



LIDARs

VERTICAL PROFILE DOPPLER LIDAR V300

Wind print V300, wind lidar for vertical profile meet the IEC 61400-12-1 standard of wind measurement. It is an economic equipment choice of wind measurements for the power curve determination and estimation, wind farm operation and maintenance, pre-evaluation, initial site assessment. The Doppler beam swinging (DBS) configuration which can probe the wind speed and direction profile from 40m to 240m (u p t o 300 m) is applied in wind print V300. It can capture wind profile in a very high spatial ($\leq 0.1m/s$) and temporal (1s data sampling rate).

Technical Specification:

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| <i>Detection range</i> | <i>40m~300m</i> |
| <i>Data update</i> | <i>1s</i> |
| <i>Range resolution</i> | <i>20 different heights from 40m to 300m</i> |
| <i>Wind speed accuracy</i> | <i>$\leq 0.1m/s$</i> |
| <i>Wind speed range</i> | <i>0~50m/s</i> |
| <i>Wind direction accuracy</i> | <i>0.1°</i> |
| <i>Power supply</i> | <i>AC 220V /50Hz Or DC12V /24V</i> |
| <i>Power consumption</i> | <i>90W 150W when cooling at 40°C</i> |
| <i>Operating temperature rang</i> | <i>-30~+50°C</i> |
| <i>Operating humidity</i> | <i>0~ 100%</i> |
| <i>Housing classification</i> | <i>IP65</i> |
| <i>LASER Safety Compliance</i> | <i>1M IEC/EN 60825-1 , (eyes safety)</i> |
| <i>Size</i> | <i>550X550X700mm</i> |
| <i>Weight</i> | <i>System 45kg</i> |
| <i>Data transfer</i> | <i>Ethernet 1000 Base-T; GPRS (optional)WIFI</i> |
| <i>Output data</i> | <i>1s horizontal, vertical wind speed &direction 10 min horizontal, vertical wind speed & direction Min & max wind speed Horizontal &vertical wind speed standard deviation Signal Noise Ratio (SNR) GPS coordinates, time The temperature, humidity ,monitoring of lidar system</i> |

WIND 3D SCANNING DOPPLER LIDAR S4000

With the ability of 3D wind field measurements in atmospheric boundary layer and lower troposphere is designed for applications in various fields such as wind power, aviation weather, weather and climate, air quality and so on. It is a coherent Doppler lidar with high efficiency and sensitivity. The compact all-fiber configuration turns the lidar into a portable autonomous system with no electromagnetic interference. The eye-safe wave length in near infrared spectrum (1.4um-2.2um) with high transmission in atmosphere is widely used for operational lidar.

Technical Specification:

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|-----------------------------------|--|
| <i>Detection range</i> | <i>50m~6000m</i> |
| <i>Data update</i> | <i>0.25s (fastest)</i> |
| <i>Range resolution</i> | <i>15m/30/60m</i> |
| <i>Wind speed accuracy</i> | <i>0.1m/s</i> |
| <i>Wind speed range</i> | <i>0~70m/s</i> |
| <i>Wind direction accuracy</i> | <i>0.1°</i> |
| <i>Power supply</i> | <i>AC 220V /50Hz Or DC12V /24V</i> |
| <i>Power consumption</i> | <i>200W 500W when cooling at 40°C</i> |
| <i>Operating temperature rang</i> | <i>-30~+50°C</i> |
| <i>Operating humidity</i> | <i>0~ 100%</i> |
| <i>Housing classification</i> | <i>IP65</i> |
| <i>LASER Safety Compliance</i> | <i>1M IEC/EN 60825-1 , (eyes safety)</i> |
| <i>Size</i> | <i>746X764X1000mm</i> |
| <i>Weight</i> | <i>System 80kg</i> |
| <i>Data transfer</i> | <i>Ethernet 1000 Base-T; GPRS (optional)</i> |
| <i>Output data</i> | <i>Wind profile, LOS wind speed PPI/RHI/CAPPI 3D wind field The local temperature, humidity, pressure GPS coordinates, time Signal Noise Ratio (SNR) The temperature, humidity, pressure, monitoring of lidar system</i> |