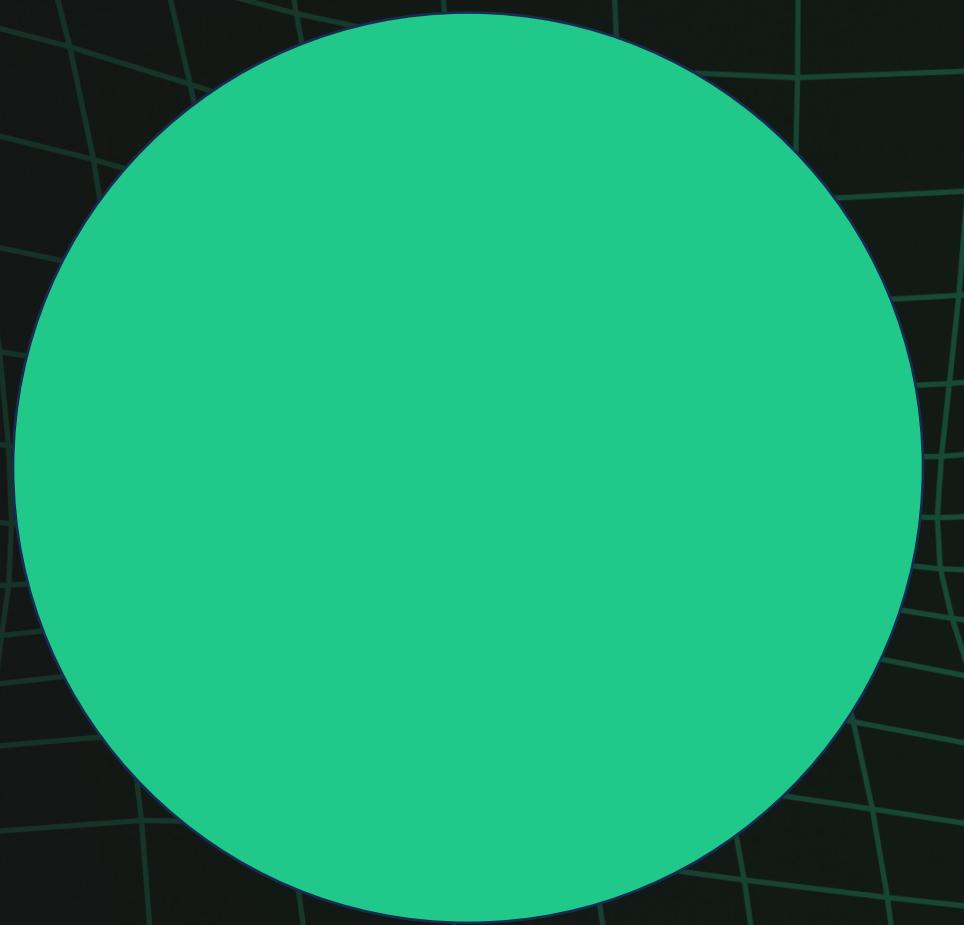
4,360 OPERATING HOURS PER DEVICE ANNUALLY

(BASED ON 12 HOURS/DAY)



Belimo doesn't just sell devices.
They sell intelligence.

GITHARD Team



LIV
Pitch Perfect



OLIVER
GitBreaker



FLORIAN
DataLicious



EMANUEL
Designosaurs