



TRAILBLAZER SERIES

MERLIN® PATENTED DESIGN, MILITARY GRADE, MODULAR SOLUTIONS FOR COMPLEX ROOFS

MERLIN® TECHNOLOGY

Industry leading power output | Enhanced performance under all light conditions | Designed and engineered in USA | Outstanding aesthetics | Redundancy by design | Robust module integrity and performance under extreme conditions | Military grade design, Materials and approvals

PRODUCT FEATURES

Modular design allows you to mix and match sizes to maximize roof area | Jump start avoidance | Optimized for maximum performance in scattered light & extreme weather conditions | Compatible with lead acid, AGM, gel, and lithium batteries | Starter and house battery maintenance | Various mounting options, including mechanical, peel & stick, and more



MERLIN® GRID PATENTED TECHNOLOGY: FLEXIBLE – RUGGED – LIGHTWEIGHT – MONO cSi



80% Lighter
than Glass Panels



50X More Durable
vs. Bus-Bar Technology



20% More Energy
In Real World Conditions



2.5X Power Density
vs. Thin Film Technology

POWER USAGE

- Charge & Maintain Batteries
- Portable Electronics
- Fans & Lights
- Refrigerators & Freezers
- Pumps, Alarms, & Sensors
- TV, Stereos, & Appliances

TECHNICAL SPECS

Electrical Characteristics (STC) ¹ MERLIN® PV Module Specs	TBS110L	TBS120S	TBS120R	TBS120L	TBS180S	TBS180R	TBS240S	TBS240L	TBS360P
Part Number (Black)	TBS-P0440BHL0	TBS-P0240BFS0	—————	TBS-P0240BFLO	—————	TBS-P0360BFRO	TBS-P0480BFS0	TBS-P0480BFLO	TBS-P0720BFRP
Part Number (White)	—————	—————	TBS-P0480WHRO	TBS-P0240WFLO	TBS-P0360WFS0	TBS-P0360WFR0	TBS-P0480WFS0	TBS-P0480WFLO	TBS-P0720WFRP
Cell Type	G1 PERC								
Rated Power (Pmax)		110	120	120		180		240	360
Voltage Pmax (W)		24.6	26.9	13.34		19.8		26.8	19.8
Current Imp (Vdc)		4.47	4.47	9.00		9.00		9.00	18.0
Voc (Amps)		29.22	31.87	15.94		23.90		31.87	23.90
Isc (Vdc)		4.84	4.84	9.67		9.67		9.67	20.1
Active Area Efficiency	19%	19%	19%	19%	19%	19%	19%	19%	19%

- STC standard test conditions: 1000W/m2 intensity, Air Mass 1.5, 25°C cell temperature. Power tolerance is +/- 5% W at STC. The electrical characteristics are within +/- 10% unless otherwise specified.
- Specifications are subject to change.

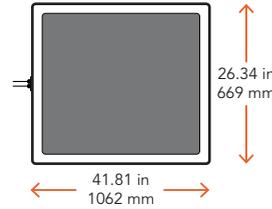
TBS110L

Weight 5.84 lb | 2.65 kg



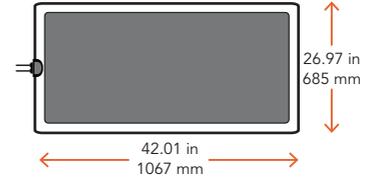
TBS120S

Weight 6.17 lb | 2.80 kg



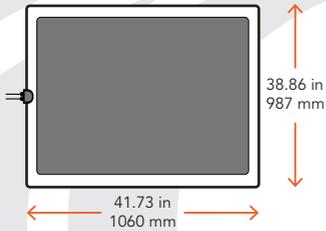
TBS120R

Weight 6.17 lb | 2.80 kg



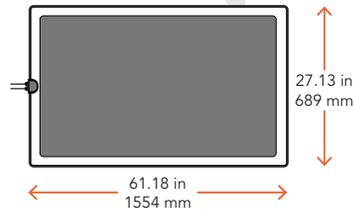
TBS180S

Weight 9.15 lb | 4.15 kg



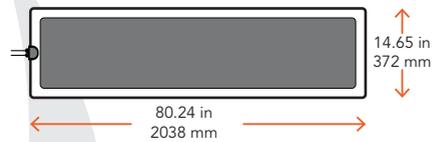
TBS180R

Weight 9.15 lb | 4.15 kg



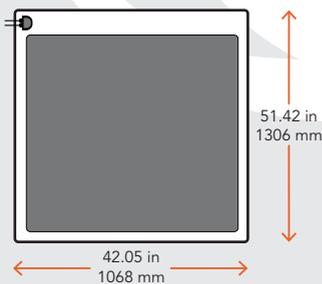
TBS120L

Weight 6.17 lb | 2.80 kg



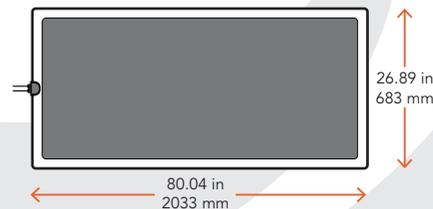
TBS240S

Weight 11.42 lb | 5.18 kg



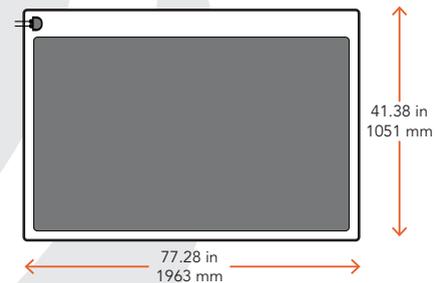
TBS240L

Weight 11.42 lb | 5.18 kg



TBS360P

Weight 17.97 lb | 7.97 kg



Read more

*Weight Specifications Pertains only to the Solar Panel

Version 2. Last revised 10/27/22