

MICROPOWER GROUP

Electrify Your Business
Summit 2026

MICROPOWER MISSION

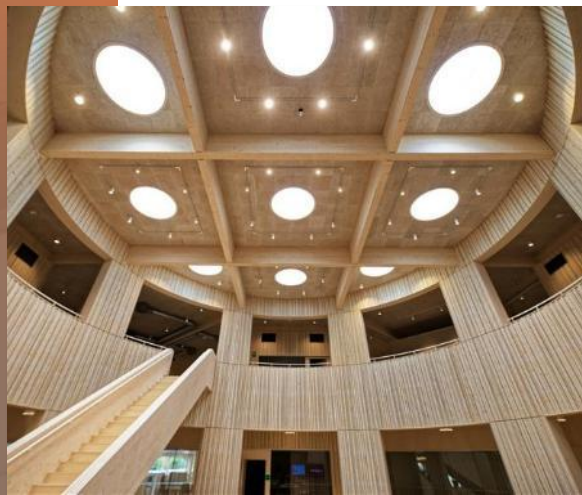
TEEMME TEOLLISUUDEN SÄHKÖISTYMISESTÄ TOTTA

MICROPOWER HEADQUARTER

THE FUTURE OF MANUFACTURING

Facility overview

- Electronics, charger and Lithium-Ion battery production
- Application engineering
- R&D center
- Testing facility
- Service and customer support
- Facility 25.000m² (site 92.000m²)
- Sustainable in construction and utilities.



[Click here to
get a digital
tour](#)

A Snapshot of Micropower

Micropower in numbers

~600Employees
*24% engineers***40+**

Years in business

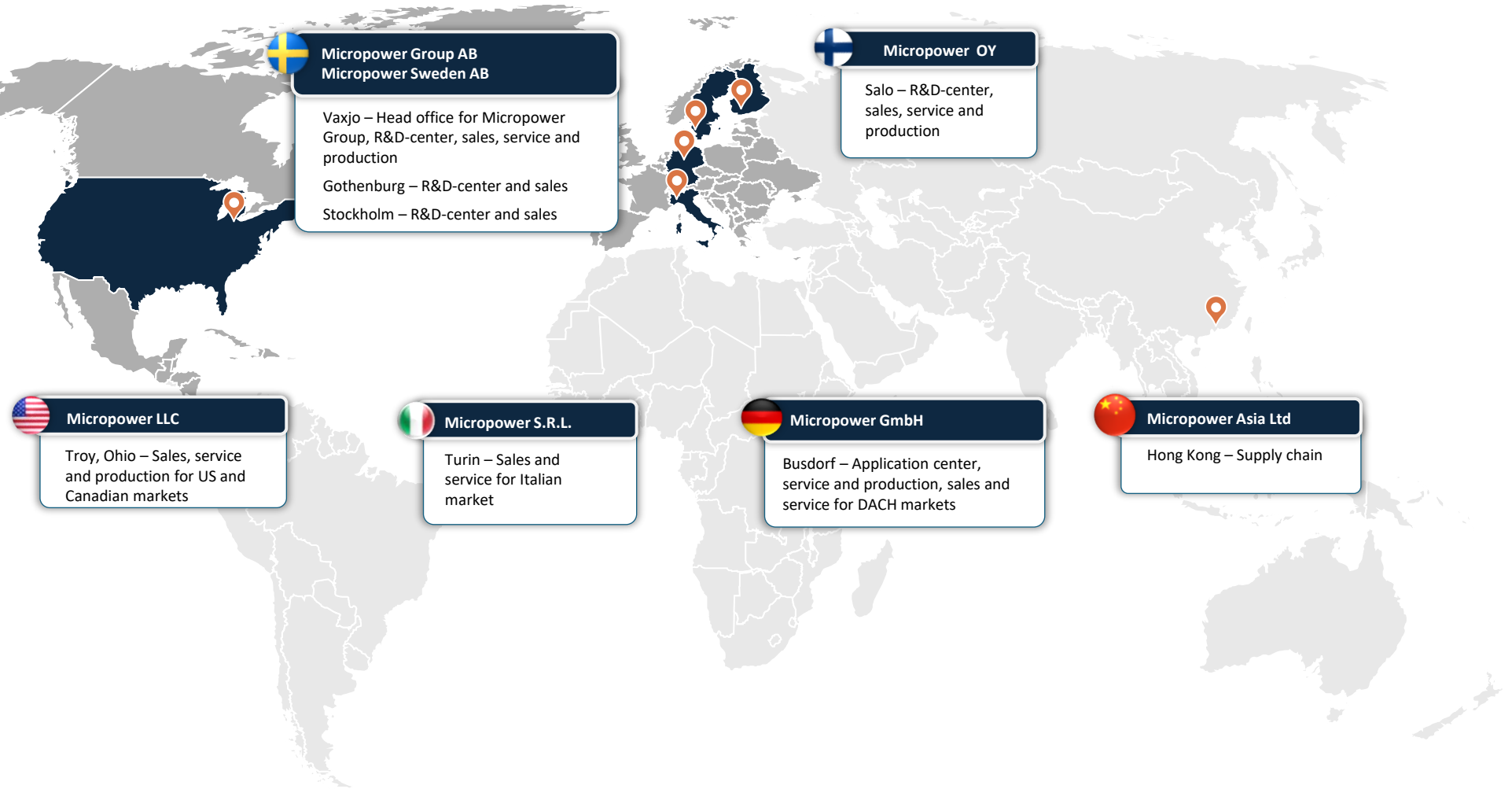
~1.8 BSEK

Annual Sales

+200 MSEK

Yearly R&D investment

Geographical presence



- Forklift Trucks
- Automated Guided Vehicles
- Construction Equipment
- Agriculture & Forestry
- Aerial Work Platforms
- Rescue & Safety



SUPPORTING YOUR ELECTRIFICATION JOURNEY

Experience full integration, wireless connectivity and industry-leading efficiency.
Engineered for the user - while meeting the industry needs of tomorrow.



BATTERY CHARGERS

- Onboard and stationary chargers for all battery types
- Output voltages 12–120 V covering multiple platforms
- Power range 100 W–45 kW for light to heavy-duty applications
- Intuitive design with wireless connectivity and smart functions
- IP66-rated, rugged construction



LI-ION BATTERY SYSTEMS

- Stand-alone or fully integrated systems
- Voltage up to 400 V / 1000 Ah+ and capacity up to 700 kWh
- Customized configurations
- Multi-level safety architecture
- Produced on fully automated manufacturing lines



POWER CONVERTERS

- Converters, chargers and equalizers
- Output voltages 12 V and 24 V
- Power range 200–1200 W with industry-leading efficiency
- Compact, robust design
- IP67-rated for waterproof and shock-resistant operation



SYSTEM SOLUTIONS

- Fleet management systems
- Power limitation functionality
- Battery exchange systems
- Automated control and analytics
- Customized, scalable system architecture
- Energy optimization to extend battery life and system uptime

Micropower

ROBUST



High efficiency 96%



High power factor 90%



Low standby power <10W



Optimized coating



Air cooled – No liquid needed



Compact design with a volume-to-power-ratio of <1.3 L/kW



Well-known Micropower user-interface



Ultra-thin 83 mm profile
- Installation in the tightest possible spaces



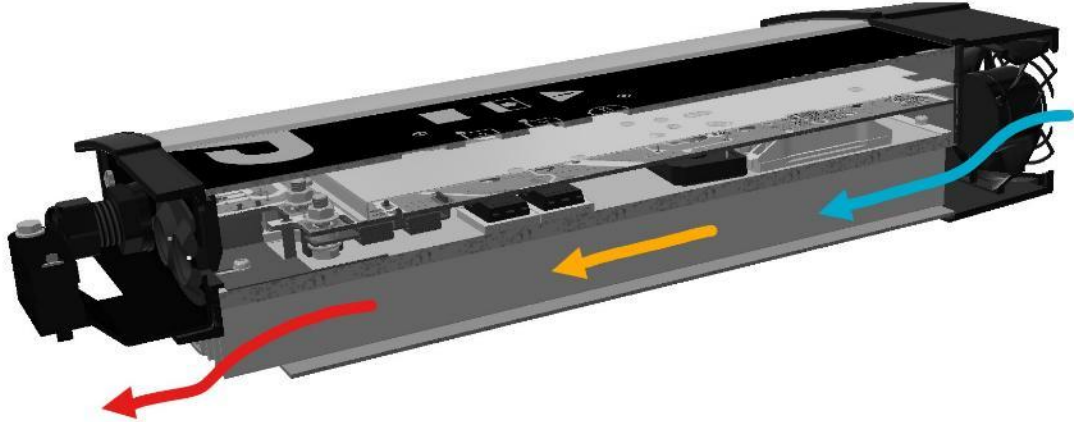
Compact and robust design IP66



Accurate current and voltage control 0-100%

ILMAJÄÄHDYTYS ROBUST LATUREISSA

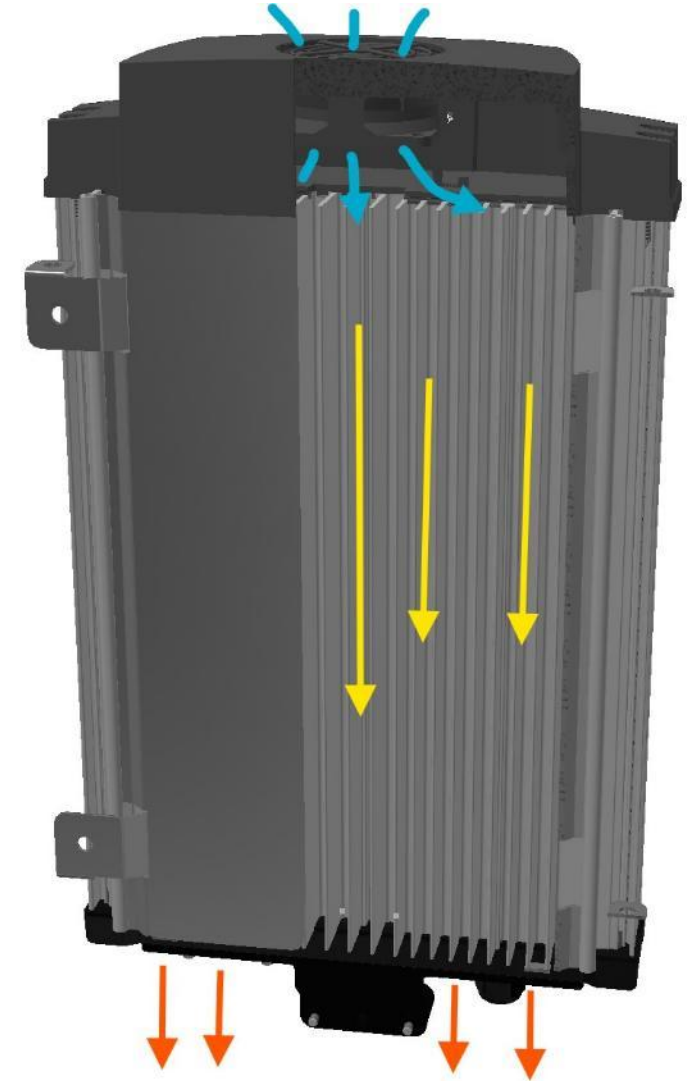
-Ilma puhalletaan kotelon ulkopuoliseen jäähdytysprofiiliin ja kotelo jossa herkkä elektroniikka on tiivis



protection class (IP66).



MICROPOWER GROUP™
POWERFUL SOLUTIONS PARTNER



— NEXT GENERATION OF BATTERY CHARGER —

MICROPOWER R066

COMPACT DESIGN WITH
HIGH EFFICIENCY



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MICROPOWER RO

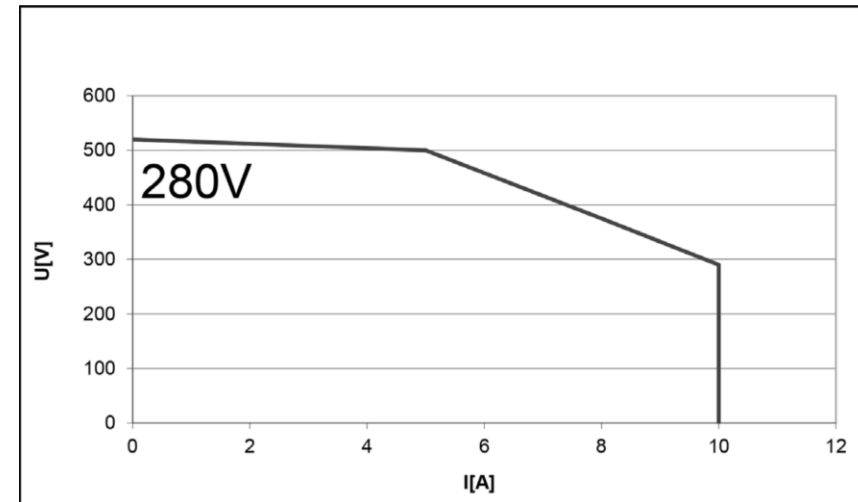
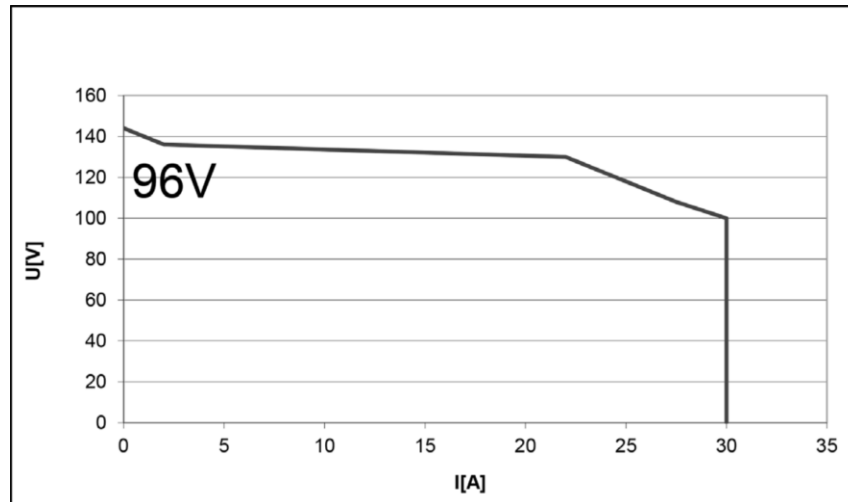
Product Overview

Micropower RO HV is a super compact 3-Phase onboard solution with an efficiency of ~96%. No liquid cooling needed.

- Wide input voltage range
 - 3x380-480VAC (-10/+10%) <16A
- Output performance:
 - 48V & 96V 115A
 - 280V (max 420V) 10A
 - 560V (max 840V) 20A
- 429x255x86mm
- Outstanding Compactness
 - ~9 liter volume
 - 1.3 liter per 1kW
 - 0.8kg per kW

Output Performance

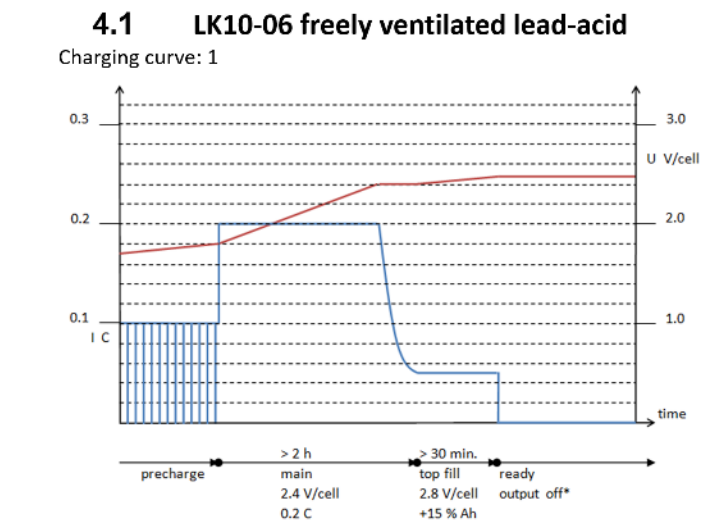
- Akkuun kennomäärä sekä kemia määrittää jännitteen
 - Lyijyakulla täytyy päästä joskus kaasuuntumisjännitteisiin asti jotta kennot saadaan tasattua ja kylmän akun lataaminen vaatii korkeampaa jännitettä 4mV/C
 - Lithiumakkua ei saa yli ladata tai purkaa aivan tyhjäksi ja pitää välttää lataamista kylmää akkua
- Akun speksistä max latausvirta tai haluttu latausaika määrittää latausvirran, siis pienivirtainenkin laturi riittää jos on aikaa ladata yön yli, akun eliniänkin kannalta kannattaa käyttää mahdollisimman matalia virtoja riippumatta kemiasta



Laturitila (Charger) toimii itsenäisesti ja ohjaa akun latausta valitun latauskäyrän sekä muiden latausparametrien mukaan. **Litiumakkujen** latauksessa turvallisuuden vuoksi tarvitaan **BMS (Battery Management System)**. BMS on yleensä akussa.

Kiinteä virtalähde (Fixed Power Supply / SDO) toimii itsenäisenä virtalähteenä, jossa jännite- ja virtarajat asetetaan pysyvästi (UdcLimit ja IdcLimit). Virransyöttö käynnistyy heti laitteen käynnistyessä. Tilassa käytetään nopeaa laitteistotason säätösilmukkaa, joka toimii vakaasti lähes kaikilla kuormilla.

Micropower-protokollan virtalähde (PDO) on CAN-väylän kautta etäohjattava virtalähde. Ohjausviestejä on lähetettävä jatkuvasti, sillä lähtö kytkeytyy pois päältä, jos viestejä ei vastaanoteta muutamaan sekuntiin. Tila toimii parhaiten vakiojännitteisellä kuormalla, kuten akulla.



5.13 Fixed power supply mode

In this mode, charger outputs power immediately after startup.

For defining power output, two CANopen SDO objects are used:

index	sub-index	format	unit	range	default value	item
2001h	01	uint32	mV	0...max*	nom**	UdcLimit
2001h	02	uint32	A	0...max*	max*	IdcLimit

* maximum output of the power unit

** nominal voltage of the power unit

1) Voltage and current setting

CAN-ID: 200h + node-ID, DLC: 8, data[0-3]: voltage in Volts, data[4-7]: current in Amperes. Numeric format: IEEE-754 single precision floating point, 32 bit.

Note the little endian byte order of CANopen. Example message:

CAN-ID	DLC	data (hex)	comment
201h	8	00 00 10 42 00 00 20 42	Uset 36.0 V, Iset 40.0 A

2) Power setting

CAN-ID: 300h + node-ID, DLC: 8, data[0-3]: power in Watts, data[4-7]: not used, set to 0. Numeric format: IEEE-754 single precision floating point, 32 bit.

Example message:

CAN-ID	DLC	data (hex)	comment
301h	8	00 80 89 44 00 00 00 00	Pset 1100 W



BATTERY CHARGER

MICROPOWER SX

Micropower SX features an intuitive user interface, designed with the operator's needs in mind. With quick installation and seamless configuration, electrical operations can be up and running in no time. This versatile and high-efficient charger is optimized for both Lead-Acid and Lithium-Ion batteries and is compatible with most commonly used mains voltages.

The charger has a user-friendly display and keypad to provide easy access to key information and configuration options, as well as an LED panel that indicates State of Charge, offering operators a simple, intuitive experience.

Find your Micropower SX charger



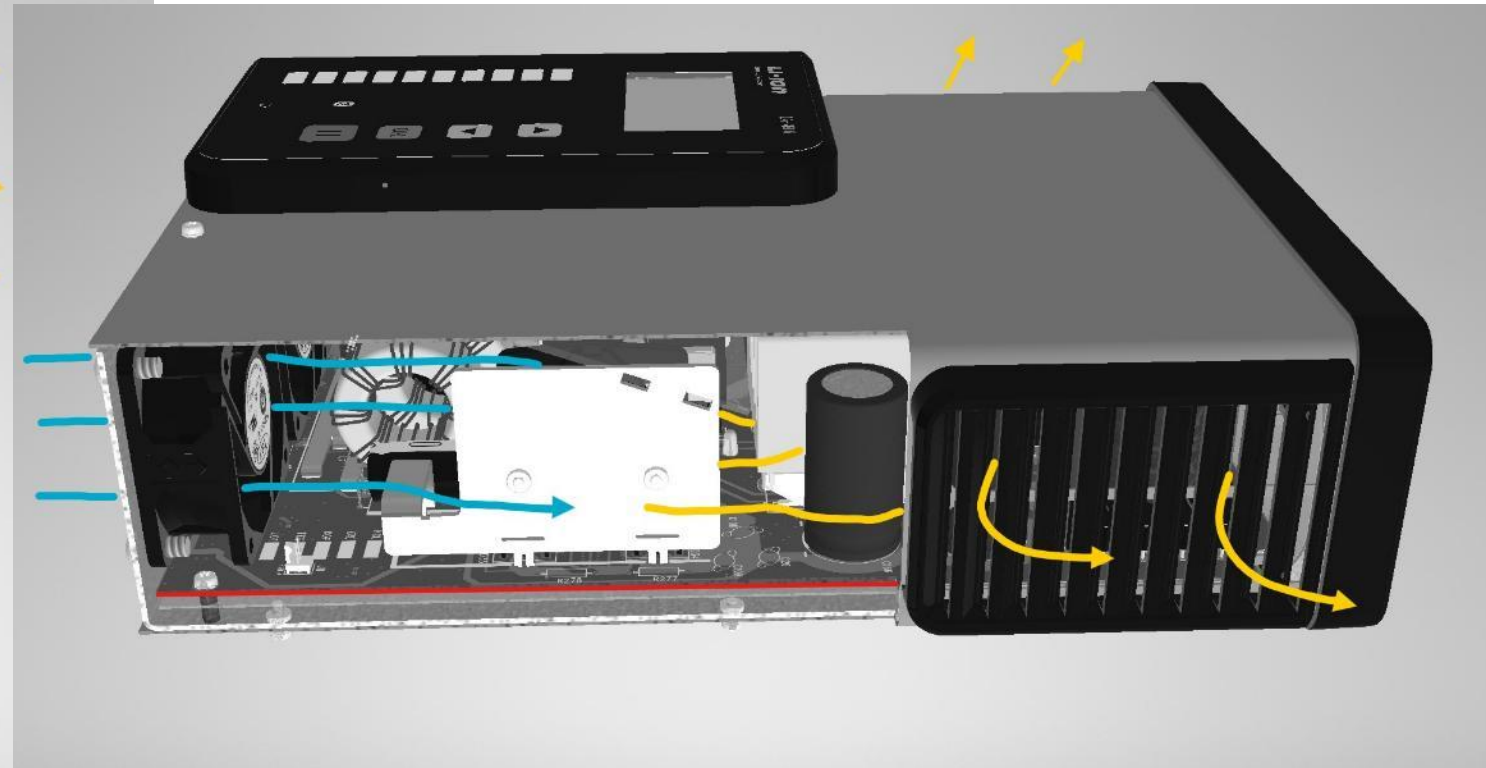
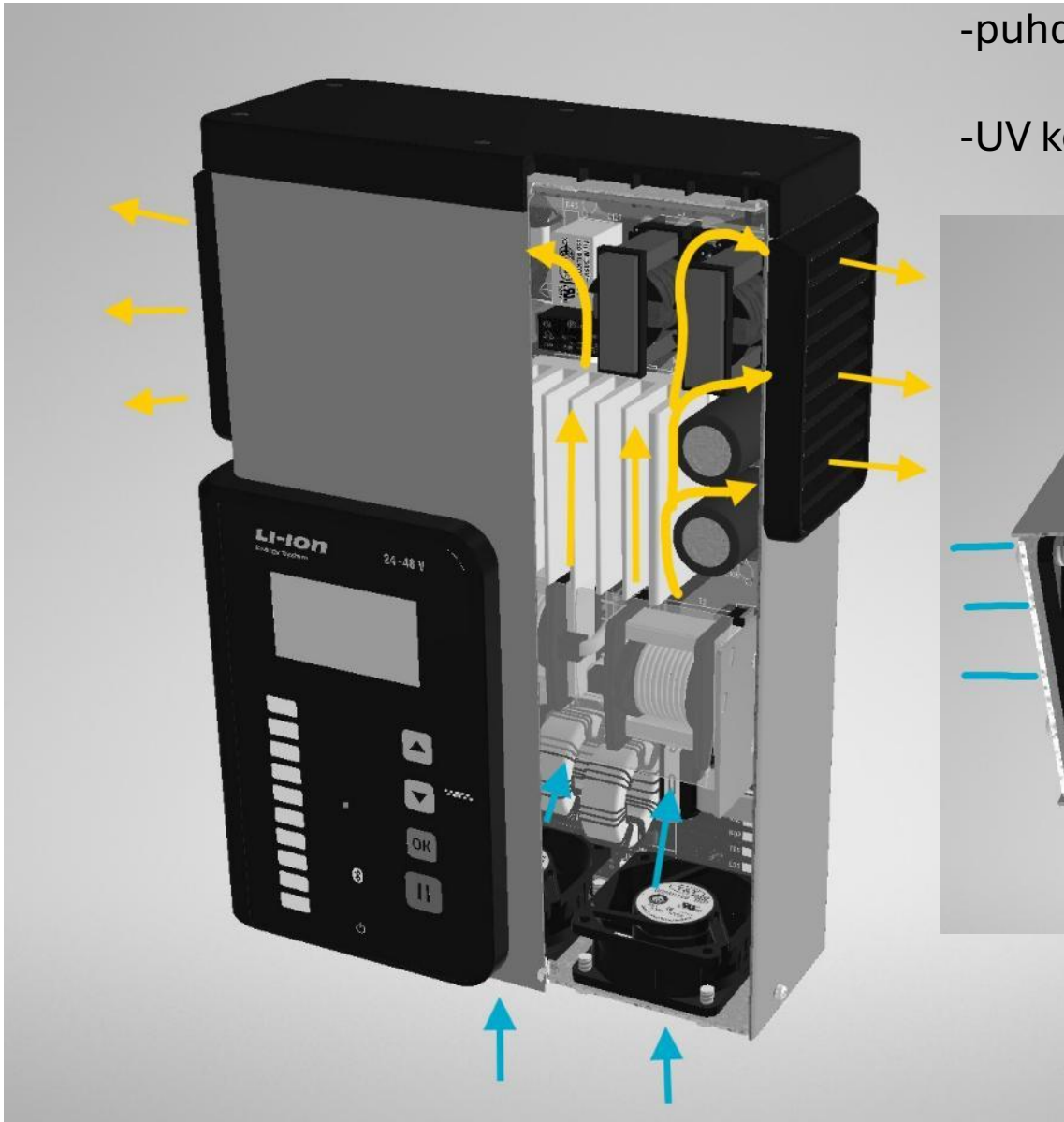
CLOUD CONNECTIVITY

For Optimized Performance

Micropower SX is an intelligent charger option, featuring wireless communication via radio and Bluetooth. It integrates seamlessly with Micropower GET fleet management system and has built-in energy management functionality.

By connecting and activating these smart software systems and features, you can optimize your electrical fleet's performance and significantly reduce the risk of misuse, ensuring smooth operations and battery longevity.

- puhdaspuoli ja likainen puoli suurille jäähdytettävälle komponenteille
- UV kovetteinen paksu selektiivilakka suojaa kosteusherkät alueet





*Your Powerful
Solutions Partner*

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