

## Sodar AQ510 and power trailer

ART have developed a unique wind measurement solution combining AQ Systems' AQ510 Sodar with their custom stand-alone power trailer, to deliver a customer focused remote and durable product.

The AQ510 Sodar is a high quality and state-of-the-art acoustic profiler for the measurement of wind. The sodar is met mast calibrated, IEC classified and independently verified.

AQ Systems' sodar's return signal uses the latest data processing technology to accurately calculate wind speed, direction and turbulence intensity. Data is communicated back via a GPRS or satellite modem to AQ-Online where it can be viewed and downloaded.

ART's stand-alone power trailer is proudly Australian designed and manufactured and eliminates the need for external power sources, enabling seamless deployment in off-grid locations.

The power trailer has a folding solar array designed for rapid deployment, low power consumption, and a durable and weather–resistant construction which can withstand harsh environmental conditions in remote locations.

The AQ510 Sodar and power trailer is the market leading integrated solution for your next wind measurement campaign.





## **FEATURES**

- Australian designed and manufactured
- Fixed solar array
- Off-road capable
- Quick and easy set up
- ✓ Low power consumption
- The AQ510 is very reliable, robust and has no moving parts
- Requires very low maintenance





## Technical specifications

FEATURE	DESCRIPTION
Trailer dimensions (L x W x H)	4120 x 1988 x 950 mm
Trailer dimensions with sodar (L x W x H)	4120 x 2300 x 2300 mm
Sodar measurement range	40 - 200 m (optional 300 m)
Sodar height resolution	5 m (33 measurement heights)
Sodar wind speed accuracy	+/- 2% horizontal
Sodar operating temp range	-40 to 60°C
Sodar operating hum range	0 to 100% RH
Sodar data availability	>98% @100 m, >92% @150 m, >85% @200 m
System voltage	12 V DC
Battery capacity	615 Ah Gel batteries
Battery autonomy	4 days
Battery design life	16 years at 25°C
Installed power array	2 x 580 W mono-facial solar modules
PV array angle	Adjustable 15-40 degrees
Solar regulator	Victron MPPT 100/50 with cloud monitoring
Remote monitoring	4G - Satellite optional (BGAN or Starlink)
Weight	Tare circa 950 kg (ATM 1500 kg)
Trailer brakes	Mechanical
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.

