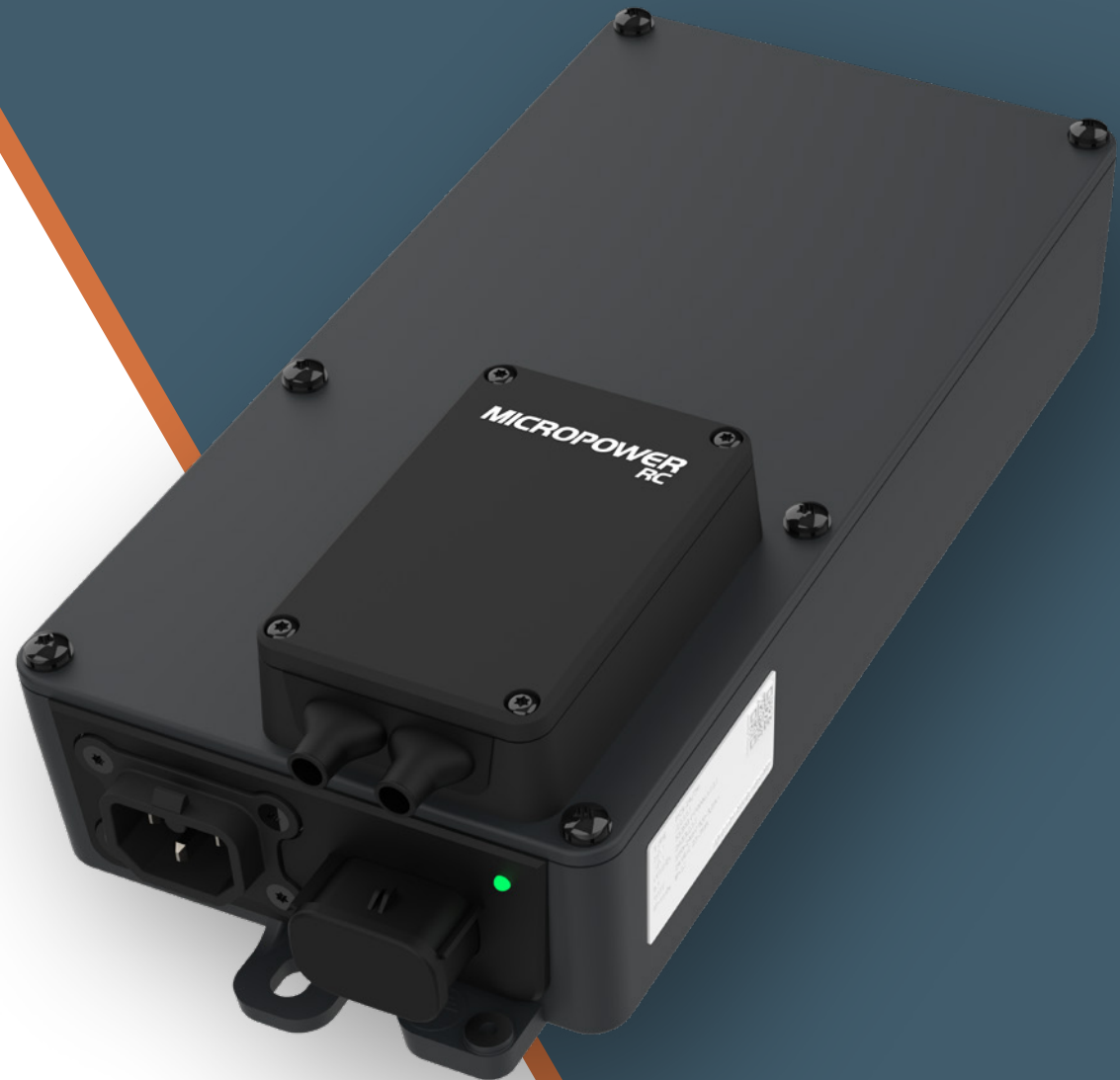


**MICROPOWER GROUP™**  
POWERFUL SOLUTIONS PARTNER

ONBOARD CHARGER

# MICROPOWER RC

COMPACT WITH 96% EFFICIENCY



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## YOUR POWERFUL SOLUTIONS PARTNER

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Micropower Group develops and manufactures energy-efficient Lithium-Ion batteries, chargers, and power converters. With 40+ years of experience, we deliver high-quality systems and long-term value to leading OEMs through technical expertise, innovation, and reliability.

*Intelligent Energy  
Solutions for a  
Sustainable Future*



# ABOUT MICROPOWER GROUP

## Driving Electrification of Industry

Micropower enables industrial electrification through energy solutions tailored to real industrial applications. With deep system integration know-how and advanced battery expertise, we deliver efficient, high-performing technologies that support OEMs on their electrification journey.

## In-house Development & Manufacturing

Our Nordic-based R&D and manufacturing ensure full process control and scalability. Our testing facilities support solution validation under real conditions. From prototype to volume, our industrialized setup enables efficient, high-quality production at scale.

## Partnership Excellence

As a strategic partner, Micropower supports customers across the full electrification process. We ensure compliance, prioritize safety, and provide expert training. Our reliable delivery, short lead times, and dedicated support foster long-term collaboration.





# COMPLETE ENERGY OFFERING

Micropower delivers energy systems combining Lithium-Ion batteries, chargers, power converters, and software into one integrated solution.

- Built on scalable and high-efficiency technology, tailored to suit your specific application
- Available as compact battery modules or high-voltage systems, with onboard or stationary chargers and robust power converters
- Enhanced with smart software for reliable, efficient performance that drives your electrification journey

OFF BOARD  
BATTERY  
CHARGER

SOFTWARE  
SOLUTIONS

POWER  
CONVERTER

LITHIUM-ION  
BATTERY

ON BOARD  
BATTERY  
CHARGER





# MICROPOWER RC ONBOARD BATTERY CHARGER

The Micropower RC is a compact, high-efficiency 1-phase onboard charger for industrial Lead-Acid and Lithium-Ion batteries. With wide 100–240 VAC input, IP67 protection, and digital control, it delivers robust performance in demanding environments. Available in models up to 1040 W.

## Performance & Efficiency

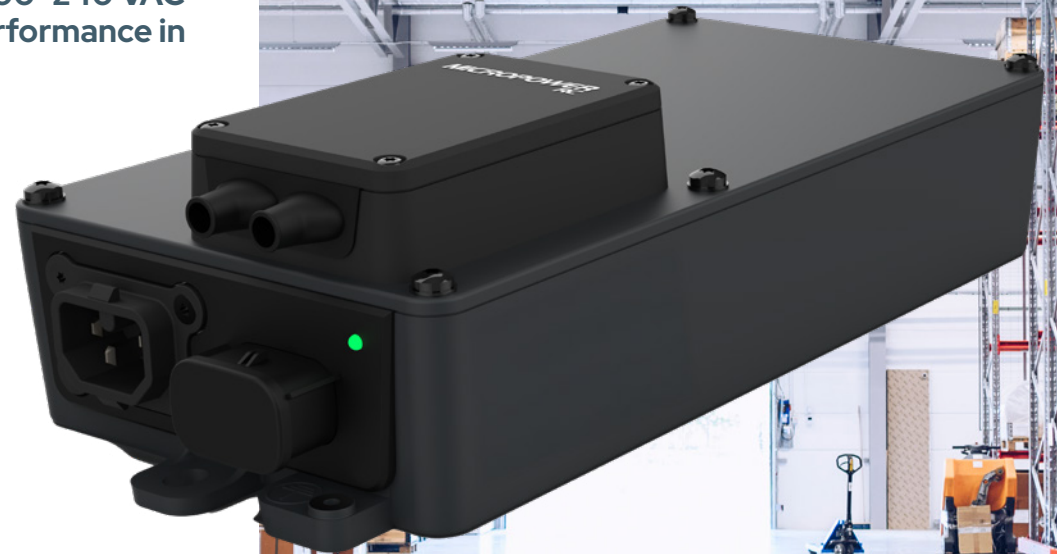
Up to 96% efficiency minimizes power loss and reduces CO<sub>2</sub> emissions by up to 50%, supporting sustainable operations and lower energy costs.

## Smart Integration

Features CAN bus communication, easy cable connection with patented AC connector, and interface via Molex 12-pin – enabling fast, fail-safe installation.

## Built for Industry Use

Fan-less, low-weight, and IP67-rated design ensures durability in harsh conditions, with consistent charging and optimized Lithium-Ion performance. Micropower RC is certified to demanding EMC standards.



**96%**  
Efficiency

**100–240**  
VAC

**1040 W**  
Output Power




**50%**  
CO<sub>2</sub> Reduction  
Compared with traditional charger  
with 90–92% efficiency

# TECHNICAL SPECIFICATIONS

Technical specifications	
Phase	1-phase
Mains Voltage	120VAC, 240VAC
Output Voltage	12–48 VDC, up to 720 W (120 VAC) / 1040 W (240 VAC)
Battery Types	Lead-acid and Lithium-Ion with CAN-bus communication
Supported Battery Technologies	Lead-acid (Wet, AGM, Gel) / Lithium-Ion (CAN-BMS controlled)
Charging Curves	7x Lead-acid charging profiles, 1x BMS-controlled Lithium-Ion charging

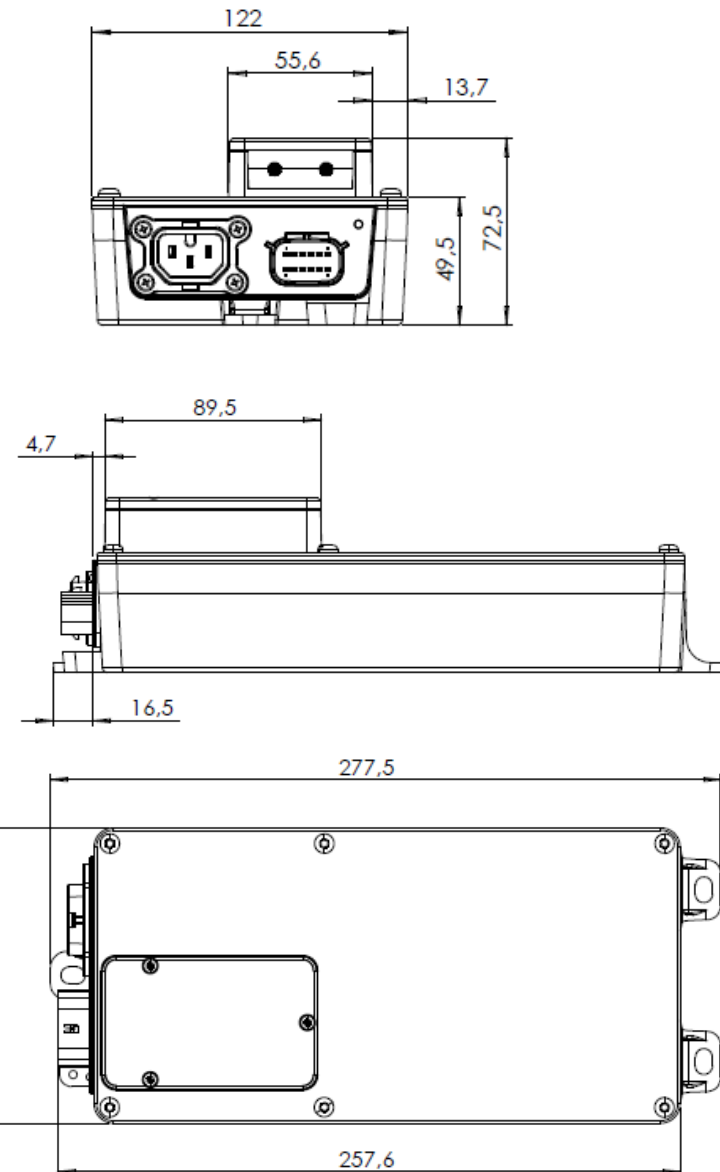
Product features	
CAN Bus	Isolated CAN-H, CAN-L, CAN-GND, CANopen
Pilot / Detect Signal	Functional safety, PLr b according to EN ISO 13849-1:2015
Interlock Signal (Immobilizer)	AC-present indicator – potential-free relay
External LED Drive	2 external LEDs
External Battery Temperature Sensor	NTC
HMI (User Interface)	1 multi-color LED
Cabinet Dimensions	122 × 277,5 × 72,5 mm
Weight	2,2 kg

## CERTIFICATIONS

  	Safety	CE, UL1564, IEC/EN/UL 60335
	Emissions & Immunity	FCC 47 Part 15/ ICES-001 Class B, EN61000-3-3, UN ECE R10 Rev. 06 – EN 61000-6-2, UN ECE R10 Rev. 06

## TECHNICAL DOCUMENTATION PORTAL

 Micropower Support Center



## TECHNICAL DATA

# MICROPOWER RC MODEL RANGE

Product	Micropower RC7	Micropower RC7	Micropower RC7	Micropower RC7	Micropower RC9	Micropower RC10	Micropower RC10
Part Number	RD1321	RD2261	RD3201	RD4161	RD2271	RD3191	RD4221
Model	2AIF911	2AIF901	2AIF921	2AIF931	2AIF910	2AIF920	2AIF930

### Main data

Output voltage (V)	12	24	36	48	24	36	48
Output current (A)	50	25	16,5	12,5	23-30	20-23	15-18
Number of phases	1	1	1	1	1	1	1
Rated voltage (V)	120-230 (50/60Hz)	120-230 (50/60Hz)	120-230 (50/60Hz)	120-230 (50/60Hz)	120-230 (50/60Hz)	120-230 (50/60Hz)	120-230 (50/60Hz)
Current at nominal voltage 120/230Vac (A)	6.5 / 3.8	6 / 3.3	6.5 / 3.8	6.5 / 3.8	6 / 3.3	6.5 / 3.8	6.5 / 3.8
Typical supply cable connector	IEC60320, type C15	IEC60320, type C15	IEC60320, type C15	IEC60320, type C15	IEC60320, type C15	IEC60320, type C15	IEC60320, type C15

### Battery connection

Output cable terminals (in unit)	M6, M8	M6, M8	M6, M8	M6, M8	M6, M8	M6, M8	M6, M8
Auxiliary connector	Molex MX120G	Molex MX120G	Molex MX120G	Molex MX120G	Molex MX120G	Molex MX120G	Molex MX120G
Output voltage (V)	0-17.5	0-35	0-52.5	0-70	0-35	0-52.5	0-70

### Electric data

Standby AC power consumption (W)	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Power consumption 120/230Vac (W)	720/720	720/720	720/720	720/720	720/900	800/1000	800/1040
Power factor	>0.98	>0.98	>0.98	>0.98	>0.98	>0.98	>0.98
Inrush current (A)	20A	20A	20A	20A	20A	20A	20A
Efficiency (%)	>95	>95	>95	>95	>96	>96	>96



# COMPATIBLE ACCESSORIES

The RC-family of products has capability to support both Lead-Acid batteries and Li-Ion batteries with BMS communication through CAN. By default, each charger is configured to use Li-Ion with BMS. Through CAN commands, the charger can be configured to act as lead-acid charger with a wide set of charge profiles.

## Configuration box

Configuration box is available to select different charge parameters in the RC 7-10 family. Main features are:

- Easy of use in different computer environment, act as USB memory
- Easy to create and maintain configuration definitions
- Log file of configuration performed stored for traceability
- Same tools for sw updates and configuration

Powered by internal battery during operation

- Power down after 10 min of no activity ( $<5\mu A$  leak from internal battery)
- Optional external power source for larger configuration
- Charged through USB port

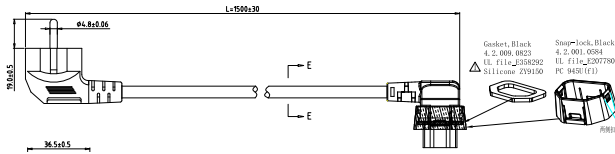


# COMPATIBLE CABLES

## AC-cables EU

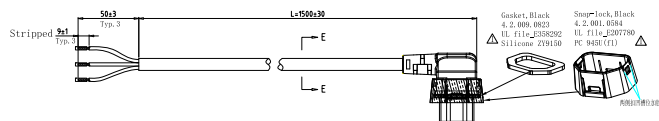
Part n. 2901061

AC Cable EU Plug, angled IP67 C15



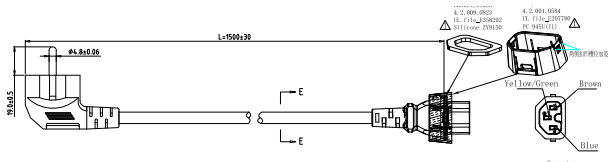
Part n. 2901063

AC Cable Open end EU, angled IP67 C15



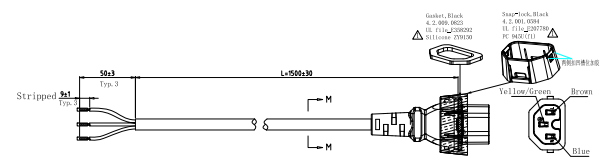
Part n. 2901062

AC Cable EU Plug, straight IP67 C15



Part n. 2901064

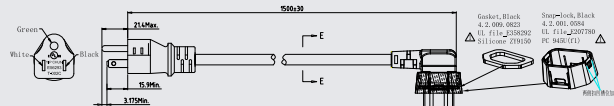
AC Cable Open end EU, straight IP67 C15



## AC-cables US

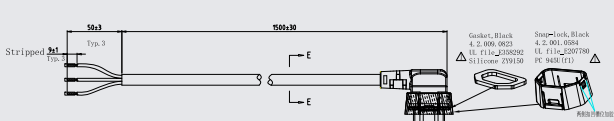
Part n. 2901067

AC Cable UL Plug, angled IP67 C15



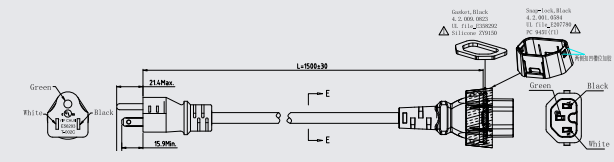
Part n. 2901065

AC Cable Open end UL, angled IP67 C15



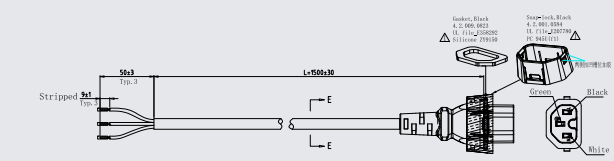
Part n. 2901068

AC Cable UL Plug, straight IP67 C15



Part n. 2901066

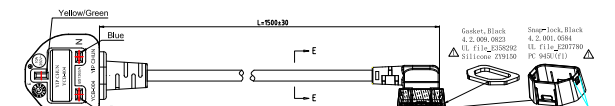
AC Cable Open end UL, straight IP67 C15



## AC-cables UK, Swiss

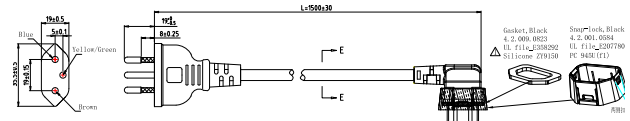
Part n. 2901071

AC Cable UK Plug, angled IP67 C15



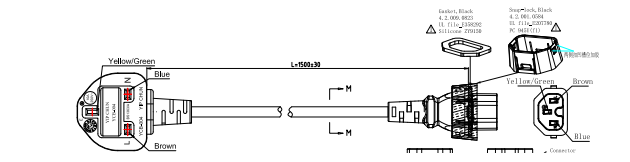
Part n. 2901069

AC Cable Swiss Plug, angled IP67 C15



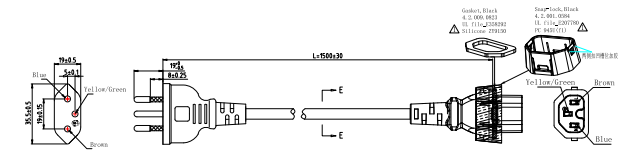
Part n. 2901072

AC Cable UK Plug, straight IP67 C15



Part n. 2901070

AC Cable Swiss Plug, straight IP67 C15



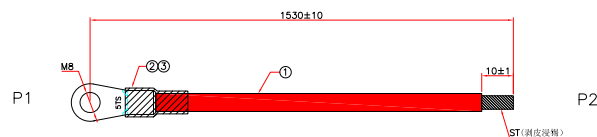


# COMPATIBLE CABLES

## DC Cables, CE

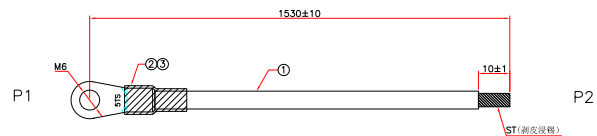
Part n. 2991042

DC cable CE 1.5 m, red



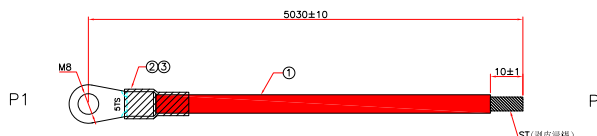
Part n. 2991043

DC cable CE 1.5 m, black



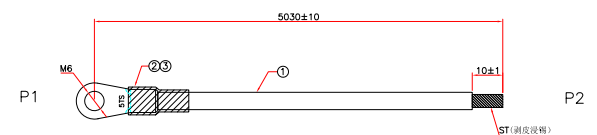
Part n. 2991044

DC cable CE 5 m, red



Part n. 2991045

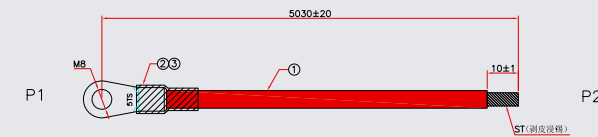
DC cable CE 5 m, black



## DC Cables, UL

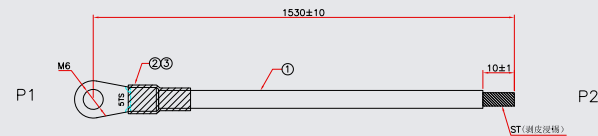
Part n. 2991048

DC cable UL 1.5 m, red



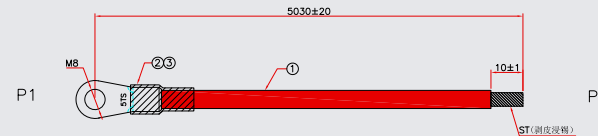
Part n. 2991049

DC cable UL 1.5 m, black



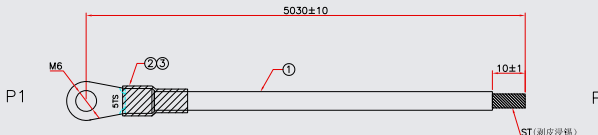
Part n. 2991046

DC cable UL 5 m, red



Part n. 2991047

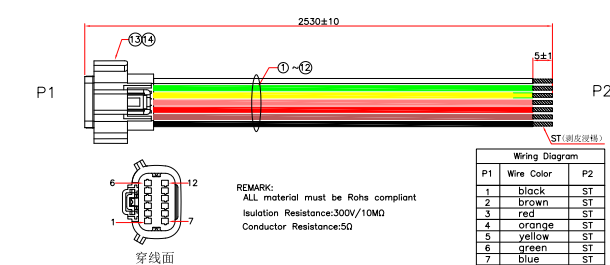
DC cable UL 5 m, black



## Communication Cable

Part n. 0521404

Communication cable 12-pole w connector



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Learn more!

