



Schneider Electric

Solar Megoldások

A Schneider Electric energia- és automatizálási digitális megoldásokat kínál a hatékonyság és a fenntarthatóság érdekében

Főbb adatok

5% a K+F-re fordított bevételekből

€28.9 millárd

2021 bevételek

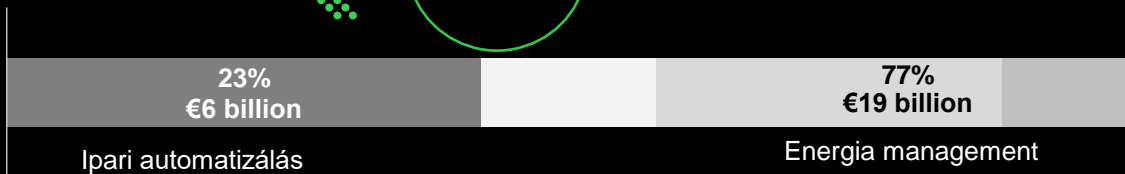
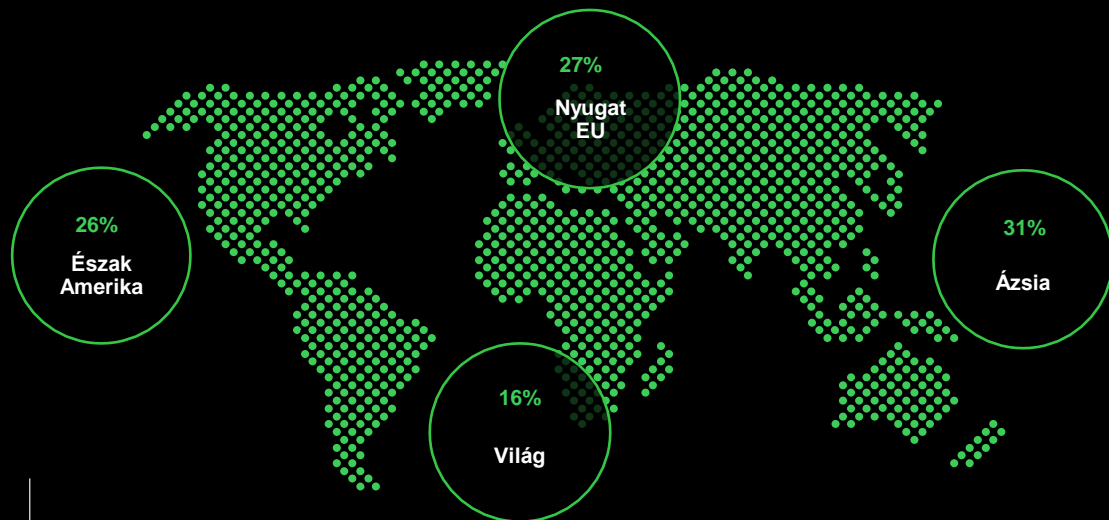
41%

Az új szegmensekből

128,500+

alkalmazottai több mint 100 országban

Kiegyensúlyozott globális jelenlét.



Schneider Electric Magyarországon



A MAGYAR KORMÁNY
STRATÉGIAI PARTNERE,
ENERGIAHATÉKONYSÁGI
SZAKÉRTŐJE.



Schneider Electric Hungária Villamossági Zrt.
BUDAPEST
Front Office
Regional Entities



M&C Energia Kft.
BUDAPEST
Consultancy services and procurement



Schneider Electric Hungária Villamossági Zrt.
GYÖNGYÓS
Gyöngyös factory
Busbar trunking systems

Schneider Electric Hungária Villamossági Zrt.
ZALAEGERSZEG
Zalaegerszeg factory
Switchboards, circuit breakers



SE-CEE Schneider Electric Kft.
SZIGETSZENTMIKLÓS
Regional distribution center



Schneider Electric Hungária Villamossági Zrt.
ZALAEGERSZEG
MG Zala factory
Mini circuit breakers, accessories



Schneider Electric Energy Magyarország Villamos Kapcsolóberendezések Gyártó Kft.
KUNSZENTMIKLÓS
Kunszentmiklós factory
Switchgears, cabinets



~300 mrd Ft árbevétel

~2000+ Munkavállaló

~400 Partner

TOP cégek között

A magyar kormány
stratégiai partnere

Life Is On

Schneider
Electric

Merre tartunk?

Ökoszisztéma

- Konnektivitás
- Egyszerű installáció
- Akkumulátor kompatibilitás



Teljesen integrált (otthoni) energiamenedzsment rendszer

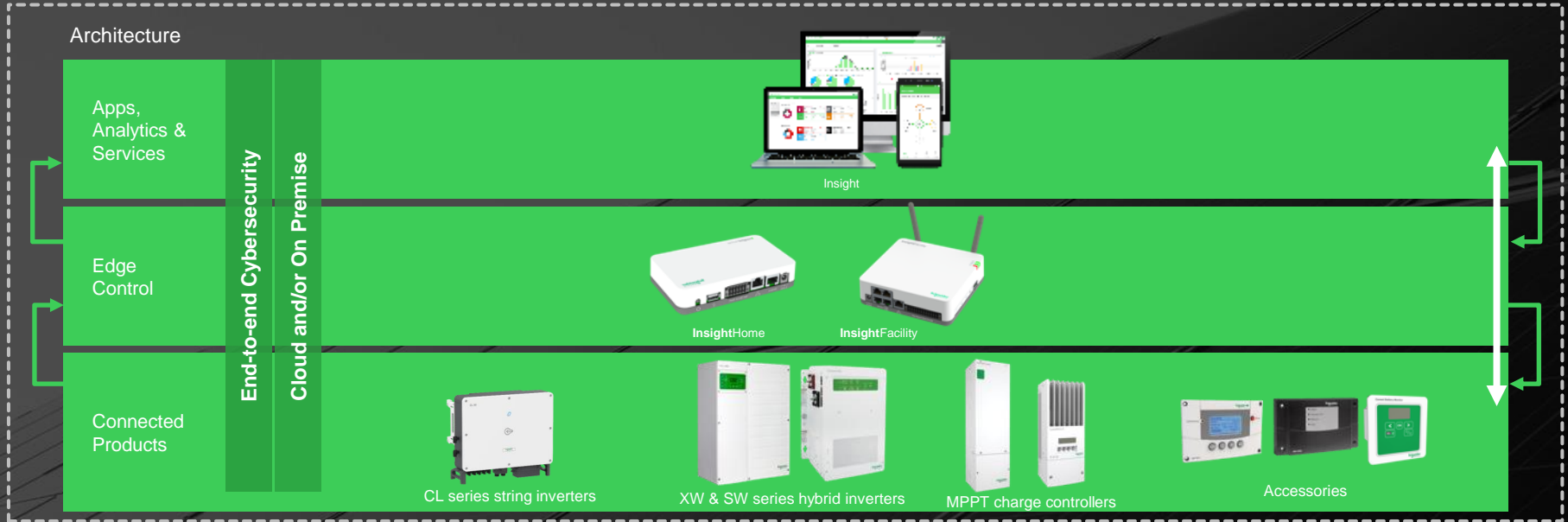
- Integrált load monitoring & control
- Schneider Electric Wiser™ integráció
- Tarifaoptimalizáció
- Okoshálózat és VPP integráció



Új termékek

- Új inverterek
- Insight termékcsalád

SE Solar Architecture logikája



InsightCloud structure

Home

- One single entry point for all sites
- Sites status overview in Map and Table mode
- Energy totalizers

Performance

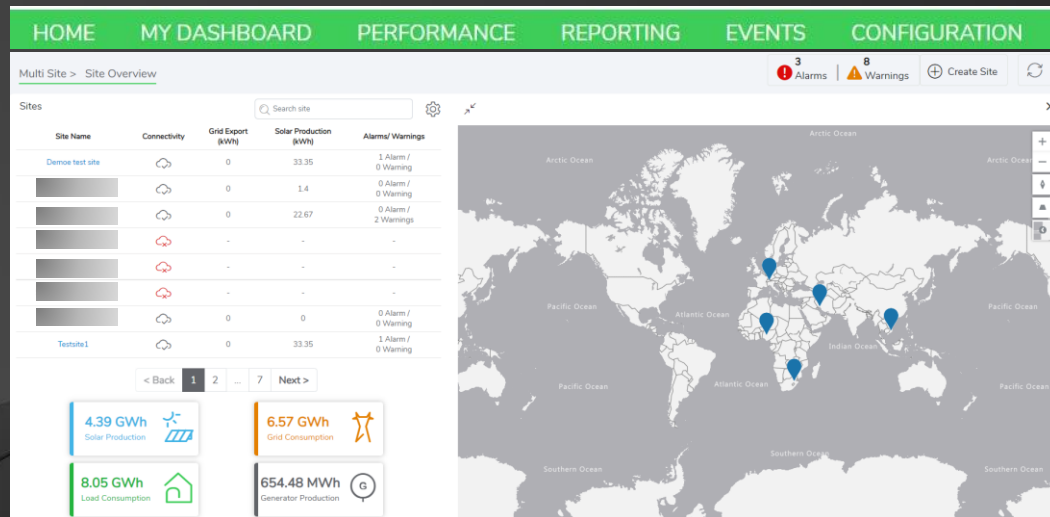
- Analyze performance in many different ways
- Site Overview: Power Flow and Advanced Analysis
- Multi-Site Comparison Analysis
- Energy Source Analysis, per site's device (SCCs, Solar Inverters, Inv/Chg, Batt)
- Energy Source Comparison (per site's device type)

Reporting

- Energy Yield, Performance Summary, Alarms & Warnings, or Consolidated Reports

Events

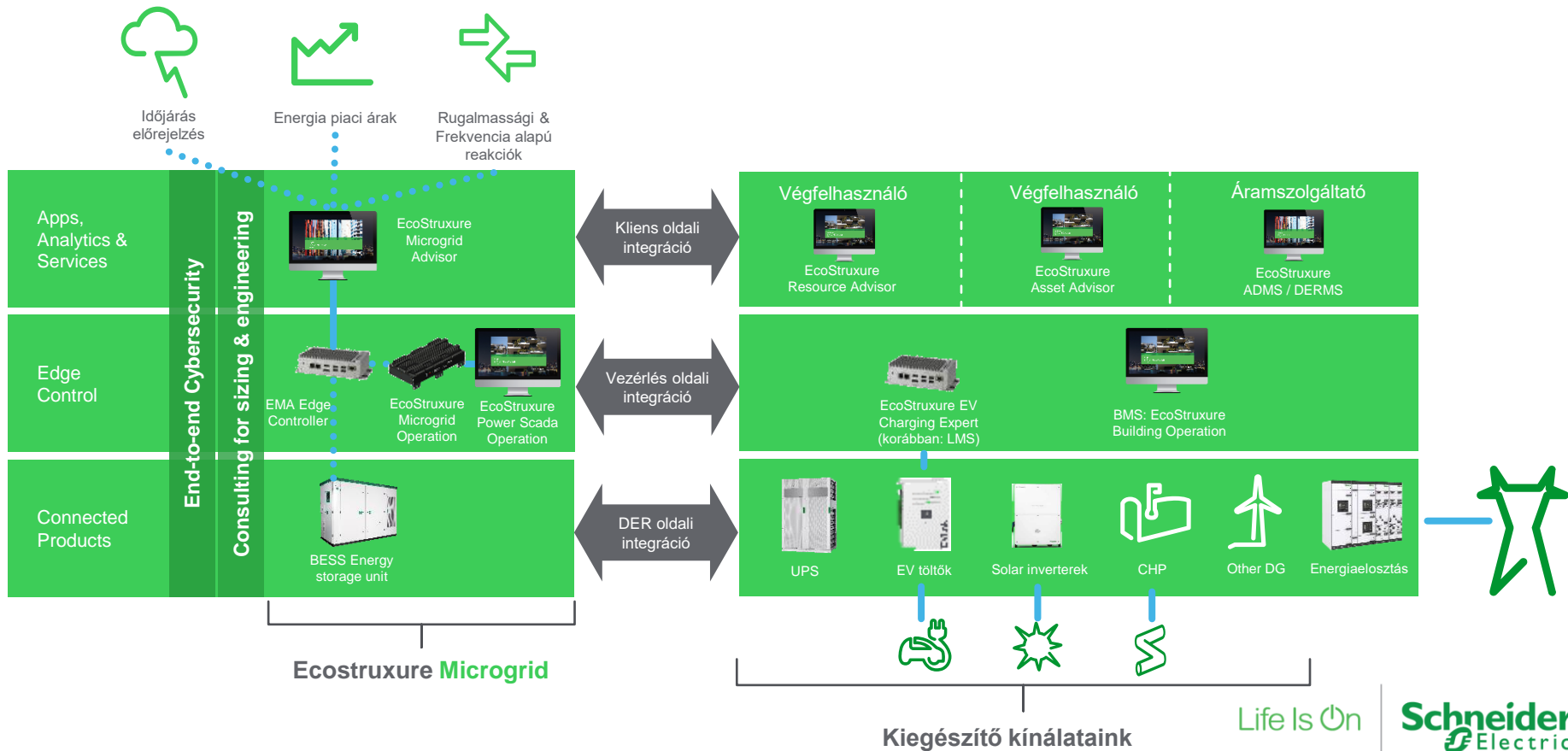
- Analyze and keep track of warnings and alarms on your sites



Configuration

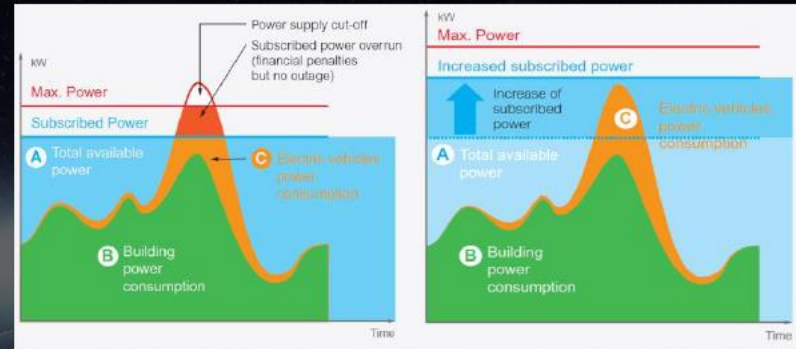
- Per site: Site & Device settings
- Advanced User Management
- e-mail Notification Management
- Financial settings
- Firmware

Microgrid Architectúra



Terhelésmenedzsment nélkül:

- Bírágolás veszélye
- Lekötés növelésének költségei



EcoStruxure EV Charging Experttel:

- Kritikus töltöttségű és VIP autók gyors töltése
- Elosztott fázis felhasználás
- Zónákra osztott teljesítményfelvétel
- Statikus és dinamikus terhelésmenedzsment
- Töltési energia korlátozása





Conext™ Family

SOLAR megoldások

Conext™ CL-33 / 50

Megújult termék flexibilitási és a skálázhatósági céllal



- 33 / 50 kVA
- 3-Ph Grid-tie, transformerless
- Multi-MPPT (3 / 5)
- Outdoor enclosure (IP66 & C5)
- Serial communications RS485 - Modbus
- **Maximum efficiency 98.6% / 98.7 %**
- Reactive power capability ($\cos\phi = 0.8$ leading to 0.8 lagging)
- MPPT harvest efficiency > 99%
- String monitoring included
- Operating altitude up to 4000 m
- UI through Bluetooth and InsightMobile SE app with datalogger

Otthoni és Üzleti megoldások teljes skálája

Lakossági és kis üzleti



Conext™ XW+ & XW Pro
8.5 kW for IEC standards



Conext™ SW
4kW (24 or 48V)
IEC standards



MPPT 60
(150V)



MPPT 80 / 100
(600 V)



Disconnect RS

Kiegészítők

- Conext SCP
- Conext AGS
- Conext Batt Monit
- Conext PDP
- ...

User Interfaces : Insight, az energiamenedzsment platform



Helyi



Felhő



Mobil

InsightHome



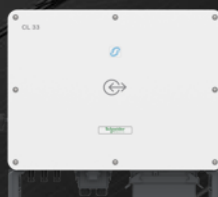
InsightFacility



Üzleti és ipari



Conext™ CL - 50
50kW for IEC standard



Conext™ CL - 33
30kW for IEC standard



Conext™ XW+
9 units, 75.6kW

Life Is On

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Monitoring Platform

Edge Control Devices

Insight Home and Insight Facility are Schneider Electric's new generation on-site monitoring, configuration and management solution for Residential, C&I, Solar and Storage Systems.

New Local Monitoring & Management System

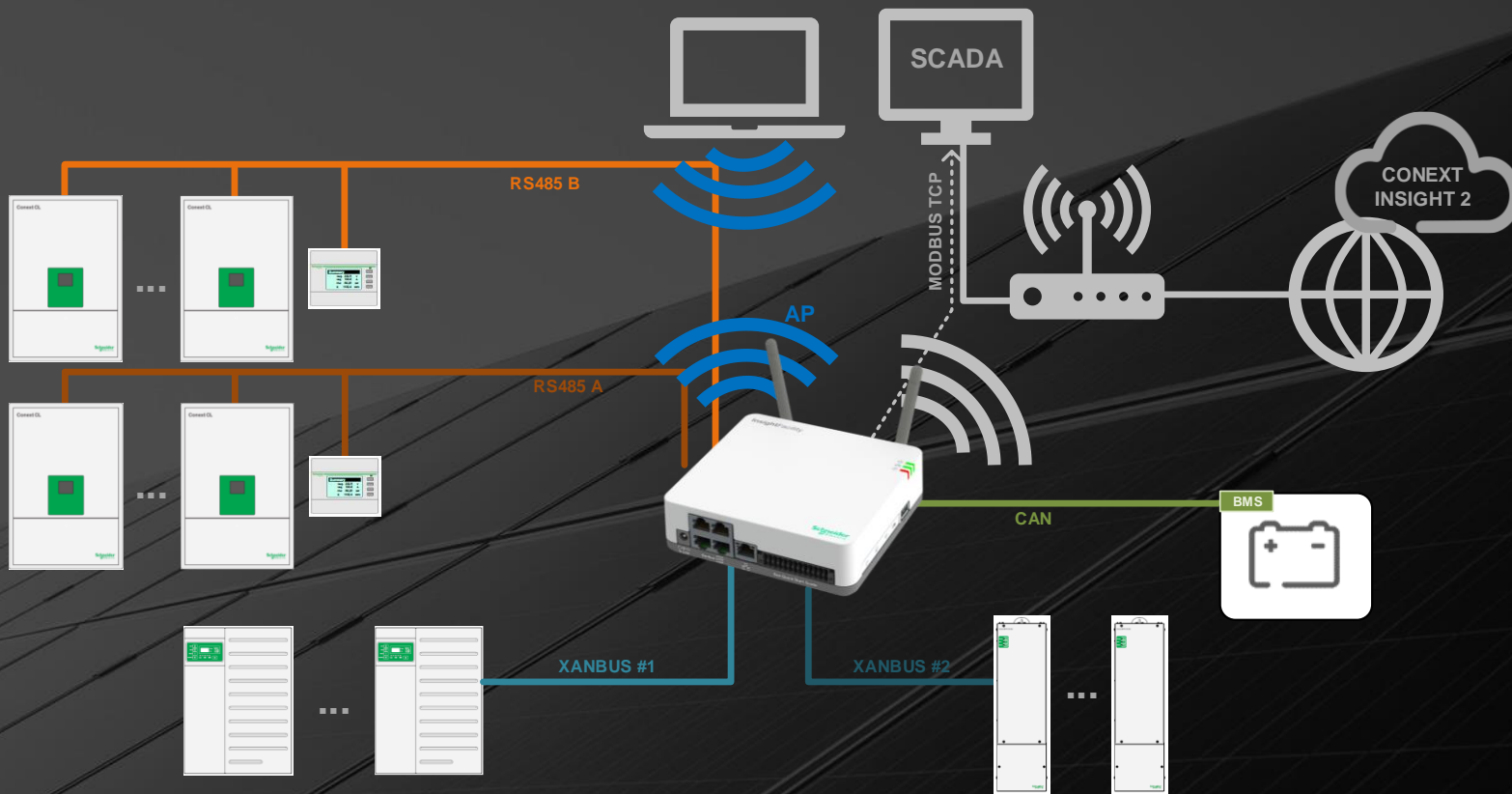
- **Easy access** to device status during operations, event tracking, management features to guide users through process of resolving warnings
- Simple and efficient **firmware upgrade with bulk** update and advanced progress tracking
- **Strong communication** capabilities

Edge Control Features:

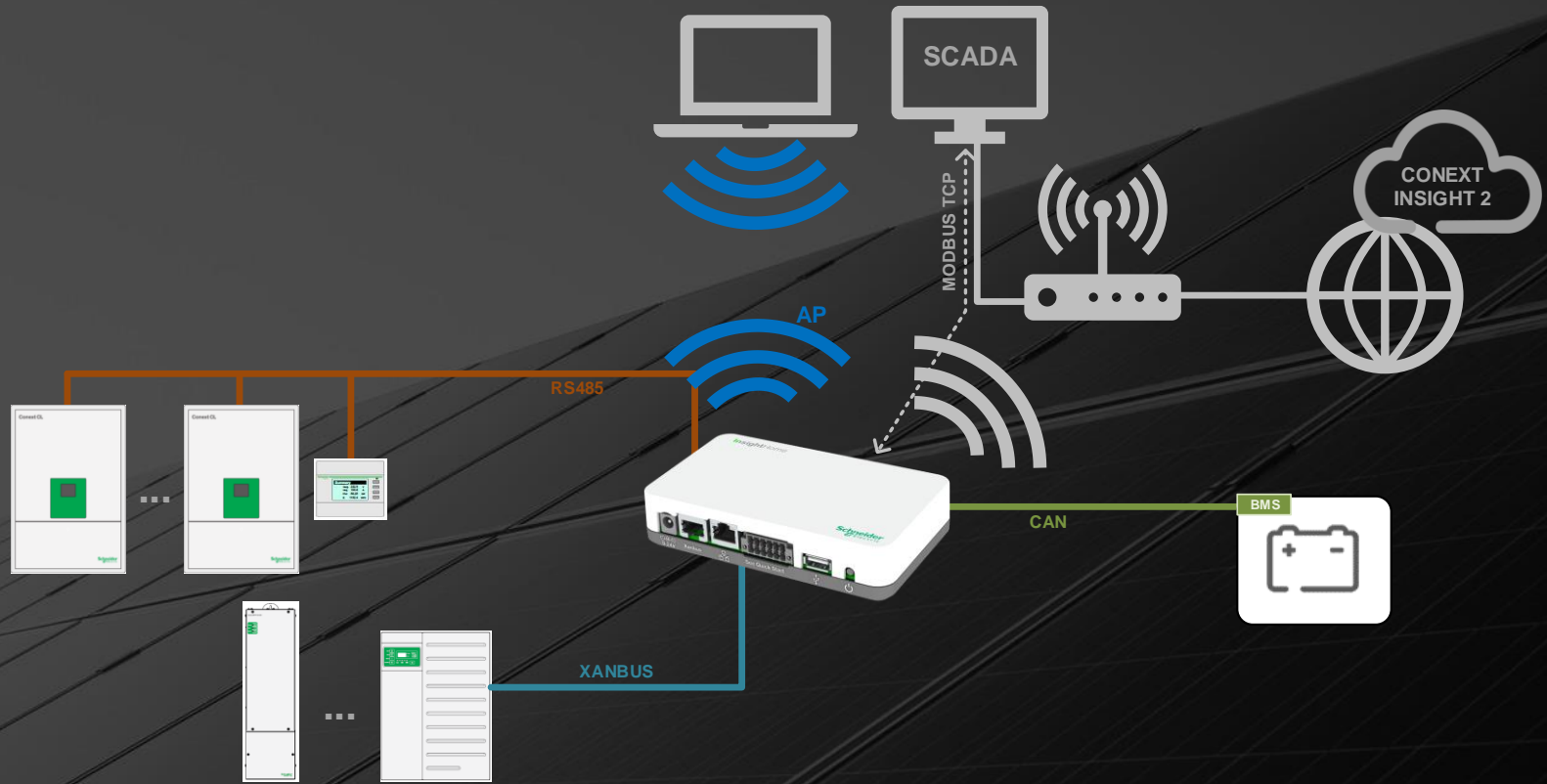
- Local system Configuration and Management
- Bulk firmware upgrade
- Live System Monitoring
- Remote settings & upgrades paired with Insight Cloud
- BMS integration
- VPP concept for DER dispatch using IEEE 2030.5
- Key on control for **Self-Consumption**



Edge Control (Insight Facility): Enhanced Communication Capabilities (I)

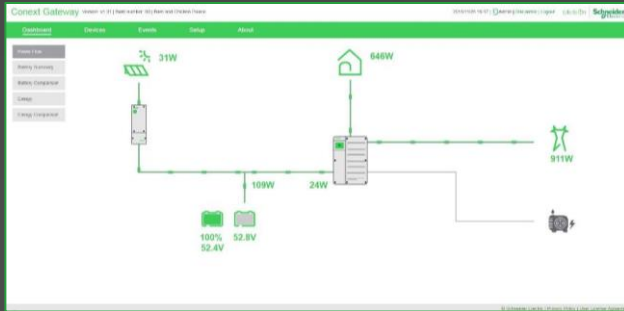


Edge Control (Insight Home): Enhanced Communication Capabilities (II)



UI Overview : Quick Access to all your key system information

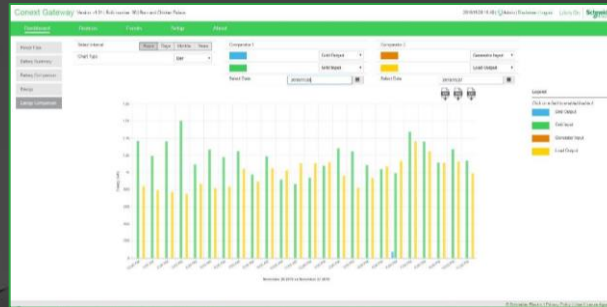
All new Dashboard Views allow for seamless toggling between power flow diagrams, system performance trackers and device status screens



Live Power Flow Display

The new power flow diagram allows users to quickly see the status of each component in their system.

Clicking on any component on the display will also take you to that components status page.



Powerful Local Monitoring

You can now analyze your battery voltage, temperature and state of charge minute by minute to track and manage how your battery is being used on each one of your sites.

The Conext Gateway also allows you to carefully monitor and track load, solar production and generator run times.



Device Status Quick View

On the Device Overview page you can quickly check up on the actual operating states of each of the devices connected to your system.

This is where you will go to take a closer look at parameters like grid or generator voltage and frequency.

UI Overview : A New Approach to System Configuration

Configuration Wizards

The Insight Local user interface will introduce intuitive system configuration wizards, designed to guide installers through the configuration of a new system step-by-step.

Simplified Configuration Screens

In addition to the Configuration Wizards, the Insight Local offers new and intuitive menu structures to allow installers to go and fine tune all of their system settings to meet their exact requirements.

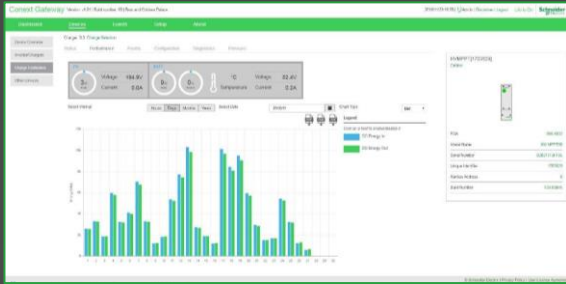
The screenshot displays the 'Conext Gateway' configuration interface for a device model CSW4048E 0. The interface is organized into several sections:

- Header:** Shows 'Conext Gateway' with version and build information, a date and time stamp (2020/02/21 11:46), user options (Admin | Disclaimer | Logout), and the Schneider Electric logo.
- Navigation:** A green bar contains 'Dashboard', 'Devices', 'Events', 'Setup', and 'About'. Below it, a sidebar lists 'Device Overview', 'Inverter/Chargers', 'Charge Controllers', and 'Other Devices'. The main menu includes 'Status', 'Performance', 'Events', 'Configuration', 'Diagnostics', and 'Firmware'.
- Configuration Wizard:** A 'Basic' tab is active, showing a 'Controls' section with three rows of settings:
 - Inverter Enable/Disable:** A toggle switch is turned on, with 'Enabled' selected and an 'Apply' button.
 - Charger Enable/Disable:** A toggle switch is turned on, with 'Enabled' selected and an 'Apply' button.
 - Force Charger State:** A dropdown menu is set to '-- Select an option --' with an 'Apply' button.
- AC Support:** A section with various sliders and input fields:
 - AC Support Voltage:** A slider set to 53 V.
 - Peak Load Shaving Current:** A slider set to 24 A.
 - Load Shave Stop:** A time selector set to 12:00 AM.
 - Load Shave Start:** A time selector set to 12:00 AM.
 - Peak Load Shaving Delay:** A toggle switch set to 'Disabled'.
 - Peak Load Shaving Enable:** A toggle switch set to 'Disabled'.
 - State of Charge Level to Start AC Support:** A slider set to 80 %.
 - State of Charge Level to Stop AC Support:** A slider set to 50 %.
 - Time Delay to Enter AC Support on SOC:** A slider set to 10 s.
 - Time Delay to Exit AC Support on SOC:** A slider set to 10 s.
- Device Information:** A panel on the right shows 'CSW4048E 0 Online' with a device image and a table of details:

| | |
|-------------------|----------------|
| FGA | 865-4049-91 |
| Device Name | CSW4048E |
| Serial Number | 00001844375901 |
| Unique Identifier | 276313 |
| Xanbus Address | 2 |
| Build Number | 3.02.00tm1 |

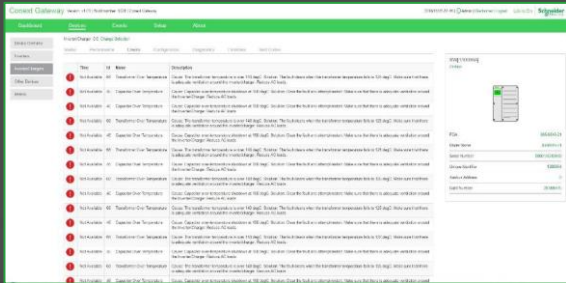
UI Overview : Reinvented Device Management

A lot of other great features for easy management



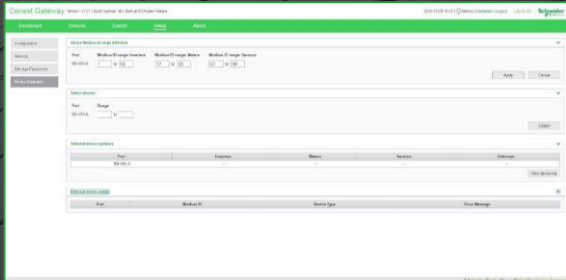
Status and Performance Screens

The Conext™ Gateway makes it as easy as possible for users to access device status and performance screens.



Event Tracking and Management

With the Conext™ Gateway we've added a lot more detail in terms of the faults and warnings to help guide users through the process of resolving the faults or warnings they get on their system.



Device Level and Bulk Firmware Update Management

The Conext™ Gateway allows for simplified on site management of device upgrades. We also built in the ability to manage device family level firmware updates with advanced progress tracking functionality.

InsightCloud, our Cloud based platform



Solar & Storage Monitoring

InsightCloud is a cloud-based platform for installers to remain connected to and manage a portfolio of customer sites. It is a simple tool for users to track their system performance remotely.

The **InsightCloud** brings solar monitoring to a whole new level:

- **Installation overview** –allows you to see active events, track power levels and see basic system information. A simple, useful snapshot of system performance.
- **Take a closer look at how your system is performing:** advanced monitoring of installation's energy sources (panels, battery, generator, load and grid) and reporting from anywhere in the world at anytime.
- **Bi-directional system:** read your data and configure your equipment directly on site or remotely.

InsightCloud structure

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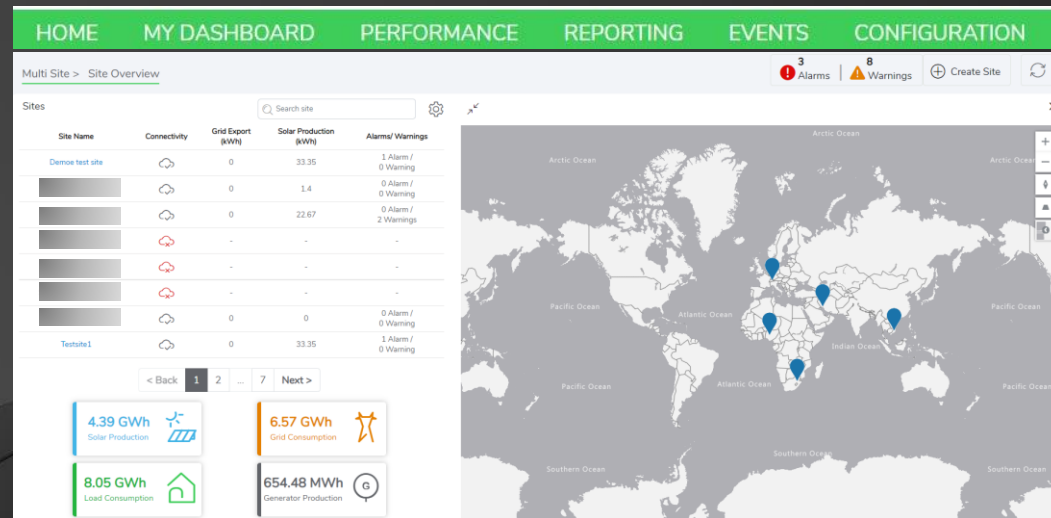
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Configuration

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- Advanced User Management
- e-mail Notification Management
- Financial settings
- Firmware

InsightMobile SE

A simple way to monitor your site from your hand...



Interactive Realtime power flow visualization

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Snapshot view of solar system

Life is On | Schneider Electric

Snapshot view of battery status

Life is On | Schneider Electric

Historic energy views

Life is On | Schneider Electric

Powerful event tracking

Life is On | Schneider Electric

... one Single App to connect to CLs, to Edge Control Devices or to InsightCloud



InsightMobile SE

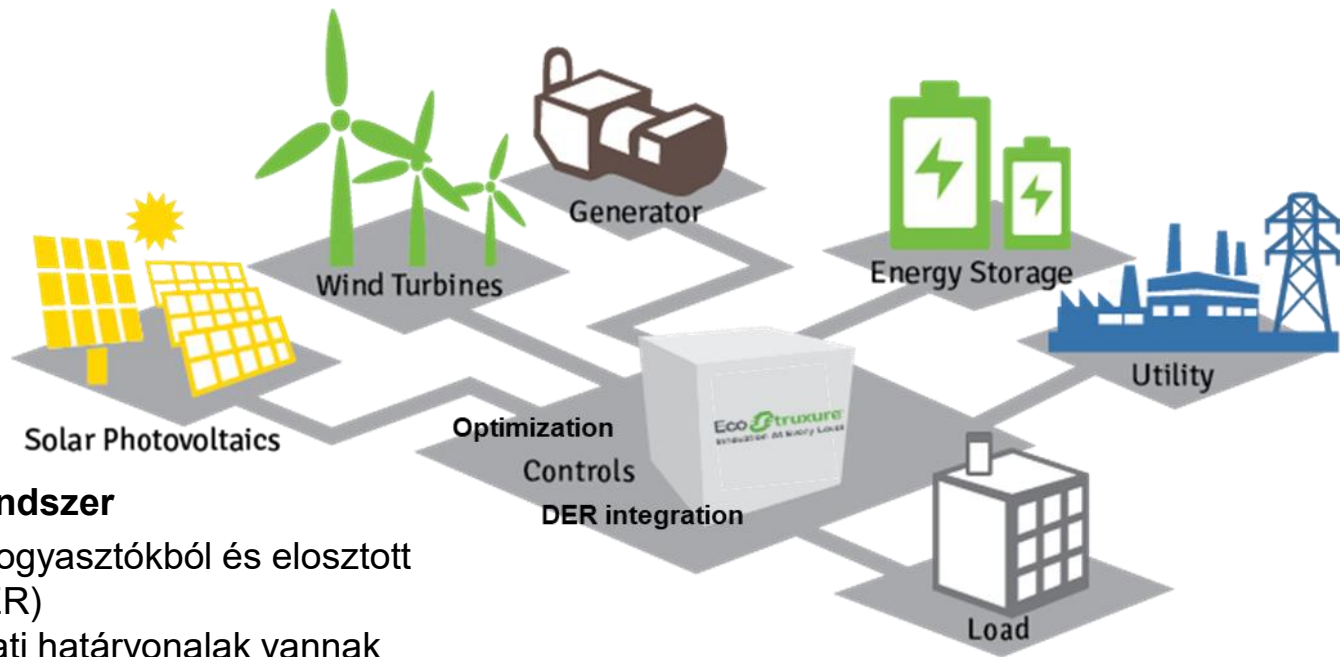
InsightMobile SE App allows monitoring on InsightCloud or directly to the Edge Control Device or a Conext CL Solar String inverter from an iOS or Android mobile device.



Mikrogrid



Mi az a microgrid?



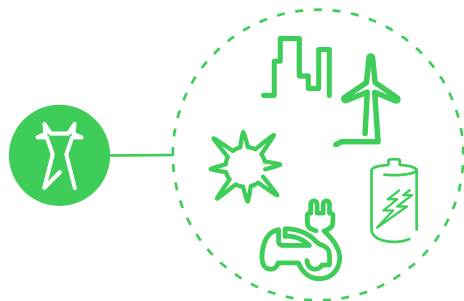
Integrált energiaelosztási rendszer

- Ami egymáshoz kapcsolt fogyasztókból és elosztott energia forrásokból áll (DER)
- Jól meghatározható hálózati határvonalak vannak
- Egy összefüggő egységként van kezelve, vezérelve
- Az áramszolgáltatói hálózattal párhuzamosan működik vagy tudatosan szigetüzemben.

Microgrid típusok, működtetési célok

Optimalizált számla és karbon lábnyom

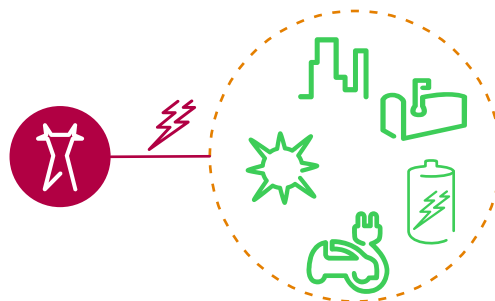
Hybrid rendszer: hálózat + helyi termelés/tárolás + terhelés menedzsment



Grid-tied

Kimaradások áthidalása miközben optimalizálja a számlát és a karbon lábnyomot

Hybrid rendszer: hálózat + helyi termelés/tárolás + terhelés menedzsment



Island-able

Folyamatos energiaellátás, könnyen skálázható rendszerben

Hybrid rendszer: gázolaj/gáz/biomassza és/vagy megújuló termelés + tárolás + terhelés menedzsment

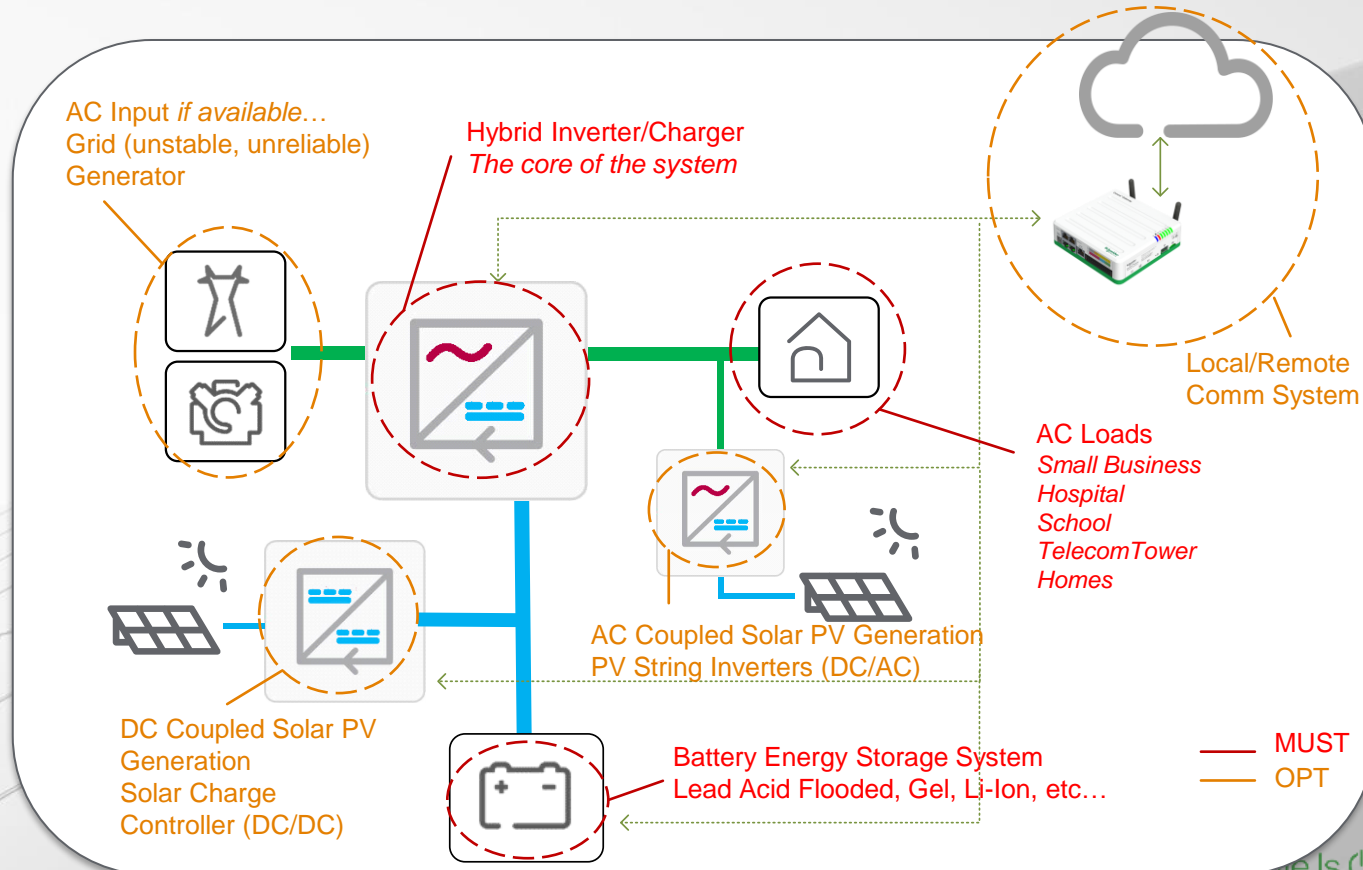


Off-grid



Hibrid megoldások

Sztenderd Architektúra Hibrid rendszerekhez



Decarbonise and make best use of precious resources

Achieve sustainability, safety and compliance aims,
and improve brand image

100% consumed energy from renewables

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