

Eficiență energetică, Timisoara, 3 Iulie 2019



Power Quality

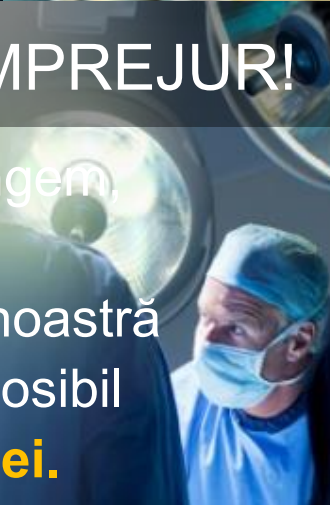
CATALIN CRIVINEANU– Partner Account Manager





UITAȚI-VĂ ÎMPREJUR!

Tot ceea ce atingem,
facem, sau
trăim în lumea noastră
modernă este posibil
datorită energiei.





Eaton – prezenta semnificativa in Romania



Vanzari:

EATON ELECTRIC SRL –

fondata in Decembrie 1997 (sub
denumirea de Moeller Electric)



Productie:

EATON ELECTROPRODUCTIE –
fondata in 2002; localizata langa Baia
Mare (Sarbi + Busag)

COOPER INDUSTRIES ROMANIA –
localizata langa Arad

Distribuția de energie electrică și protecția circuitelor

Furnizează o energie electrică fiabilă, eficientă și sigură acolo unde este nevoie



**Soluții
de medie și joasă tensiune**



**Tablouri și cutii de
distribuție**



**Înteruptoare
automate**



Siguranțe



Transformatoare

Iluminat și securitate

Eficiență îmbunătățită, confort și siguranță în casă și la locul de muncă



**Iluminat
ascuns**



**Iluminat
ambiental**



**Iluminat
de exterior**



**Iluminat
de urgență**



**Sisteme
antiincendiu**

Soluții pentru medii grele și cu risc de explozie

Oferă fiabilitate și siguranță
pentru a preveni întreruperile producției



Carcase



Componente și soluții
pentru control industrial



Iluminat



Clădiri comerciale - cutii
cabluri
și fittinguri



Instrumentație



Comunicații
pentru medii
cu risc de

Control și automatizare

Îmbunătățește eficiența de operare și permite echipamentelor să funcționeze cu performanțe de vârf



Centre de control motoare de medie și joasă tensiune



Aționări cu convertizoare de frecvență



Contactoare și startere



Interconectivitate și I/O



Automatizări și senzorială



Soluții de cablare a panourilor

Simplified, compact &
lower cost machine

Reliable machine

Safer machine

Energy efficient
machine

Benefit with SmartWire-DT: Manufacturing and commissioning



- Control Wiring in cabinets requires lots of effort for design and assembly.
- Test and commissioning is extremely time-consuming.
- Additional functions are difficult to install during operation.



- Control wiring becomes obsolete
- Reduces assembly time, less mistakes
- Faster testing and commissioning
- Easier trouble shooting



Simplified, compact &
lower cost machine


Reliable machine

Safer machine

Energy efficient
machine

SmartWire-DT: Application examples





Application example

A more simplified machine, designed and delivered fast

Customer challenge

- Fully automated potato sorting plant
- Switching and protecting 250 drives
- Reducing wiring to a minimum for a less error-prone system

Eaton solution

- Eaton's SmartWire-DT used for more efficient wiring and cross wiring

Business outcome

- Elimination of wiring errors
- Testing/ commissioning performed much faster
- Cabling efforts cut to an eighth
- Cross wiring reduced from 1km to 50m

- Enhanced data transparency



Application example

Simplified automation on the production line of a global auto manufacturer

Customer challenge

- Automation of car body production line with central control and monitoring unit

Eaton solution

- Eaton's SmartWire-DT used for efficient wiring of 1,200 motor starters

Business outcome

- 180 hour time saving compared to conventional solutions
- Wiring reduced from 12,000 to 700 meters



Powering Business Worldwide

3 phase UPS

91PS / 93PS

8- 40 kW

Efficiency > 96%

Modular and compact design

ESS, HS, ABM, Internal bat.

Hot swap/scale

Cloud and Virtualization ready



Premium (Modular)

Powering Business Worldwide

93PM

30- 500 kW

Efficiency up to 97%

Modular and compact design

ESS, HS, ABM, Internal bat.

High end software & security



9395P

250-1200 kW

Efficiency > 96%

Modular and compact design

ESS /VMMS/HS

Distributed and Centralized topologies



93E

15-80 kVA

15, 20;30; 40, 60, 80 kVA @ pf 0,9

Efficiency up to 94%

Internal batteries

HS/ABM

Eco mode: 98%

Parall units

General purpose



93E

100-200 kVA

100,120, 160, 200 @ pf 0.9

Efficiency up to 94%

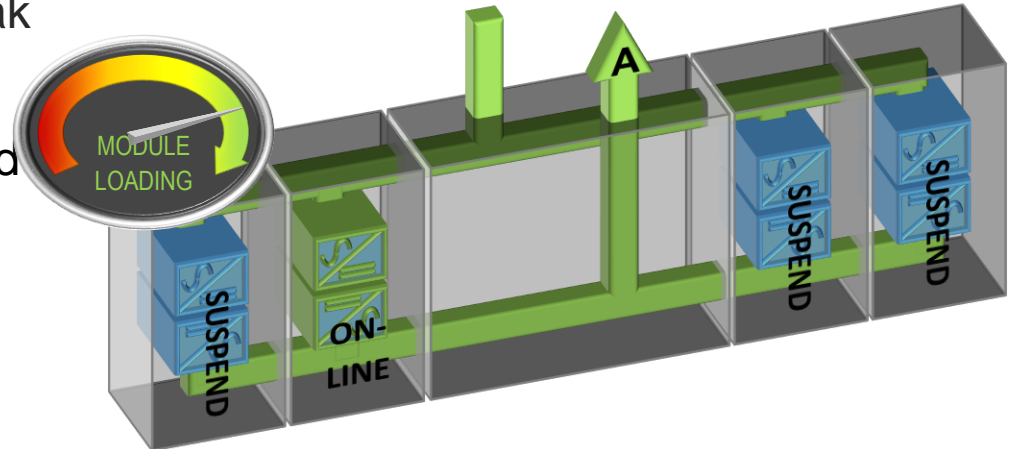
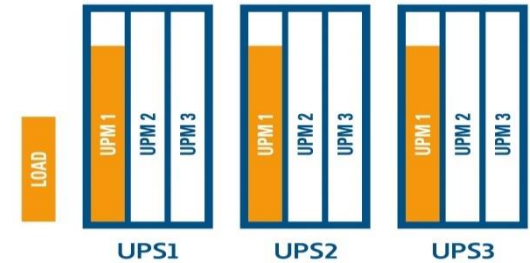
High Efficiency mode →98.5%

ABM & Hot Synch up to 4 units

LCD

Energy Saving Technologies - VMMS

- Variable Module Management System (VMMS) brings up efficiency and optimizes the load levels of power modules by suspending extra UPS capacity
- Optimised for 50% load level peak efficiency/module
- All control logic is active, suspended modules are synchronised all the time and ready to go online when required



Energy Saver System (ESS) – 99%

The year
ESS became
available

2009



Amount of UPS
capacity in kVA
using ESS mode

879,000 kVA



Energy
saved
every day

>348,000 kWh



Number of UPS
units operating
in ESS mode

>1,500



Resulting overall
availability of UPS
units in ESS mode

>99.999%



Overall
reduced CO₂
emissions

95,000,000 kg



Number of sites
using ESS

>150



Total time
of ESS
operation

>23 million hours



Overall energy
saved by units

214 GWh



EATON

Powering Business Worldwide

A partnership of environmental excellence



By partnering with **Nissan** amongst others, we provide energy storage solutions in the full range of energy capacity.

RESIDENTIAL



COMMERCIAL



INDUSTRIAL

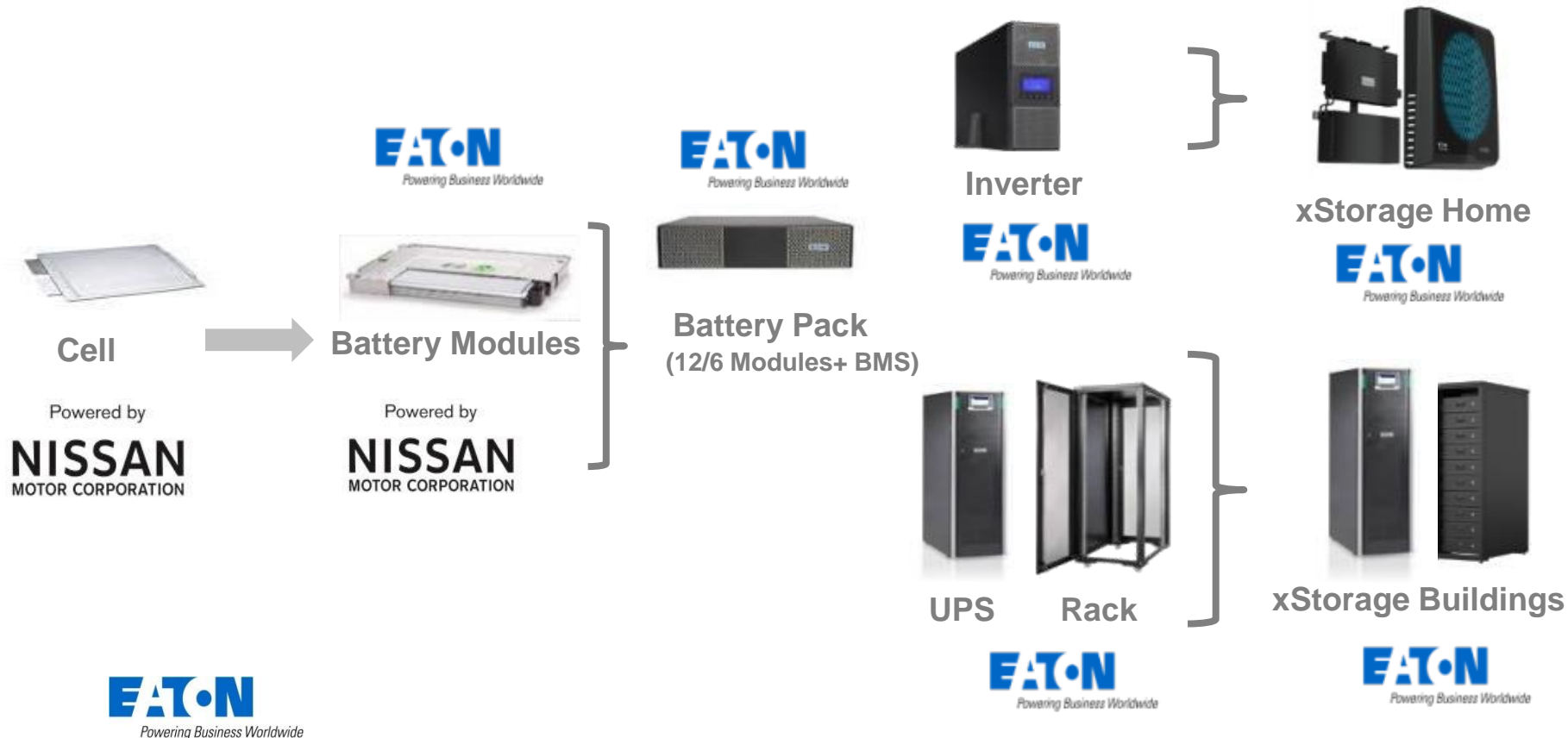


Expertise - Reach - Dependability - Diversity - Footprint - Portfolio

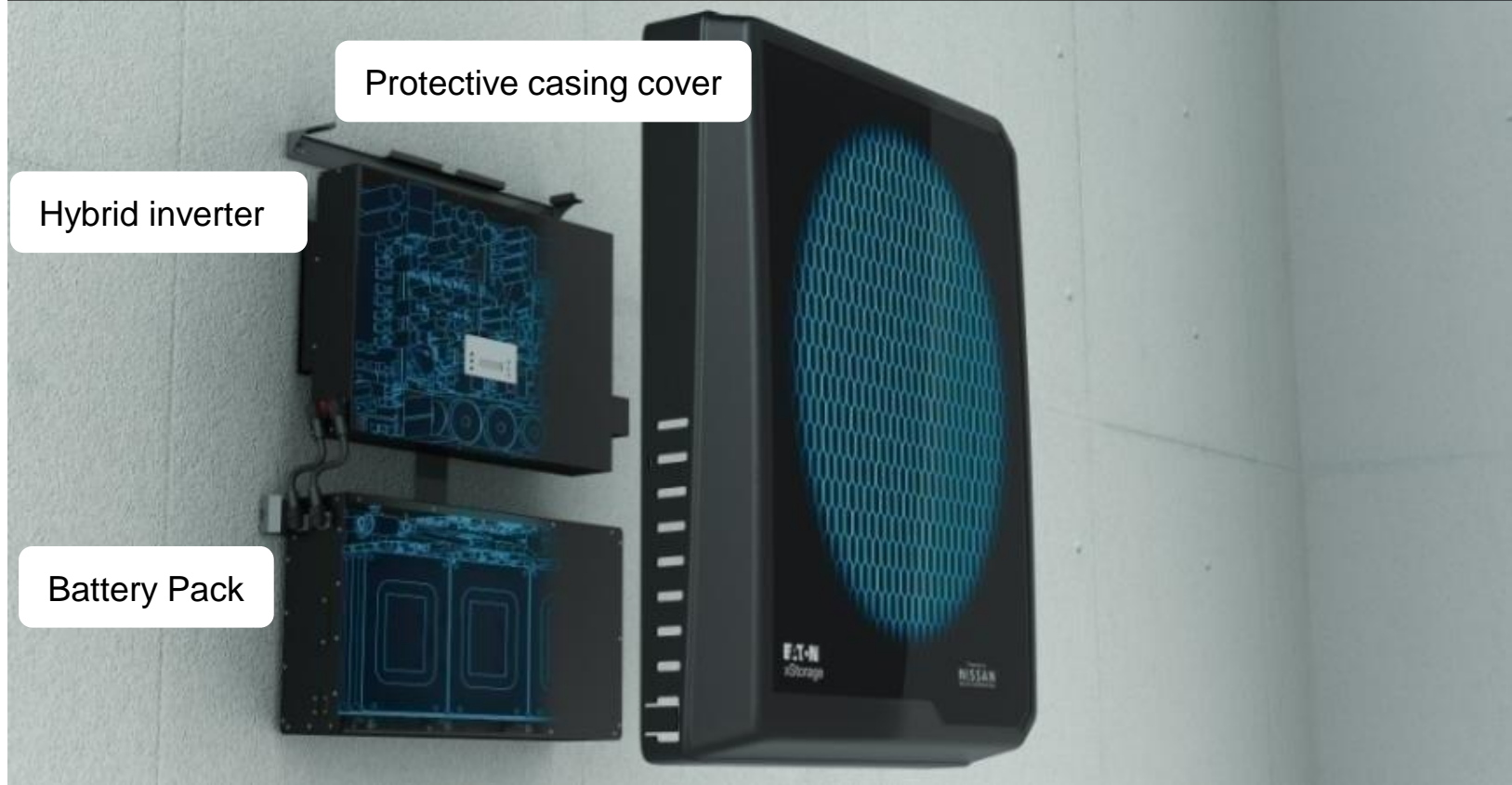
Eaton can partner with you to help you achieve substantial benefits.



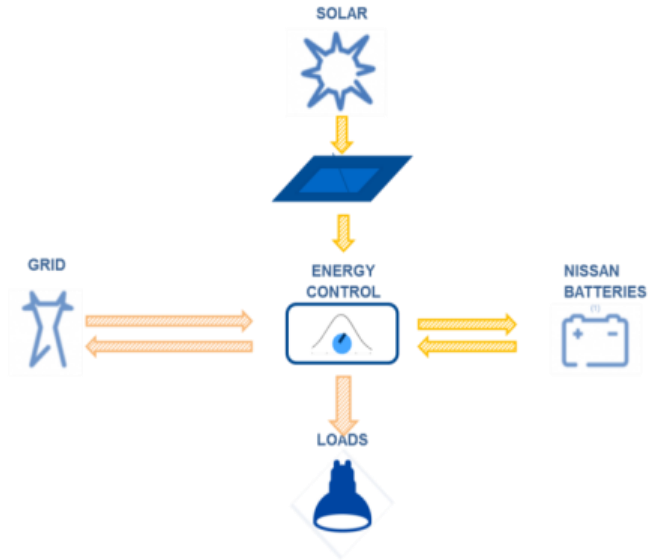
Eaton with Nissan Technology Partnership



The xStorage Home system



Customer Installation of Eaton Nissan energy storage solution for Buildings with EV battery pack



NISSAN

We have been selected...

Amsterdam Arena project



During matches, sporting fixtures, or concerts, a stadium or an arena's demand for electricity typically ramps by several megawatts over a matter of hours, in order to power large loads like lighting, catering and broadcasting equipment.

Many stadiums operate large events with their critical load supported by generators.

Eaton's Energy Storage System is designed to

- reduce the use of generators and provide clean and dependable energy on event day.
- support reduced energy costs by minimizing peak demand charges
- improve network stability
- reduce infrastructure costs while providing critical system power requirements

BRACE YOURSELF!



EATON IS COMING!

Feel free to email your questions to:
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