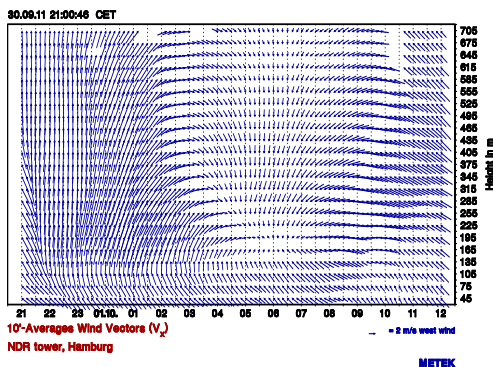
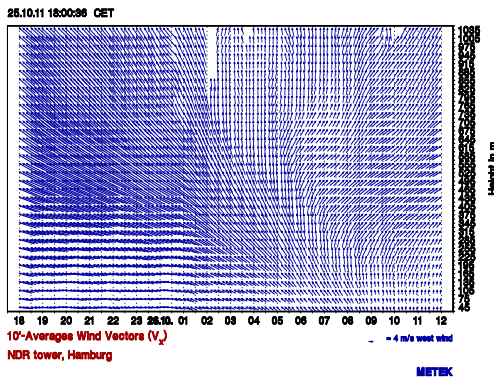


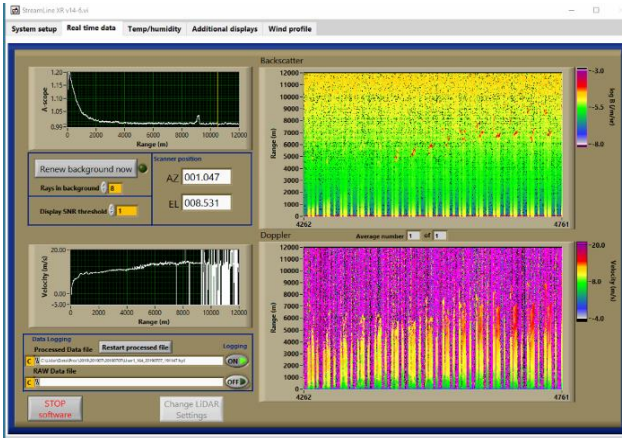
Doppler Lidar Streamline AllSky XR



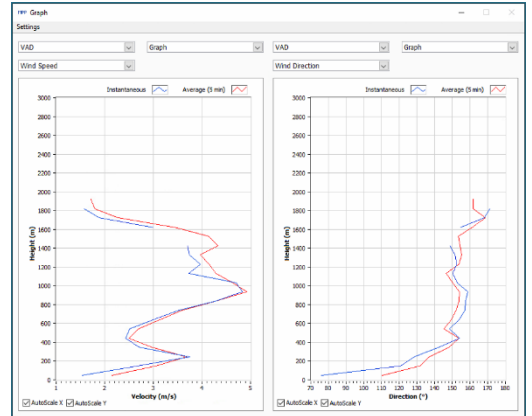
- Compact pulsed Doppler lidar for high quality wind measurements
- Very robust optics and mechanics, wide operational temperature range -20 ... +45 °C
- 24/7 unattended self monitored measurements
- All-sky scanner head, elevation range $\pm 105^\circ$
- Full control of all scanner parameters
- User defined scan patterns stored in scan files
- Combined or sole use of pre-defined and/or user defined scan patterns
- Step-stare and continuous scanning modes available
- Scan patterns can be synchronised to GPS time
- High performance signal processor unit (WIN10)
- Nominal signal analysing range 70 m ... 7.5, 10 or 12 km
- Experienced vertical range of radial wind within atmospheric boundary layer
- Output rate 8.5 Hz (max., raw mode) or 1 ... 60 s
- Real-time derivation of profiles of wind speed and wind direction from radial winds
- Wind profile upfresh rate 10 ... 600 s (typ.)
- Analysing range ± 19 (± 38) m/s @ 50 (100) MHz
- Wind range 0 ... 60 m/s (@ elevation angle of 60°)
- Range gating ≥ 18 m, increments 6 m
- Overlapping mode shift range gates by 3 m
- Precision of wind speed $\leq \pm 0.5$ m/s or $\leq \pm 2\%$ (max. rating applies)
- Precision of the wind direction $\leq \pm 3^\circ$ @ wind speed > 3 m/s
- Raw data storage, UDP output
- 2 RJ45 Ethernet ports, 1 x monitor, 2 x USB
- Access by LTE/UMTS modems
- Body dimension 630 x 530 x 400 mm, weight 85 kg
- Power consumption 170 W Lidar / 350 W cooling



Samples of radial wind data



Samples of online derived wind profiles

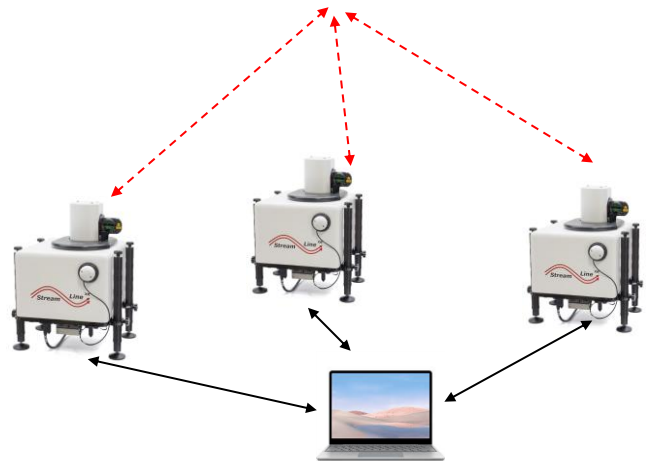


The delivered post processing software (Metek) evaluates the radial wind data of the Stream Line system (left) and derives online or offline wind data with flexible, user adjustable evaluation parameters.

The Graphic software (Metek, right) allows different presentation types (vector presentation, vertical profiles, time series, time/height cross section, statistics).

Sync-mode software (see right) installed at remote PC allows synchronization of up to 3 Stream Line systems via Ethernet to measure simultaneously in the same measuring volume to derive the instantaneous 3D wind vectors.

Remote profile software delivers vertical wind profiles for virtual masts for up to 3 different positions.



Power supply box

- 110 ... 220 VAC/24 VDC/10 A converter for Lidar unit
- 110 ... 230 VAC/24 VDC/20 A converter for extended cooling unit
- All connector IP 67
- 24 VDC re-chargeable battery, 3.6 Ah
- UPS system provides about 10 minutes operation and gentle shutdown
- Overvoltage protection for power line and Ethernet connection
- Modem antenna assembled ready to use, modem insertion prepared
- Central fuse (16 A)



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