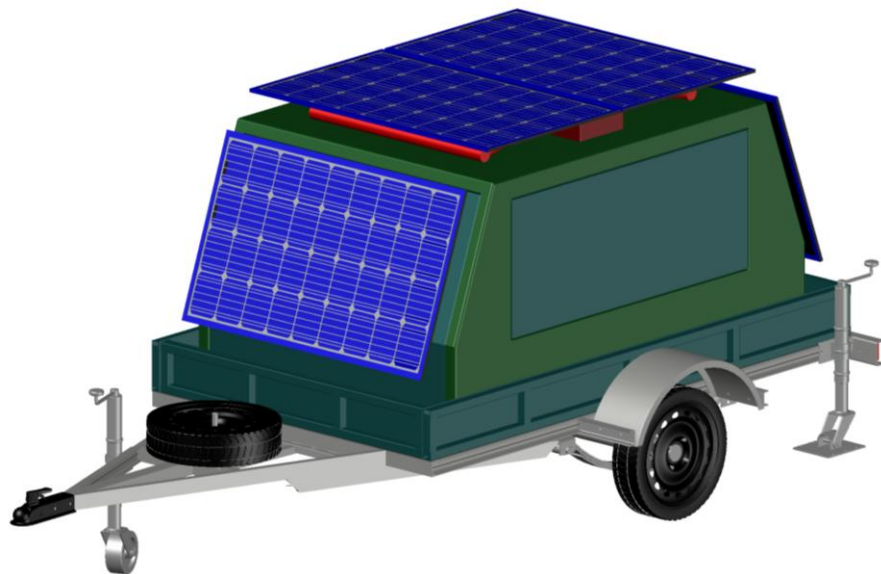


WP350 Pulse Coherent Vertical Mast Wind LiDAR

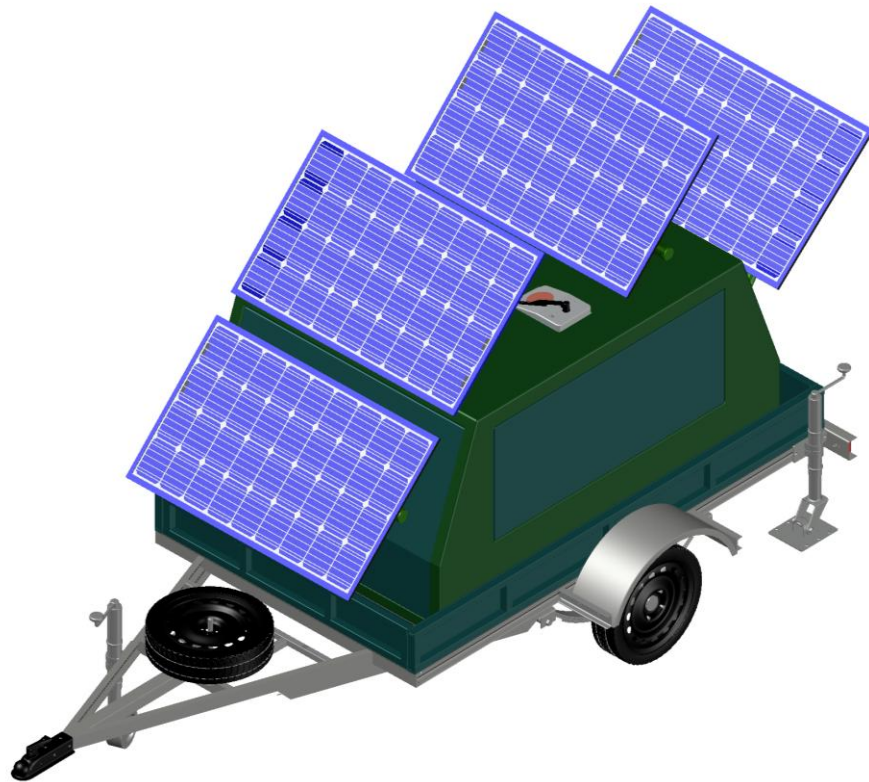


Trailer Solar Powered System



Trailer package solution all-in-one

- Deployable on site within 60 minutes
- Shown above in closed-for-transit mode (heavy duty road cover is provided for overall security and protection)



- Solar panels deployed on site ready for 24x7 operation
- Outrigger legs adjustable to take the weight of the trailer and provide stabilization
- Leica LiDAR system is mounted inside the main enclosure
- Solar MPPT charge controller and electrical and communications systems inside the main enclosure



Doors open for service and during on-site commissioning

WP350 Specifications

Index	Specifications	Parameter
1	Detection height range	40m~350m
2	Spatial resolution	Software can be configured with any 24 heights in the range of 40-350m, the highest resolution is 1m
3	Wavelength	1550nm, Eye-safe and not visible to the naked eye
4	Data updating time	1min/2min/5min/10min (configurable)
5	Wind speed range	0~70m/s
6	Wind speed accuracy	≤0.1m/s
7	Wind direction accuracy	<3° (average wind speed>2m/s)
8	Scanning mode	Multibeam scanning /VAD
9	Weight	<30kg
10	Size (L*W*H)	463mm*351mm*564mm
11	Average power consumption	<80W
12	Data storage	1T SSD, can store more than 36 months of data
13	Power supply	AC:100-220V/50Hz (adapter) /DC: 24V±0.5V
14	Data product	Second-order and time-average data include wind speed and direction, vertical speed, maximum and minimum horizontal wind speed, wind speed mean square error (turbulence intensity), signal to noise ratio data, GPS position, time, surface atmospheric temperature, humidity, Pressure data, etc.
15	Data format	ASCII (.csv)
16	Data transfer	Ethernet/4G/3G/Beidou
17	Working environment	Temperature:-40°C ~50°C Relative humidity:0~100%
18	Environmental protection	IP67
19	Laser safety compliance	Class 1 of IEC 60825-1



Operation Modes

Standalone with no long range external communications available

- All configurations made at time of installation for continuous monitoring
- 1TB internal data storage supports up to 36 months operation
- Wireless local data retrieval by connection to internal WiFi AP
 - (No need to open the enclosure or physically connect, just drive up to the location and access the WiFi connection)

Remote Desktop Operation (periodic access or real time data)

- Connect the Physical Ethernet network to your local network, or
- Utilise the inbuilt 4G Data connection to local cell tower, or
- Add on a Starlink Satellite data connection if no 4G available
 - (all of New Zealand and most of Australia covered as at October 2022)

UPS (uninterruptable Power Supply)

1. Where the instrument is locally powered by 230VAC then a local UPS can be provided to maintain data capture during short mains power outages (typically up to 30 minutes cover)
2. Allows cover for short breaks and allows for orderly shutdown and restart of data capture in the event of a longer duration outage (integrated to the WP350 software).

Solar Powered mobile solution

- Fully autonomous 24VDC solar power system with full integration to the WP350 software for battery and charge control status monitoring
- 800W solar panels and 400Ah 24VDC LiFePO4 battery systems engineered for up to 6 days autonomy and long life operation.
 - (no sunlight or complete cloud cover for 6 days, can be extended if required with additional batteries)
- Automated shutdown of WP350 software in the case of battery storage nearing low power state to extend “live” condition, then complete orderly shutdown
- Internal automated restart from power down condition resumes all programmed data capture operations and any remote communications link.

CCTV Camera (option)

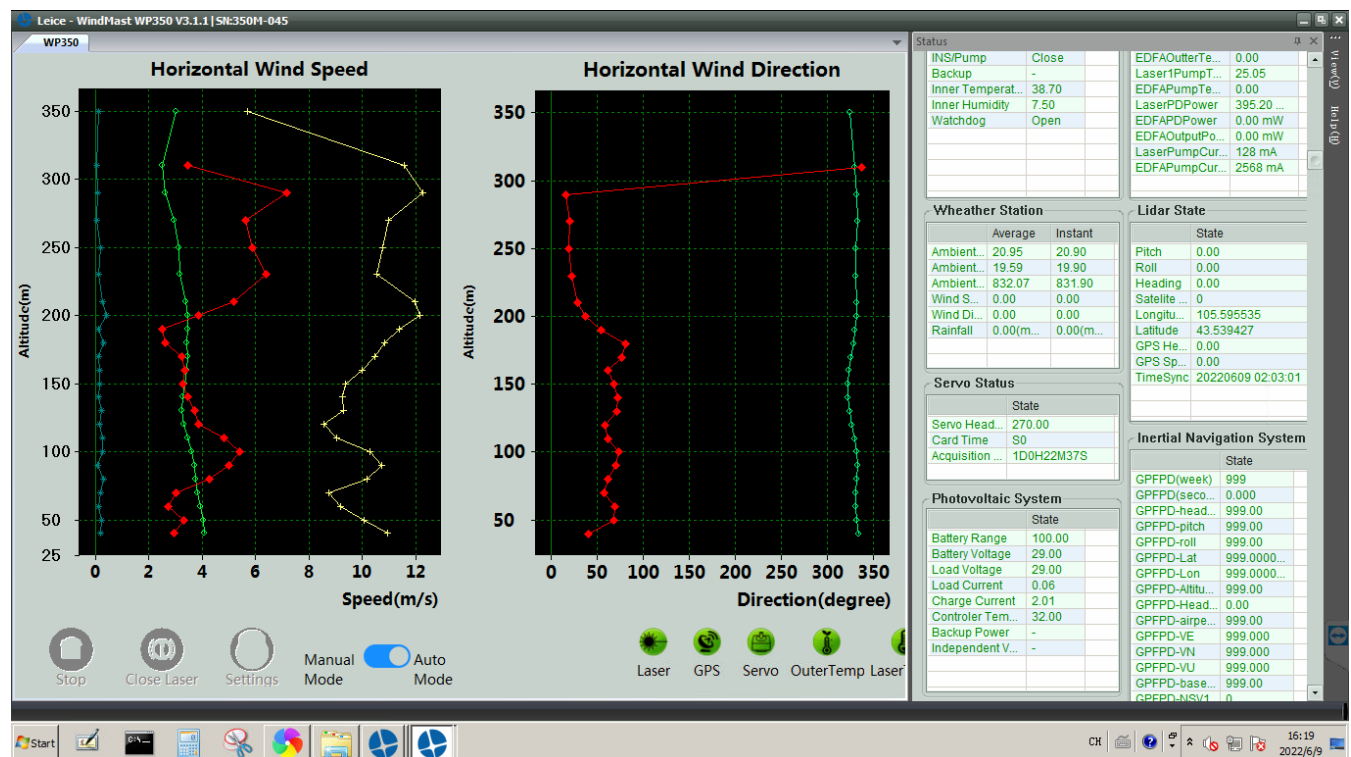
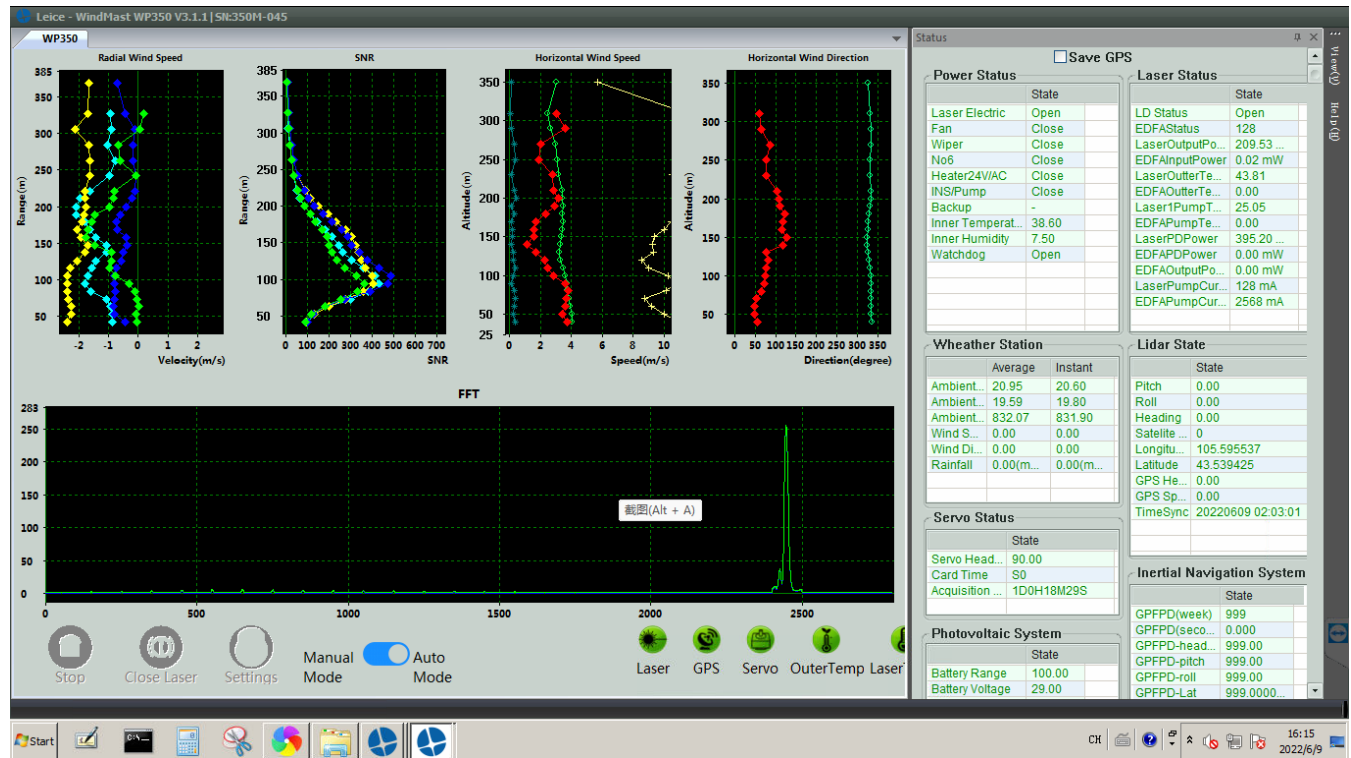
- PTZ colour IP camera connected to WP350 local network
- Accessible locally and remotely to observe local conditions at the site
- Extreme low light capability

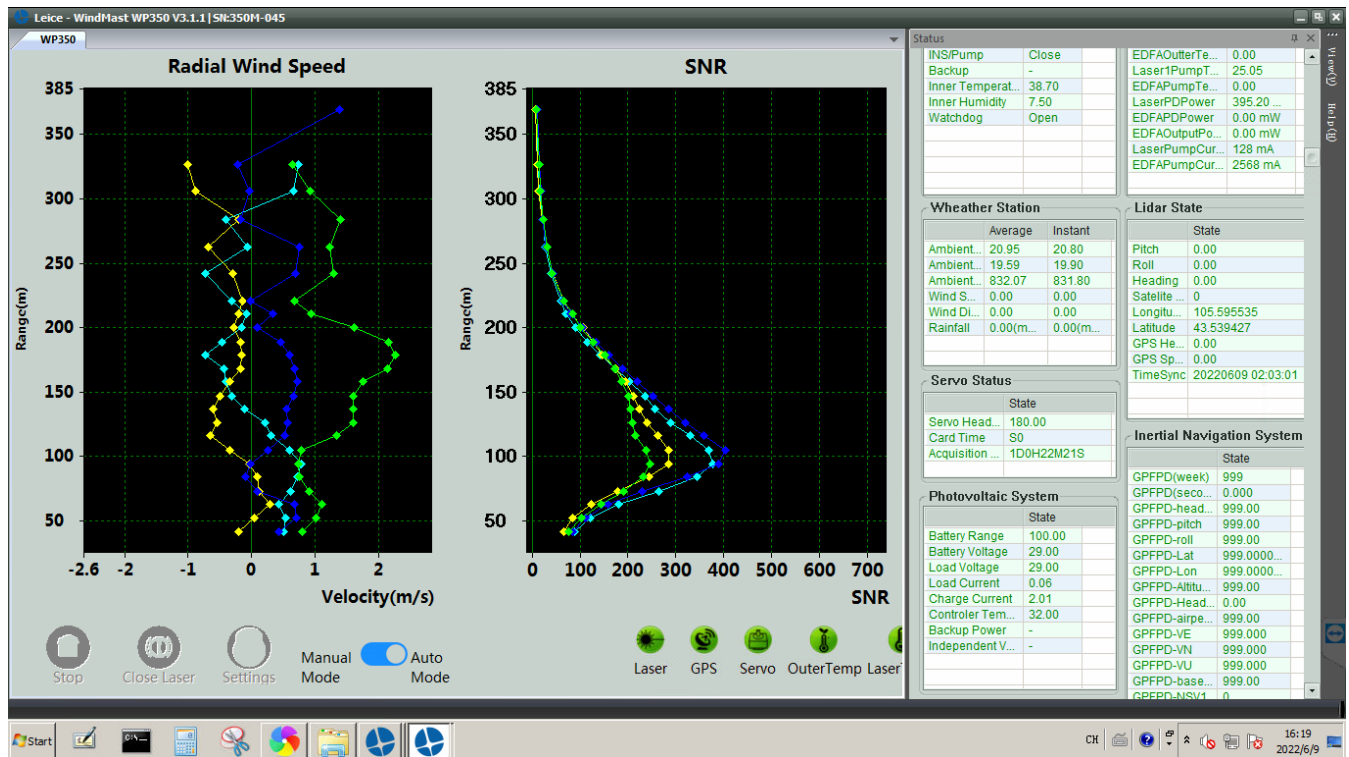
Illumination (option)

- LED lighting for illuminating the installation for security or safety, powered from 230VAC, via UPS, and/or local solar power

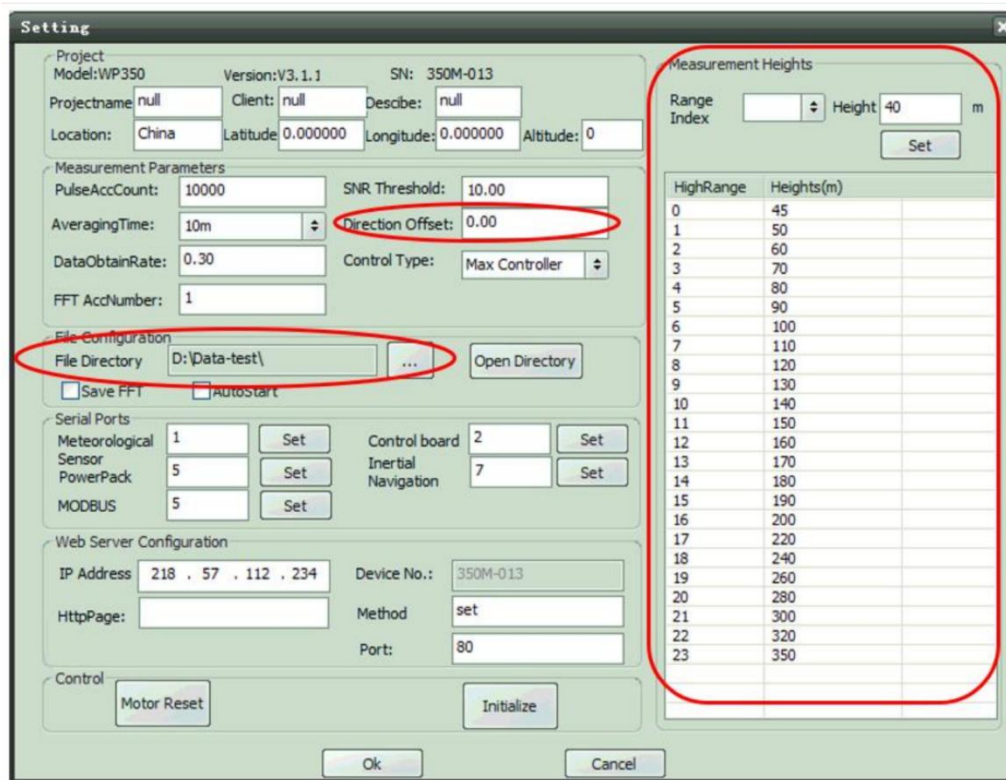


WP350 Software Analysis and System Status Windows (available locally and remotely)





User Configuration Settings



The screenshot shows the 'Setting' dialog box for the Leica WindHast WP350. The dialog is divided into several sections:

- Project Information:** Model: WP350, Version: V3.1.1, SN: 350M-013. Fields for Projectname, Client, Describe, Location, Latitude, Longitude, and Altitude are present.
- Measurement Parameters:** PulseAccCount: 10000, SNR Threshold: 10.00, AveragingTime: 10m, Direction Offset: 0.00 (highlighted with a red circle), DataObtainRate: 0.30, Control Type: Max Controller, FFT AccNumber: 1.
- File Configuration:** File Directory: D:\Data-test\ (highlighted with a red circle), Save FFT, Autostart, Open Directory button.
- Serial Ports:** Meteorological Sensor, PowerPack, MODBUS, Control board, Inertial Navigation.
- Web Server Configuration:** IP Address: 218 . 57 . 112 . 234, Device No.: 350M-013, HttpPage, Method: set, Port: 80.
- Control:** Motor Reset, Initialize.
- Measurement Heights:** A table showing Range Index (0 to 23) and Heights (m) (45 to 350). The table is highlighted with a red circle.