



HYBRID ELECTRIC SOLAR TRAILER

Hybrid electric transport refrigeration system



**UNLOCK ZERO-EMISSION REFRIGERATED TRANSPORT
WITHOUT SIGNIFICANT UPFRONT COSTS or RANGE ANXIETY**

➤ *Full Electric Capability*

➤➤ *Diesel Backup Enabled*

➤➤➤ *Low Cost Leases*



ZERO-EMISSION TRAILER

Performance Specifications



Specifications

Weight	850 lbs
Dimension	76.43" (W) 12.65" (D) 36.00" (H)
Charging	-
-240V	10 hours
-3 phase 480V, slow	5 hours
-3 phase 480V, rapid	1.5 hours
-DCFC fast charge	0.5 hours
Output Standard	460V/3ph/60Hz
Output Option	230V/3ph/60Hz
Output APU/AUX	12V / 48V
Cont. Output Avail.	50kW
Peak Output (30s)	100kW
Self-Discharge Rate	<3%/month
Cycle Life	6000 cycles
EOL Capacity	>= 70% nominal capacity
Storage Temp.	-20 °C to 45 °C
IP Rating (Enclosure)	IP66, NEMA 1,2,4,4X, 12
Cert. (Enclosure)	CE / ROHS Approved
Feature (Enclosure)	Lockable, Waterproof, Fire-resistant

Safety Performance and Testing

Over Discharge...	No Fire, No Explosion
Over-Charging...	No Fire, No Explosion
Short Circuit...	No Fire, No Explosion
Drop...	No Fire, No Explosion
Heating...	No Fire, No Explosion
Extrusion...	No Fire, No Explosion
Low Pressure...	No Fire, No Explosion
Thermal Runaway...	No Fire, No Explosion

Runtimes

Use Case	Ambient Temp	Set Temp	Standard Mode	Truck Support Option	Solar Option	Truck Support + Solar Options
53' Refrig. Trailer PP-100	100 °F	60 °F	20.0 hrs	2 days 2.3 hrs	inf	inf
	100 °F	33 °F	9.1 hrs	12.5 hrs	16.7 hrs	1 day 9.6 hrs
	100 °F	0 °F	12.5 hrs	20.0 hrs	1 day 9.4 hrs	inf
53' Refrig. Trailer PP-200	100 °F	60 °F	1 day 16 hrs	4 days 4.5 hrs	inf	inf
	100 °F	33 °F	18.2 hrs	1 day 1.0 hrs	1 day 9.4 hrs	2 days 19.1 hrs
	100 °F	0 °F	1 day 1 hrs	1 day 16.1 hrs	2 days 18.9 hrs	inf
53' Refrig. Trailer PP-300	100 °F	60 °F	2 days 12 hrs	6 days 6.8 hrs	inf	inf
	100 °F	33 °F	1 day 3.3 hrs	1 day 13.5 hrs	2 days 2.1 hrs	4 days 4.7 hrs
	100 °F	0 °F	1 day 13.5 hrs	2 days 12.1 hrs	4 days 4.3 hrs	inf

*Performance data is dependent on operational settings, environmental conditions, and market rates.

**inf is short for infinity and means that the input power from the auxiliary sources will allow the system to run without ever needing a charge. However, it is possible that charging the unit when possible will reduce operating costs.

Why adopt the Tandem eTRU for your fleet?

- Immediate OpEx Reduction
- Zero-Emission Refrigerated Supply Chain
- Diesel Backup At Any Time