



BROCHURE



OVERVIEW

Pharos Marine Automatic Power offers a versatile and rugged range of solar electrical power generators for individual or multiple installations, suitable for a wide range of client projects in demanding gas & dust hazard environments.

The Photovoltaic Module is highly resistant to water, abrasion, hail impact and other severe weather conditions, making it suitable for use in any climate. Our dedicated team can custom design and manufacture a portable or permanent certified Zone 1 solar powered system, with battery back-up to provide required autonomy for a multitude of applications in hazardous areas.

Current applications for this reliable and economical energy source include remote marine navigation and aviation warning systems, communications & wifi, site traffic management, pipeline / valve leak detection and fluid / vapour flow monitoring, security applications and offshore HPU UPS systems.

CERTIFICATIONS

ATEX certificate number: ExVeritas 15ATEX0051X

IECEX certificate number: IECEX EXV 15.0001X

Coding: Ex II 2 G Ex e mb II C T6 Gb -40°C ≤ Tamb ≤ +55°C

Ingress Protection: IP-66

KEY FEATURES

- PID resistant
- 1000V (UL) / 1000V (IEC) Certified
- Micro-crack free
- Triple stage 100% in-line EL passed
- Higher energy yield on field performance
- Certified solar panels range from 20W-400W for use in Zone 1 & Zone 2 hazardous environments
- Anodised aluminium extruded frame for torsional rigidity and ease of installation
- High integrity IP66 universal junction box c/w 4mm² terminals with blocking diode included
- Two ISO M25 cable entries
- Designed for modular integration and expansion in series for 24V and higher voltages
- Designed for modular integration and expansion in parallel for increased output currents

MECHANICAL SPECIFICATIONS

Connector	MC4 Compatible
Diode	Shottky bypass diodes; 3nos
Frame	Anodised aluminium alloy; twin wall profile
Locking	Corner Key Type
Glass	ARC; low iron; tempered; high light transmission; 3.2mm

Furnished with universal GRP Junction Box

Part Number	Length (mm)	Width (mm)	Thickness (mm)	Weight (kg)
SPEX37-12	515	470	35	4
SPEX60-12	558	667	35	7
SPEX130-12	1157	677	35	10
SPEX175-12	1487	667	35	11
SPEX235-24	1353	987	40	20
SPEX350-24	1968	987	40	23

ELECTRICAL SPECIFICATIONS

Part Number	Nominal Volt	Rated Power (W)	Open Circuit Voltage (Voc)	Max Power Voltage (Vmp)	Max Current (Imp)	Short Circuit Current (Isc)	Efficiency (%)
SPEX37-12	12	37	24.12	20.63	1.83	1.92	15.3
SPEX60-12	12	60	23.98	20.45	2.97	3.13	16.3
SPEX130-12	12	130	23.98	20.45	6.59	6.96	17.2
SPEX175-12	12	175	23.98	20.45	8.63	9.11	17.5
SPEX235-24	24	235	31.97	27.26	8.63	9.11	17.5
SPEX350-24	24	350	47.95	40.90	8.63	9.11	18.2

General Details:

Output Tolerance (%): +-5

Warranty:

0-10 Years for 90% rated power, 10-25 years for 80% rated power

**All values are subject to change without notice.*

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