

Compact, full-featured DINrail power system

The Micropack System is convection cooled, designed for less power hungry applications, but still with system functionality options to match any requirements. Use as stand alone or in a flexible off the shelf configurable system.

The Micropack Power System extends your network one step further. With load ranges typically between 120W and 1000W, and in 12, 24 and 48V options, the system is perfect for a great variety of applications.



Micropack System

For $12 V_{DC}$, $24 V_{DC}$, $30 V_{DC}$ & $48 V_{DC}$ output

DOCUMENT NO: 241120.90x.DS3 v3

INDUSTRY APPLICATIONS

Telecom

- LTE/femto cells
- Small base stations / repeaters
- Fixed & mobile broadband
- FTTx

Power utilities

- Control & protection
- Scada
- Communication

Railway infrastructure

- Control & protection
- Signaling

Various other applications in demanding industries like Marine, Oil & Gas, process etc.



Micropack rectifiers



Compack controller

KEY FEATURES

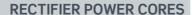
- ✓ Compact and shallow (149 mm deep)
- Din rail mountable
- ✓ On-site configurable
- Off the shelf delivery
- ✓ Stand-alone option (w/alarm relay)
- ✓ Plug-in breakers or bulk output
- ✓ Accepts 85 300 V_{AC/DC} input
- √ 12, 24-30, 48 V_{DC} output versions
- Ethernet for remote and local monitoring and control via WEB Browser
- ✓ SNMP protocol with TRAP, SET and GET on Ethernet. Email of TRAP alarms
- √ 3 digital programmable relay outputs
- ✓ 3 programmable multipurpose inputs ("digital inputs", battery midpoint or analog signals).

See reverse side for specifications

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2-positions (241120.901)

Standalone (241120.900)



4-positions (241120.902)

NEGATIVE DISTRIBUTIONS

Battery distribution with shunt, LVBD and sockets for 2 breakers (241120.910) Load distribution with sockets for 4 breakers (241120.920)





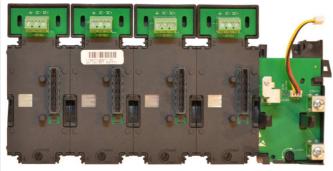
Plug-in battery and load



DC/DC CONVERTER POWER CORES



Standalone (241120.905)



4-positions (241120.907)

POSITIVE/FLOATING BULK OUTPUT

Bulk feed output (241120.911)



Battery bulk feed with shunt and contactor in positive leg. $(241120.912 - 12 V_{DC} \text{ only})$



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MARINE FILTER



MICROPACK SYSTEM BUILDING BLOCKS - COMPABILITY MATRIX									
		Output Voltage		Output grounding			Supports		
Part number	Description	12V	24V	48V	DC+	DC-	FLOAT	Rectifier	DC/DC
241120.90	0 Powercore -1	✓	✓	✓	✓	√	✓	✓	×
241120.90	1 Powercore -2	✓	✓	✓	✓	✓	✓	✓	×
241120.90	2 Powercore -4	✓	✓	✓	✓	✓	✓	✓	×
241120.90	5 Powercore -1	✓	✓	✓	✓	✓	✓	×	✓
241120.90	7 Powercore -4	✓	✓	✓	✓	✓	✓	×	✓
241120.91	.0 Batt dist.	×	×	✓	✓	×	√ 1)	✓	✓
241120.91	.1 Bulk feed	✓	✓	✓	✓	✓	✓	✓	✓
241120.91	2 Bulk feed LVD	✓	×	×	×	✓	✓	✓	✓
241120.92	Load dist.	✓	✓	✓	✓	×	√ 1)	✓	✓
241120.93	Marine filter ²⁾	✓	✓	✓	✓	✓	✓	✓	✓

¹⁾ Grounding of positive recommended 2) For AC input

A few quick steps.....

(241120.930)

- ✓ Start with a DIN rail
- Clip on and lock the desired power core; 2 or 4 rectifier positions or stand alone
- Clip on and fasten either the bulk feed unit or battery distribution (for 2 or 4 pos power cores)
- ✓ Clip on and fasten the load distribution (if applicable)
- Do the wiring

EASY INSTALLATION - ON-SITE CONFIGURATION

- ✓ In marine applications, clip on the Marine Filter Unit and connect the AC feed through it.
- ✓ Plug in the battery and load breakers
- ✓ Plug in the rectifier modules and controller
- ✓ Install covers for the distributions, bulk feed and blind panel for any unused rectifier positions if applicable

...and you'll have a complete DC system.

			TECHNICAL	SPECIFICATIONS			
Model	Battery dist.	Bulk feed	Bulk feed LVD	Load dist.			
Part number	241120.910	241120.911	241120.912	241120.920			
OUTPUT DATA							
System voltage support	- 48 V _{DC}	±12 - ±48 V _{DC}	+ 12 V _{DC}	-1248 V _{DC}			
Unprotected bulk output connections	-	1 (Max 10 mm²)	1 (Max 10 mm²)	-			
Protected load output connections (plug-able single pole MCB in negative)	-	-	-	4 x 2 - 15 A (Max 4 mm²)			
Connection to Load dist (241120.920)	•	•	•	•			
Unprotected battery output connections (shunt and LVBD in positive)	-	-	1 (Max 10 mm²)	-			
Protected battery output connections (single pole MCB, shunt and LVBD in negative)	2 x max 30 A (Max 10 mm²)	-	-	-			
Output Protection in rectifiers	Blocking OR-ing FET or fuse, Short circuit proof and High temperature protection						
OTHER SPECIFICATIONS							
Control system connection terminals	CAN (1 x RJ45)	CAN (1 x RJ45) 2 x LVD 2 x fuse fail 1 x current shunt	CAN (1 x RJ45) 1 x LVD 2x fuse fail 1 x earth fault	-			
Extending width	66 mm [2.6"]	26 mm [1.0"]	66 mm [2.6"]	73 mm [2.9"]			
Weight	270 g [0.6 lbs]	110g [0.24 lbs]	250 g [0.6 lbs]	165 g [0.3 lbs]			

Micropack System



For $12 \, V_{DC}$, $24 V_{DC}$, $30 V_{DC} \, \& \, 48 \, V_{DC}$ output

Model	Stand along	2 225		CHNICAL SPE			
Model	Stand alone	2-pos	· ·	DC/DC 1-pos			
Part number	241120.900	241120.901	241120.902	241120.905	241120.907		
INPUT DATA							
Maximum voltage		300 V _{AC/DC}		72	72 V _{DC}		
Maximum current	2 A	7 A	7 A	15 A	15 A		
Connection, screw terminals max 2.5mm ²		1 x L/N/PE		1 x DC+/DC-/PE	4 x DC+/DC-/PE		
Protection	Individual fuse in	Micropack power	modules				
Coding (prevents mixing of output voltages)	Yes,	and only rectifier	Yes, and only DC/DCs fit				
OUTPUT DATA							
Voltage	12V _{DC} , 24 V _{DC} , 30	V _{DC} & 48 V _{DC}					
Maximum current	10 A	20 A	40 A	12 A	40 A		
Connection, screw terminals max 2.5mm ²	2 x V _{OUT+} /V _{OUT-}	-	-	2 x V _{OUT+} / V _{OUT-}			
Connection to 241120.91x bases	-	•	•	-	•		
Output Protection in rectifiers	Blocking OR-ing F	ET or fuse, Short	circuit proof and	High temperature	orotection		
OTHER SPECIFICATIONS	3 3		· ·				
Module alarm relay output, max 1mm ²		-	-				
CAN connections	_	• (2 wire)	• (2 wire)	-	• (3 wire		
Width	44 mm [1.7"]	142 mm [5.6"]	231 mm [6.1"]	44 mm [1.7"]	231 mm [6.1"		
Weight	70 g [0.2 lbs]	160g [0.4 lbs]	250 g [0.6 lbs]	78 g [0.2 lbs]	292 g [0.6 lbs]		
Model	Micropack Ma	rine Filter Unit					
Part number	241120.930						
OTHER SPECIFICATIONS							
Mains rating / connection	$85 - 300 V_{AC/DC}$, $0 - 10 A$ / L- N (DC+/-) + PE : 2.5mm^2 screw terminals						
Dimensions / weight	35 x 99 x 114.5 mm [1.4 x 4.1 x 4.7"] / 328 g [0.72 lbs]						
All models							
OTHER SPECIFICATIONS							
Cover material	Plastic V0 rated a	and aluminum					
Temperature	Operating: -40 to +65°C (-40 to +149°F), storage: -40 to +85°C (-40 to +185°F)						
Mounting	35mm DIN rail						
Dimensions (H x D)	89 mm (2U) ¹⁾ x max. 150mm (incl. DIN rail) mm [3.5 x 5.9 "]						
DESIGN STANDARDS	00 mm (20) x m	20011111 (1110.1.1	, , , , , , , , , , , , , , , , , , ,	(0.0)			
Electrical safety	LII 60050-1-3rd oc	dition EN 60050-1	L-3rd adition CSA	22.2			
EMC	UL 60950-1-3 rd edition, EN 60950-1-3 rd edition, CSA 22.2 ETSI EN 300 386 V.1.3.2 EN 61000-6-1 / -2 / -3 / -4 / -5 FCC Part 15 Subpart 109						
Mains Harmonics Environment	EN 61000-3-2 ETSI EN 300 019: 2-1 (Class 1.2), 2-2 (Class 2.3) & 2-3 (Class 3.2) ETSI EN 300 132-2 2002/95/EC (RoHS) & 2002/96/EC (WEEE)						
Marine compliance				_ight Craft and Dn\	/ Offshore		