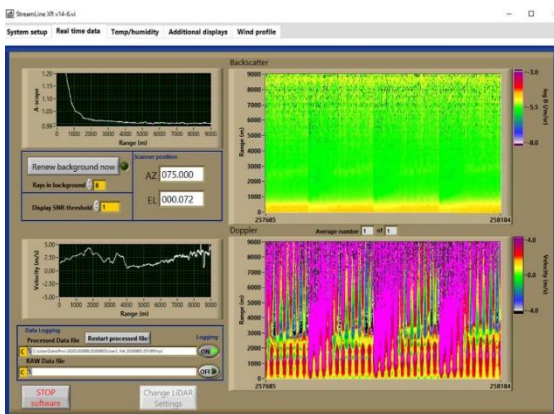


Doppler Lidar Streamline AllSky XR+

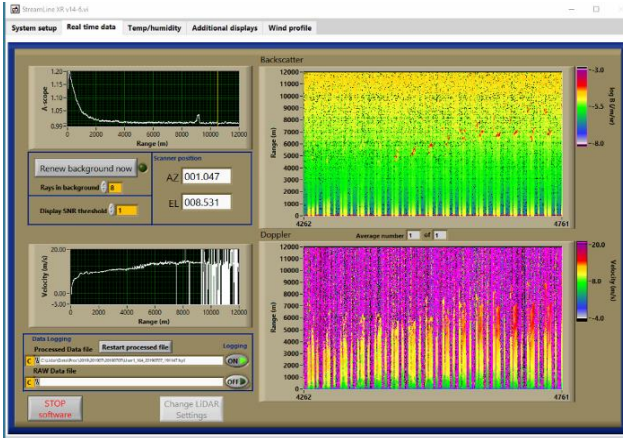


- Compact pulsed Doppler with doubled signal power lidar compared to Streamline XR
- Improved range coverage, max. observed range 6 ... 10 km
- Temperature range -20 ... +45 °C
- 24/7 unattended self monitored measurements
- All-sky scanner head, elevation range $\pm 105^\circ$
- Full control of all 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 ... 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
- $\leq \pm 0.5$ 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 700 mm, weight 95 kg
- Power consumption 170 W Lidar / 350 W cooling

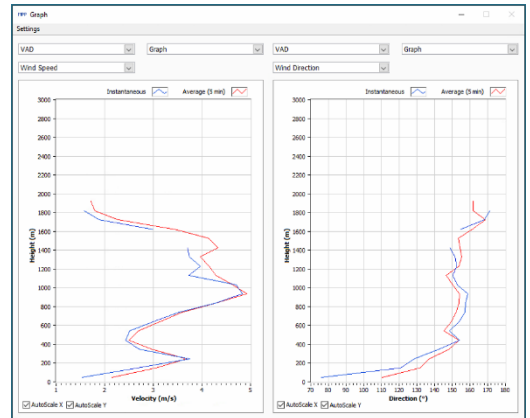


Samples of combined short range and long range scan patterns

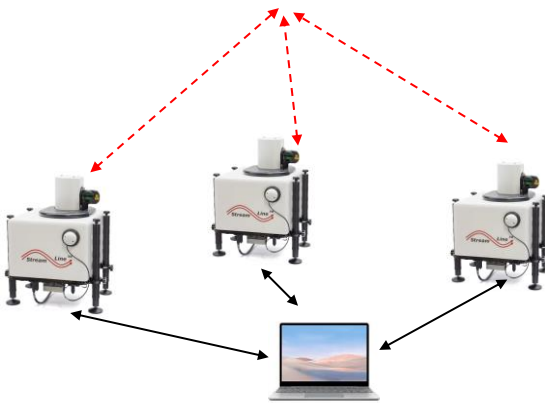
Samples of radial wind data



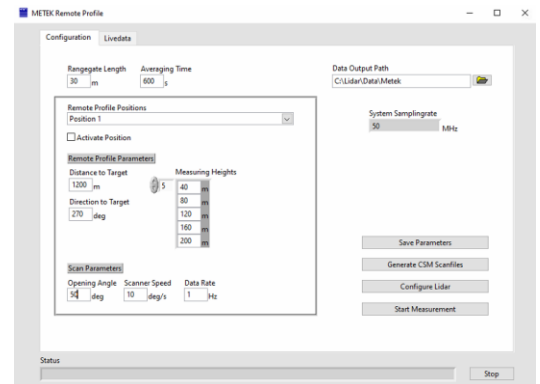
Samples of online derived wind profiles



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.



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 wind profile software offers scan patterns to install up to 3 individual virtual wind masts. All scanning parameters are automatically adjusted according to the pre-selected measuring requirements, e.g. range and directions of masts, measuring heights, scan speed, scanning angle, averaging period, etc.



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 connectors IP 67
- 24 VDC re-chargeable battery, 3.6 Ah
- Adjustable stand-alone operation time before gentle shutdown
- Overvoltage protection for power line and Ethernet
- Modem antenna assembled ready to use by LTE/UTMS modem



METEK GmbH, Fritz-Strassmann-Str. 4, 25337 Elmshorn, Germany
 Phone: +49 4121 121 43590, Fax: +49 4121 4359 20
 E-mail: info@metek.de, Internet: <http://www.metek.de>

METEK Meteorologische Messtechnik GmbH



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