

# P R B X

## POWERBOX Marine Line PT510 Series DIN-Rail Mountable Redundancy Diode

### Features

GL approved for bridge use
Cooling by free air convection
DIN-Rail mounting on back or side
Conformal coating
RoHS compliant
Ultra low voltage drop
Suitable for 12 / 24 / 48 V redundant operation
LED's indicating Input OK

### Input

Voltage range	10-48VDC.
Number of inputs	2.
Input current	20A (max) per input.
LED indicators	DC OK (1 for each input).
Reverse polarity protection	Yes, <60V.

### Output

Max reverse voltage	50V.
Output current	20A (max).
Voltage drop	<200mV @ 20A.

### Environmental

Operating temperature	-25°C to +70°C without derating.
Storage temperature	-40°C to +85°C.
Humidity	5-95%, non-condensing @ +55°C.
	Conformal coating.
Vibration	Germanischer Lloyd table 3.16 High vibration strain ±1.6mm displacement, 2-25Hz, 4g; 25-100Hz (1 octave/min).
Altitude	10,000 feet operating. 30,000 feet non-operating.

### General

Isolation voltage	1kVAC Input/Chassis. 1kVAC Output/Chassis.
Isolation resistance	>100M @ 500VAC Terminal-Chassis.
Dimensions (HxWxD)	134 x 43 x 126 mm, excluding DIN-Rail mounting device. Add 10mm for standard mounting device and EN50022 DIN-Rail.

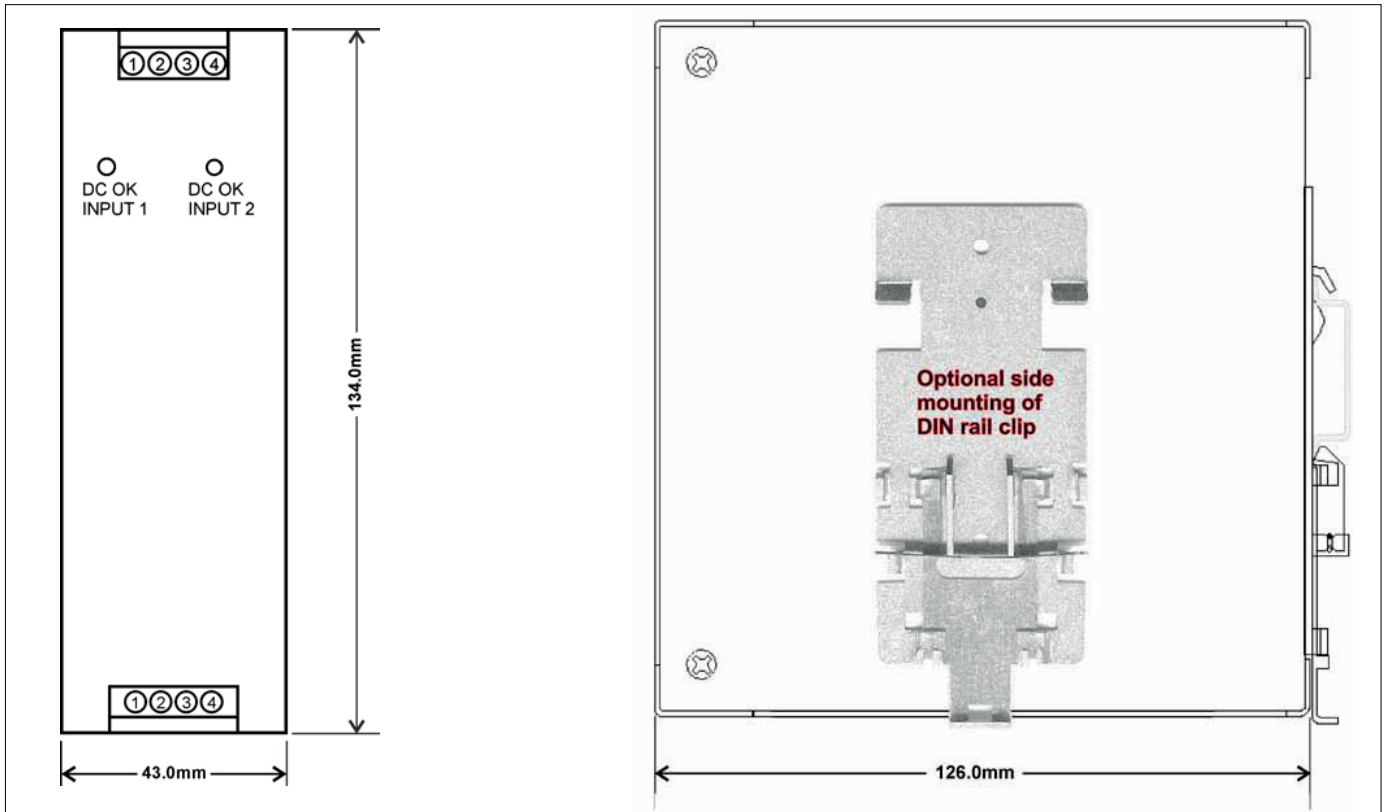


Weight	<0.4 kg.
Warranty	2 years.

### Standards

Safety standard	EN60950 compliant.
EMC ESD	EN61000-4-2 Air ±8kV, Contact ±4kV.
Electromagnetic fields	EN61000-4-3 10V/m 8MHz-2GHz.
EFT/Burst	EN61000-4-4 2kV.
Surge	EN61000-4-5 0.5kV Input+ - Input-.
Conducted immunity	EN61000-4-6 3VRMS, 150kHz-80MHz.
Conducted LF	IEC60533 3VRMS, 50Hz-12kHz.
HV immunity	IEC60947-2 2kV, 60s.

Mechanical



Pin Connection

**Input Connector**

Pin	Function
1	Input 1 +
2	Input 1 -
3	Input 2 -
4	Input 2 +

**Output Connector**

Pin	Function
1	Output DC +
2	Output DC +
3	Output DC -
4	Output DC -

**Wire Gauge**

AWG	24-12
Solid	0,2-4mm <sup>2</sup>
Flexible	0,2-2,5mm <sup>2</sup>

Specifications are subject to change without notice.