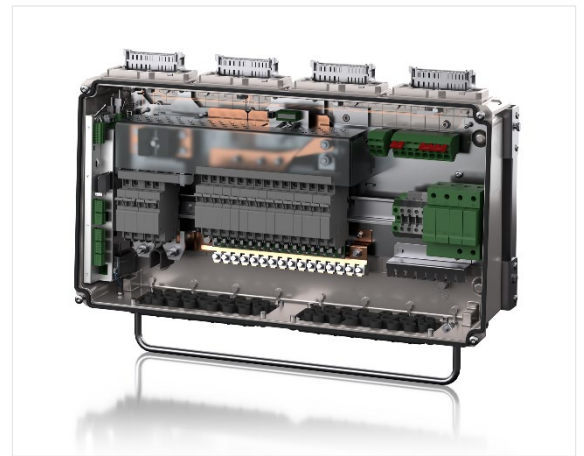




Rectifier (Field Expansion)



Design Cover



System Compartment Interior

# IPack65

## 48V 8kW Power System

### Super High Efficiency Power System for Telecom

The roll-out of 5G networks will significantly increase the number of small cells and 5G radio equipment at the edge of the telecom network. The IPack65 power system provides uninterrupted 48Vdc, either backed up by nearby IP65 free-standing Li-ion batteries or by normal indoor batteries in an outdoor cabinet. Alternatively, the system can be powered by a backed-up 400V AC or DC feed.

The IPack65 rectifier itself, and the system compartment, are IP65 compliant, without fans or filters, and will withstand any outdoor environment and require no regular maintenance. With its super high efficiency, small size and weight, and flexible installation options, the IPack65 is a true 5G enabler.

It boasts application flexibility with a power range of 2-8kW and can be expanded in the field as load demands increase.

### Main features

- Super high efficiency – 97.7% rectifiers
- IP65 - convection cooling
- Full distribution
  - 15 Load Branches (LVLD)
- Smartpack S Controller allows for remote monitoring and control
- Hot pluggable rectifiers

### Applications

- Telecom – Wireless
  - Radio base station / RAN sites
  - 5G / 4G
  - Microwave
- Railway and Metro
  - Communication systems



# IPack65

48V 8kW Power System

Model	IPACK65 48V 8KW 400V SPD BD LD	IPACK65 48V 8KW 400VDC SPD
Ordering Part Number	MFGFC-0415.0001	MFGFC-0415.0002

Input Data		
Voltage nominal / operating range	185 - 275 V <sub>AC</sub> / 85 - 275 V <sub>AC</sub> (Shutdown above 305V <sub>AC</sub> )	300 - 400 V <sub>DC</sub> / 85 - 400 V <sub>DC</sub> (Shutdown above 420 V <sub>DC</sub> )
Frequency	45 - 66 Hz	0 Hz
Mains configuration / surge protection	3ph 400V+N TN / Class2 20kA	Ind. input breaker / 450VDC Class2 20kA
Mains connection	1.5 - 16mm <sup>2</sup> terminal block	1.5 - 25mm <sup>2</sup> terminal block

Output Data		
Voltage nominal / adjustable range	-48 V <sub>DC</sub> / 42 - 59 V <sub>DC</sub>	
Power maximum / installed	8kW / 4kW	
Protection	ORing FET, short circuit proof, shutdown for cont. deep short circuit, SPD Cl.2 10kA	

Load Distribution		
Primary load breakers (field replaceable)	9 pos: 2 x 40A, 3 x 16A, 4 x 10A	15 pos: 3 x 40A, 9 x 25A, 3 x 16A
Secondary (LVLD 100A) load breakers (field replaceable)	6 pos: 3 x 40A, 3 x 16A	-
Connection	1.5 - 35mm <sup>2</sup> , negative directly in breaker, positive screw clamps	
Maximum rated load	6kW	8kW

Control & Monitoring	
Smartpack S ND (no display)	Ethernet (RJ45): SNMP, MODBUS slave, Webpages, E-mail. Serial RS-232/485 (RJ-11): MODBUS master for Smart-battery/- meter monitoring 6 x Inputs (conf. digital/temp./batt. sym.), 6 x Relay outputs (max 75V / 2A / 60W)

Battery Distribution		
LVBD	Default	-
Breaker positions (field replaceable)	2 x 150A	-
Connection	M8 stud in negative 1.5 - 35mm <sup>2</sup> screw clamp in positive	-



# IPack65

## 48V 8kW Power System

Other Specifications	
Efficiency (rectifier)	97.7 %
Temperature	Operating: -40 to +55°C (-40 to +131°F) Shutdown above 75°C (167°F)
Environmental protection class	IP65 – Rectifiers and system box
Seismic / Vibration	Zone 4 (Telecordia GR 63 core) / ETSI EN 300 019:-2-4 (Cl.1), EN 50125-3:2003
Cable entry	2xMC25 Multigate gland plates in bottom (IP65) 5-7mm Ø: 2x4pcs, 8-12mm Ø: 2x4pcs, 10-14mm Ø: 2x12pcs, 14-20mm Ø: 2x4pcs, 20-26mm Ø: 2x1pcs
Accessories	Wall mount bracket and design cover included
Dimensions (WxHxD)	598 x 729 x 148 mm <sup>2)</sup> [23.54 x 28.7 x 5.83"] <sup>2)</sup>
Weight (w/o packing), system module / wall bracket / design cover	20.4 kg [45 lbs] 3.3 kg [7.3 lbs] / 1.9 kg [4.2 lbs] / 2.8 kg [6.2 lbs]

Design Standards	
Electrical safety	EN IEC 62368-1:2020/A11:2020, IEC 62368-1:2018, UL 62368-1:2021 <sup>1)</sup> C22.2 No. 62368-1:2021 <sup>1)</sup> , IEC 60950-1:2013
EMC	EN IEC 61000-6-1:2019, -6-2:2019, -6-3:2021, -6-4:2019 ETSI EN 300 386 V.2.2.1, FCC CFR47 part 15B:2020 (parts of), EN 50121-4:2016+A1:2019, -5:2017+A1:2019, EN 61000-6-5:2015/AC:2018
Environment	ETSI EN 300 019: -2-1 (class 1.2), -2-2 (class 2.2), -2-4 (Class 4.1E & 4.2H) EN 50614:2020 (WEEE) EN IEC 63000:2018 (ROHS), EN IEC 62474:2019 + A1:2021 (REACH)

Additional Items	
Rectifier module	ELK1126.106 - IPACK65 48/2000 SHE

1) No UL/CSA on MFGFC-0415.0002 | 2) dimension with design cover WxHxD 610 x 793 x 189 mm [24.01 x 31.22 x 7.44"]

Specifications are subject to change without notice