

# Essentials stand-alone trailer

ART's Essentials stand-alone power trailer is a custom designed remote power solution that provides autonomous power for lidars.

Designed and manufactured in Australia, this RSD (Remote Sensor Device) enabler eliminates the need for external power and allows seamless deployment in off-grid locations.

The Vaisala WindCube® v2.1 is integrated on to the trailer's A-frame enclosed in a custom deployment box. The robust box design means that your WindCube® v2.1 lidar can travel to site safely and securely, removing the need for onsite installation and lifting.

The trailer is also equipped with a robust industrial solar and battery power system, featuring a fixed solar panel array (no setup required) and a Victron inverter. This system includes remote monitoring capabilities via 4G or satellite, enabling real-time tracking of the power system's health. Alerts are automatically sent via email, ensuring proactive maintenance and troubleshooting.

Designed for rapid deployment with jack up legs on all four corners for stability and easy leveling and storage for extra equipment.

The Essentials trailer is the lightweight and low-cost stand-alone power supply option for your next wind monitoring campaign.



## FEATURES

- ✓ Australian designed and manufactured
- ✓ Custom built WindCube® v2.1 deployment box
- ✓ Victron inverter for remote monitoring
- ✓ Storage
- ✓ Lidar sunshade
- ✓ Earth stake – lightning strike protection
- ✓ Fixed solar array
- ✓ Some off-road capability





## Technical specifications

FEATURE	DESCRIPTION
Trailer dimensions (L x W x H)	4120 x 1940 x 950 mm
Trailer dimensions with solar (L x W x H)	4100 x 2300 x 1750 mm
System voltage	24 V or 12 V DC PSU
Battery capacity	820 Ah Gel batteries
Battery autonomy	3–4 days
Battery design life	16 years at 25°C
Installed power array	2 x 580 W mono-facial solar modules
PV array angle	15 degrees
Solar regulator	Victron MPPT 100/50 with cloud monitoring
Remote monitoring	4G – Satellite optional (BGAN or Starlink)
Weight	Tare circa 1050 kg (ATM 1500 kg)
Water capacity	55 L water tank with level monitoring and alerts
Trailer brakes	Mechanical
Trailer jack legs	Medium duty
Other features included	Spare tyre, fire extinguisher, star picket driver, earth stake

## About us

ART designs, manufactures, installs, and maintains turnkey infrastructure solutions for wind resource assessments, as well as for the broader renewables, resources and communications industries.

**ART**

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