

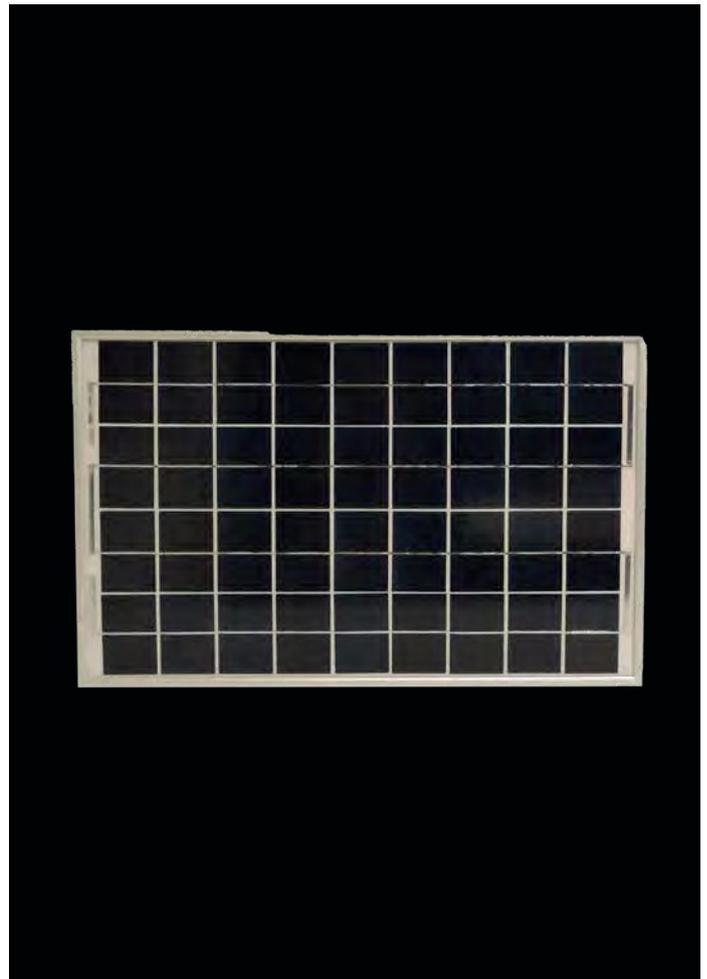


Solar Modules

Photovoltaic Modules for Aids-to-Navigation

These high performance modules are developed and optimized for off-grid photovoltaic systems. The modules have a proven record of hundreds of AtoN installations from arctic to tropic conditions. They have a high reliability in harsh marine environments.

- Long-life industrial quality design
- Stable frame construction
- Stable aluminium frame with mounting and grounding holes
- Carefully selected polycrystalline solar cells to reach top performance
- Wired in bypass diodes to reduce potential loss of power and damage from partial array shading
- Junction box with installation friendly cable fittings
- Designed to meet the environmental requirements of IEC61215



Polycrystalline Modules

Type/Order Code	SNG40	SNG55	SNG80	SNG160
Nominal Power	40 W	55 W	80 W	160 W
Nominal Voltage	18.4 V	18.4 V	18.3 V	18.2 V
Nominal Current	2.20 A	2.93 A	4.40 A	8.79 A
Open Circuit	22.5 V	22.7 V	22.8 V	22.9 V
Short Circuit	1.78 A	2.38 A	3.57 A	7.13 A
Max. Tolerance of P	+10%/-5 %	+10%/-5 %	+10%/-5 %	+10%/-5 %
Dimensions	420x670 mm	540x670 mm	775x670 mm	1480x670mm
Weight	3.5 kg	4.4 kg	6.0 kg	11.5 kg
Max. System Voltage	1000 V	1000 V	1000 V	1000 V
Module Technology	Glass-foil-laminate with aluminium frame			
Module Design	Cover material: high transparent solar glass (tempered), 4mm Encapsulation: EVA - Solar Cells - EVA Back material: Tedlar - Polyester - Tedlar, white			
No. and Type of cells	36 pcs. Polycrystalline cells			
Cables/Connection	Plus and minus connectors in junction box			
Bypass Diodes	2 pcs.			
Operation Temperature	-40...+60 °C			
Hail Resistance	25 mm hailstones with 83 km/h			
Wind Resistance	Wind speed 130 km/h with safety factor 3 (corresponds 2,400 Pa)			
Qualification	IEC 61215			