

Transportation Kits



MERLIN™ TECHNOLOGY

PERFORMANCE

Industry-leading power output

- Superior low-sun angle performance in all light conditions
- Robust panel integrity
- Redundancy with grid design

DESIGN AND ENGINEERING

Exceptionally rugged & durable

- Monocrystalline silicon cells
- Engineered for extreme conditions, including military environments
- Lightweight and flexible
- Outstanding aesthetics and aerodynamics

CUSTOMER BENEFITS

DEPENDING ON PANEL AND APPLICATION, YOUR SYSTEM MAY ALSO:

Reduce total cost of ownership, fuel use, operational disruptions, and maintenance

- Cut equipment downtime and labor costs from jump-starts
- Extend battery life while lowering starter and alternator expenses

PRODUCT FEATURES

COMPATIBILITY

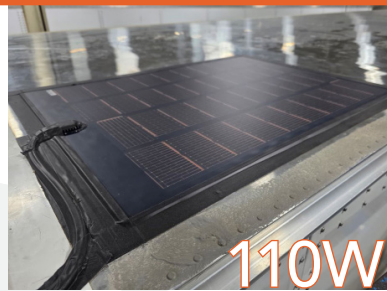
All vehicles, types, batteries

- Vehicles: vans, specialty, last mile, straight trucks, trailers, tractors
- Types: gasoline, propane, CNG, diesel, diesel-electric hybrid, all-electric
- Batteries: lead acid, AGM, gel, lithium

INSTALLATION AND USE

Peel-and-stick adhesive

- Non-invasive installation avoids roof or surface penetration



Achieve ROI In Just 1 to 12 Months —
Proven By 100,000+ U.S. Installs Since 2016

MERLIN™ GRID PATENTED TECHNOLOGY

FLEXIBLE – RUGGED – LIGHTWEIGHT – MONO cSi



50% More Power
vs. Thin Film Technology



Peel-and-Stick
for Easy Installation



Top Performance
in Any Light



Long-Term Durability
and Resilience



20% More Energy
In Real World Conditions



80% Lighter
Than Glass Systems

SOLUTIONS GUIDE

Battery Maintenance

	55W	180W	360W	460W	500W
Telematics, Cameras, IoT Support	✓	✓	✓	✓	✓
Battery Maintenance (Starter or Reefer)	✓	✓	✓	✓	✓
Lot Rot Prevention	✓	✓	✓	✓	✓
Jump Start Avoidance	✗	✓	✓	✓	✓
eHVAC (Day Cab)	✗	✓	✗	✗	✗
Idle Mitigation (Day Cab)	✗	✓	✗	✗	✗
eHVAC (Sleeper)	✗	✗	✓	✓	✓
Idle Mitigation (Sleeper)	✗	✗	✓	✓	✓
Hotel Loads (Sleeper)	✗	✗	✓	✓	✓

Liftgates

	Lite: 240W	Pro: 360W	Ultra: 425W
Estimated Number of Daily Cycles	6–20	21–30	Cold weather, Maximum cycles
Auxiliary Battery Lot Rot Prevention	✓	✓	✓
Liftgate Battery Operations	Low Capacity	✓	✓
	Medium Capacity	✗	✓
	High Capacity	✗	✓

1.3 | 7 JAN. 2026

* Wattage shown reflects a single panel. Image displays multiple panels of the same wattage.

SCAN THE QR CODE TO SEE A
MERLIN SOLAR INSTALLATION ON A TRUCK!



All OEMs

REEFER AND DAY CAB

55W



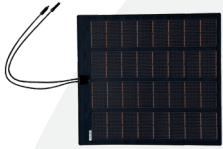
Reefer Kit

Part Number: SYST-000133		Price per Kit: \$377.00
1x	55W MerlinSolar™ Panel	
1x	MerlinSolar™ TS10 Charge Controller (10A)	
1x	10 ft Home Run Cable	
1x	5 ft Battery Cable	
1x	Hardware Kit, Strain Relief Kit, Edge Tape	

Panel (PV)	FLX-AQ031R
Weight	~3 lb (1.4 kg)
Dimensions¹	30 × 16 × 1/8 in (770 × 418 × 3.6 mm)

BOX TRUCK - JUMP START AVOIDANCE

110W



Jump Start Avoidance

Part Number: SYST-000137		Price per Kit: \$598.00
1x	110W MerlinSolar™ Panel	
1x	MerlinSolar™ TS15 Charge Controller (15A)	
1x	20 ft Home Run Cable	
1x	10 ft Battery Cable	
1x	Hardware Kit, Strain Relief Kit, Edge Tape	

Panel (PV)	FLX-AH032R
Weight	~6.5 lb (3 kg)
Dimensions¹	34 × 31 × 1/8 in (853 × 786 × 3.6 mm)

180W

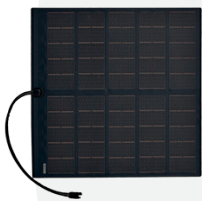


Jump Start Avoidance

Part Number: SYST-000157		Price per Kit: \$845.00
1x	180W MerlinSolar™ Panel	
1x	TS15 Charge Controller (15A)	
1x	20 ft Home Run Cable	
1x	10 ft Battery Cable	
1x	Hardware Kit, Strain Relief Kit, Edge Tape	

Panel (PV)	FLX-AH052R
Weight	~10 lb (4.5 kg)
Dimensions¹	67 × 25 × 1/8 in (1706 × 627 × 3.6 mm)

180W



Jump Start Avoidance

Part Number: SYST-000139		Price per Kit: \$845.00
1x	180W MerlinSolar™ Panel	
1x	TS15 Charge Controller (15A)	
1x	20 ft Home Run Cable	
1x	10 ft Battery Cable	
1x	Hardware Kit, Strain Relief Kit, Edge Tape	

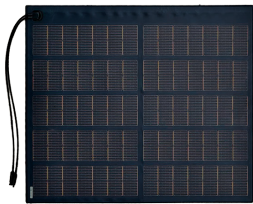
Panel (PV)	FLX-AH050S
Weight	~8.6 lb (3.9 kg)
Dimensions¹	40 × 41 × 1/8 in (1018 × 1029 × 3.6 mm)

1. Dimensions are rounded to the nearest inch (25.4 mm) and may vary by up to ±0.5 in (12.7 mm).
2. Standard Test Conditions (STC): 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.

All OEMs

BOX TRUCK / TRAILER - LIFTGATES AND PALLET JACK

240W

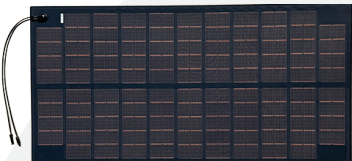


Liftgate Pro: Light and Medium Duty / Low and Mid Cycles

Part Number:	SYST-000178	Price per Kit:	\$1,171.30
1x	240W MerlinSolar™ Panel		
1x	MerlinSolar™ RWP30 Charge Controller (30A)		
1x	50 ft Home Run Cable		
1x	2.5 ft Battery Cable		
1x	Hardware Kit, Strain Relief Kit, Edge Tape		

Panel (PV)	RYD-AH070R
Weight	~14.3 lb (6.5 kg)
Dimensions¹	56 × 41 × 1/8 in (1415 × 1039 × 3.6 mm)

360W

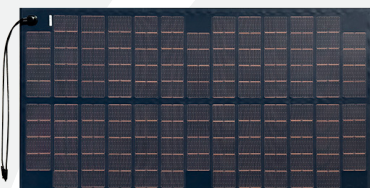


Liftgate Ultra: Heavy Duty / High Cycles

Part Number:	SYST-000167	Price per Kit:	\$1,690.00
1x	360W MerlinSolar™ Panel		
1x	MerlinSolar™ RWP30 Charge Controller (30A)		
1x	50 ft Home Run Cable		
1x	2.5 ft Battery Cable		
1x	Hardware Kit, Strain Relief Kit, Edge Tape		

Panel (PV)	RYD-AH106R
Weight	~18.7 lb (8.5 kg)
Dimensions¹	83 × 42 × 1/8 in (2094 × 1051 × 3.6 mm)

425W

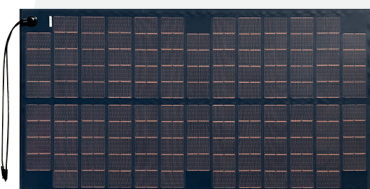


Liftgate Prime: Cold Climate, Heavy Duty / High Cycles

Part Number:	SYST-000168	Price per Kit:	\$1950.00
1x	425W MerlinSolar™ Panel		
1x	RWP30 Charge Controller (30A)		
1x	50 ft Home Run Cable		
1x	2.5 ft Battery Cable		
1x	Hardware Kit, Strain Relief Kit, Edge Tape		

Panel (PV)	RYD-AH124R
Weight	~21.8 lb (10 kg)
Dimensions¹	97 × 42 × 1/8 in (2462 × 1051 × 3.6 mm)

425W



Pallet Jack Kit

Part Number:	SYST-000224	Price per Kit:	\$1950.00
1x	425W MerlinSolar™ Panel		
1x	TS15 Charge Controller (15A)		
1x	10 ft Home Run Cable		
1x	6 ft Battery Cable		
1x	Hardware Kit, Strain Relief Kit, Edge Tape		

Panel (PV)	RYD-AH124R
Weight	~21.8 lb (10 kg)
Dimensions¹	97 × 42 × 1/8 in (2462 × 1051 × 3.6 mm)

1. Dimensions are rounded to the nearest inch (25.4 mm) and may vary by up to ±0.5 in (12.7 mm).

2. Standard Test Conditions (STC): 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.

345W



Freightliner Flat Roof

Part Number:	SYST-000210	Price per Kit:	\$1690.00
1x	345W MerlinSolar™ Panel		
1x	MerlinSolar™ RWP30 Charge Controller (30A)		
1x	20 ft Home Run Cable + 6 ft extension		
1x	10 ft Battery Cable		
1x	Hardware Kit, Strain Relief Kit, Edge Tape		

Panel (PV)	FLX-AH100R
Weight	~15 lb (8 kg)
Dimensions¹	42 × 75 × 1/8 in (1067 × 1890 × 3.6 mm)

360W



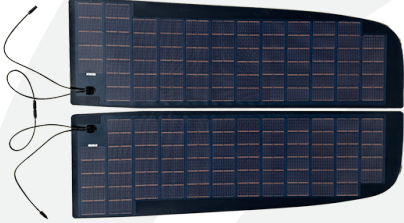
Freightliner Cascadia Mid-Roof

Part Number:	SYST-000140	Price per Kit:	\$1690.00
2x	180W MerlinSolar™ Panels		
1x	MerlinSolar™ RWP30 Charge Controller (30A)		
1x	20 ft Home Run Cable + 6 ft extension		
1x	10 ft Battery Cable		
1x	Hardware Kit, Strain Relief Kit, Edge Tape		

Compatible with International LT,
 Volvo VNL, Mack Anthem

Panel (PV)	FLX-AH052R
Weight	~10 lb (4.5 kg) per panel
Dimensions¹	67 × 25 × 1/8 in (1706 × 627 × 3.6 mm) per panel

500W



Freightliner Cascadia High Roof

Part Number:	SYST-000146	Price per Kit:	\$2,145.00
2x	250W MerlinSolar™ Panels		
1x	MerlinSolar™ Lightning40 Charge Controller (40A)		
1x	20 ft Home Run Cable		
1x	10 ft Battery Cable		
1x	Hardware Kit, Strain Relief Kit, Edge Tape		

Compatible with Western Star



Panels (PV)	FLX-AH071K and FLX-AH071J
Weight	~13.6 lb (6.2 kg) per panel
Dimensions¹	95 × 29 × 1/8 in (2400 × 732 × 3.6 mm) per panel

PACCAR

360W



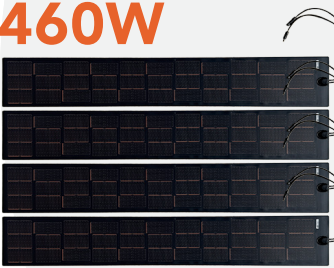
Peterbilt 579

Part Number:	SYST-000156	Price per Kit:	\$1690.00
2x	180W MerlinSolar™ Panels		
1x	MerlinSolar™ RWP30 Charge Controller (30A)		
1x	20 ft Home Run Cable		
1x	10 ft Battery Cable		
1x	Hardware Kit, Strain Relief Kit, Edge Tape		



Panel (PV)	FLX-AH054L
Weight	~8.3 lb (3.8 kg) per panel
Dimensions¹	22 × 82 × 1/8 in (534 × 2074 × 3.6 mm) per panel

460W



Kenworth T680

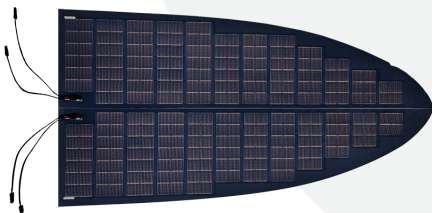
Part Number:	SYST-000145	Price per Kit:	\$2,145.00
4x	115W MerlinSolar™ Panel		
1x	MerlinSolar™ RWP30 Charge Controller (30A)		
1x	20 ft Home Run Cable		
1x	10 ft Battery Cable		
1x	Hardware Kit, Strain Relief Kit, Edge Tape		



Panel (PV)	FLX-AH033L
Weight	~6.2 lb (2.8 kg) per panel
Dimensions¹	84 × 13 × 0.12 in (2133 × 329 × 3.2 mm) per panel

INTERNATIONAL

450W



International LT Curve Cut

Part Number:	SYST-000152	Price per Kit:	\$2,145.00
2x	230W MerlinSolar™ Panels		
1x	MerlinSolar™ Lightning40 Charge Controller (40A)		
1x	20 ft Home Run Cable		
1x	10 ft Battery Cable		
1x	Y-Branch Connector		
1x	Hardware Kit, Strain Relief Kit, Edge Tape		

Panels (PV)	FLX-AH066K, FLX-AH066J
Weight	~25.6 lb (11.6 kg) per panel
Dimensions¹	97 × 30 × 1/8 in (2455 × 760 × 3.6 mm) per panel

¹ Dimensions are rounded to the nearest inch (25.4 mm) and may vary by up to ±0.5 in (12.7 mm).
² Standard Test Conditions (STC): 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.

TECH SUPPORT

