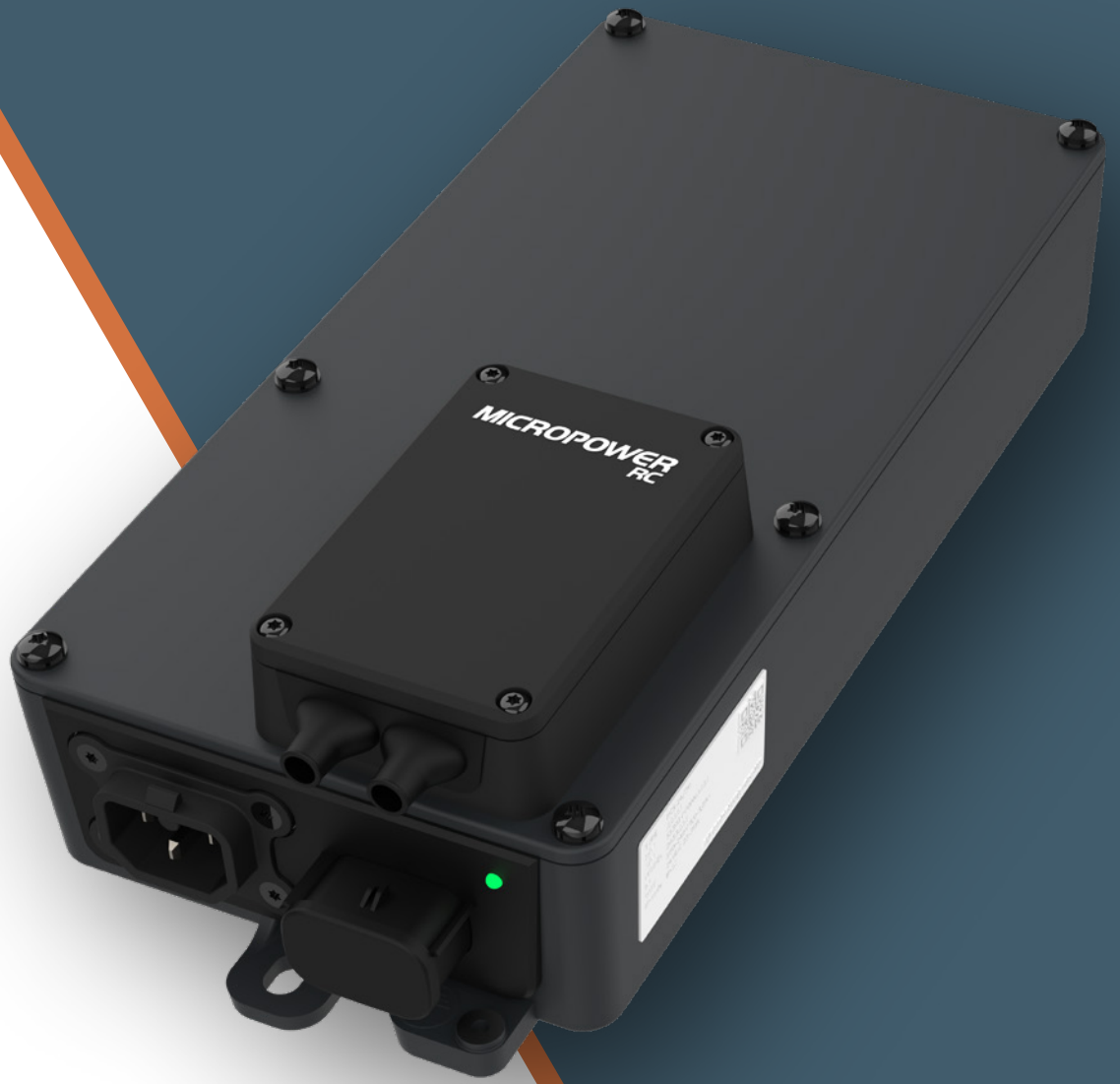
MICROPOWER GROUP™
POWERFUL SOLUTIONS PARTNER

ONBOARD CHARGER

RC7-10

COMPACT WITH 96% EFFICIENCY



micropower-group.com

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YOUR POWERFUL SOLUTIONS PARTNER

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



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_2 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.

Up to 96% Efficiency	100–240 VAC	1040 W Output Power	50% CO_2 Reduction
			Compared with traditional charger with 90-92% efficiency

TECHNICAL SPECIFICATIONS

Technical specifications	
Phase	1-phase
Mains Voltage Range	100VAC-240VAC (50/60Hz)
Output Voltage	12–48 VDC, up to 800 W (120 VAC) / 1040 W (More than 180 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, J1939
Pilot / Detect Signal	AC-present and charge enable/disable signal for BMS
Interlock Signal (Immobilizer)	AC-present indicator – potential-free relay
External LED Output	Control for 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
Auxiliary output	12V supply (Max 1W)
Parallel connections	Up to 3 units in parallel

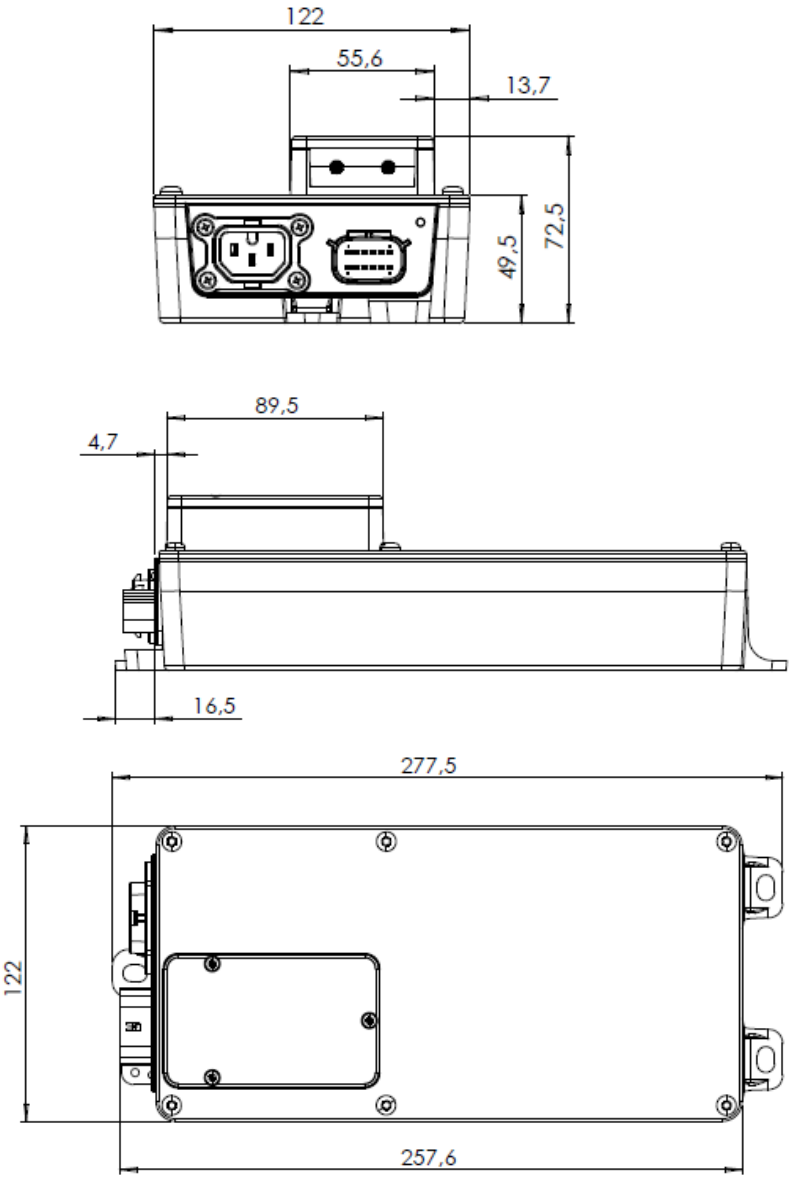
CERTIFICATIONS

E5

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

TECHNICAL DOCUMENTATION PORTAL

Micropower Support Center



TECHNICAL DATA

MICROPOWER RC MODEL RANGE

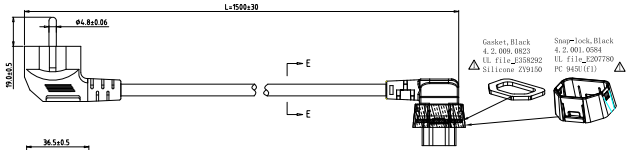
Product	Micropower RC7	Micropower RC7	Micropower RC7	Micropower RC7	Micropower RC9	Micropower RC10	Micropower RC10
Part Number	RD1321	RD2261	RD3201	RD4161	RD2271	RD3191	RD4221
Model	2A1F911	2A1F901	2A1F921	2A1F931	2A1F910	2A1F920	2A1F930
Main data							
Output voltage (V)	12	24	36	48	24	36	48
Output current (A)	50	25	16,5	12,5	25-30	18-23	14-18
Number of phases	1	1	1	1	1	1	1
Rated voltage (V)	100-240 (50/60Hz)	100-240 (50/60Hz)	100-240 (50/60Hz)	100-240 (50/60Hz)	100-240 (50/60Hz)	100-240 (50/60Hz)	100-240 (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
Operational ambient temperature	-40°C - 70°C (-40°F - 158°F)	-40°C - 70°C (-40°F - 158°F)	-40°C - 70°C (-40°F - 158°F)	-40°C - 70°C (-40°F - 158°F)	-40°C - 70°C (-40°F - 158°F)	-40°C - 70°C (-40°F - 158°F)	-40°C - 70°C (-40°F - 158°F)
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 CABLES

AC-cables EU

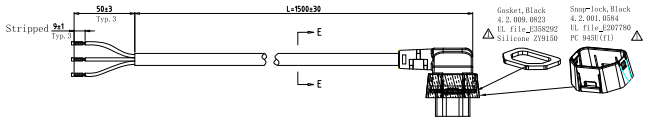
Part n. 2901061

AC Cable EU Plug, angled IP67 C15



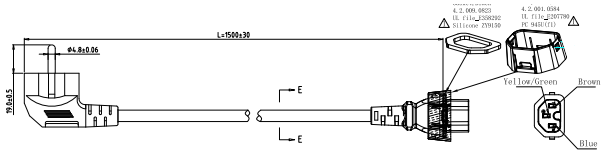
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AC Cable Open end EU, angled IP67 C15



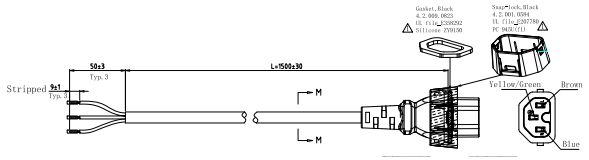
Part n. 2901062

AC Cable EU Plug, straight IP67 C15



Part n. 2901064

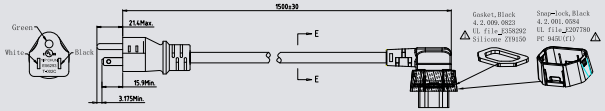
AC Cable Open end EU, straight IP67 C15



AC-cables US

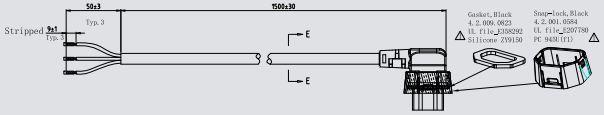
Part n. 2901067

AC Cable UL Plug, angled IP67 C15



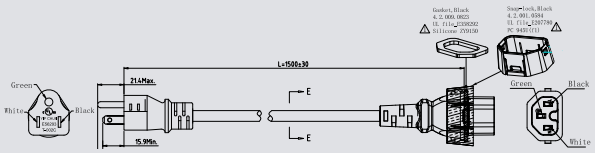
Part n. 2901065

AC Cable Open end UL, angled IP67 C15



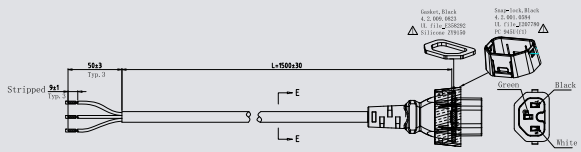
Part n. 2901068

AC Cable UL Plug, straight IP67 C15



Part n. 2901066

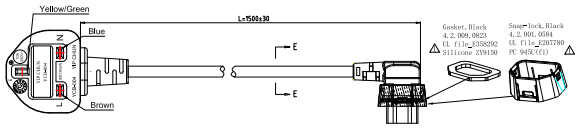
AC Cable Open end UL, straight IP67 C15



AC-cables UK, Swiss

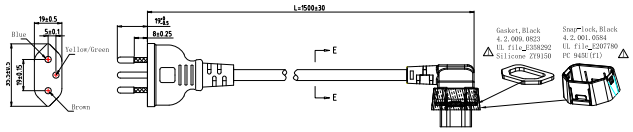
Part n. 2901071

AC Cable UK Plug, angled IP67 C15



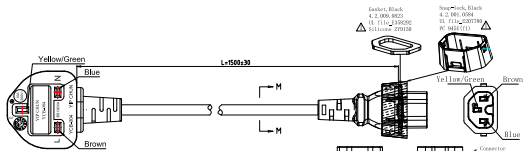
Part n. 2901069

AC Cable Swiss Plug, angled IP67 C15



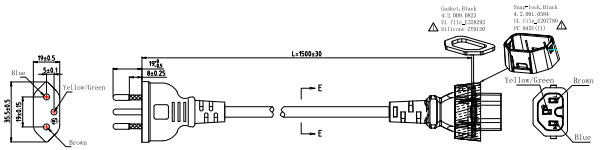
Part n. 2901072

AC Cable UK Plug, straight IP67 C15



Part n. 2901070

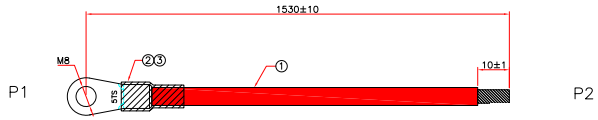
AC Cable Swiss Plug, straight IP67 C15



DC Cables, CE

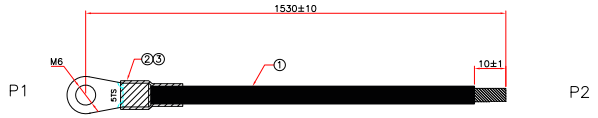
Part n. 2991042

DC cable CE 1.5 m, red



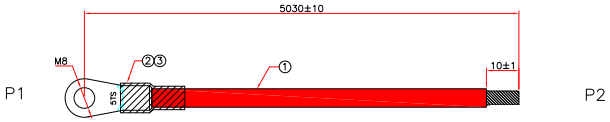
Part n. 2991043

DC cable CE 1.5 m, black



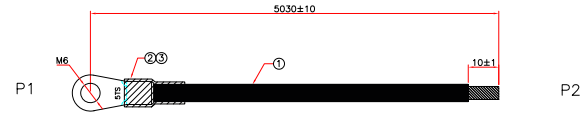
Part n. 2991044

DC cable CE 5 m, red



Part n. 2991045

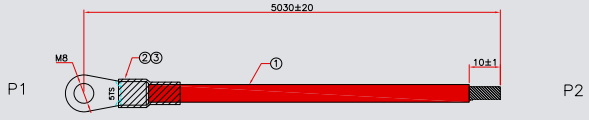
DC cable CE 5 m, black



DC Cables, UL

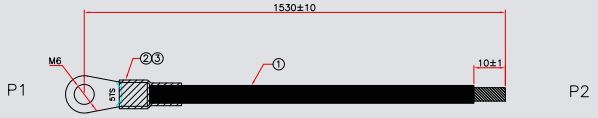
Part n. 2991048

DC cable UL 1.5 m, red



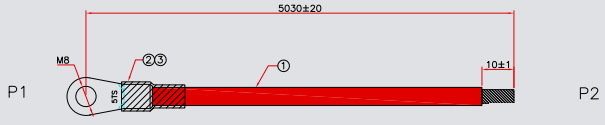
Part n. 2991049

DC cable UL 1.5 m, black



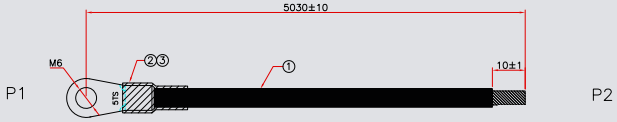
Part n. 2991046

DC cable UL 5 m, red



Part n. 2991047

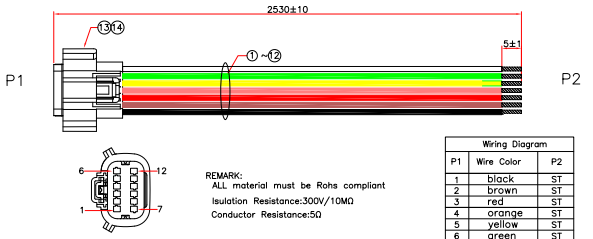
DC cable UL 5 m, black



Communication Cable

Part n. 0521404

Communication cable 12-pole w connector



Wiring Diagram		
P1	Wire Color	P2
1	black	ST
2	brown	ST
3	red	ST
4	orange	ST
5	yellow	ST
6	green	ST
7	blue	ST

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Learn more!

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