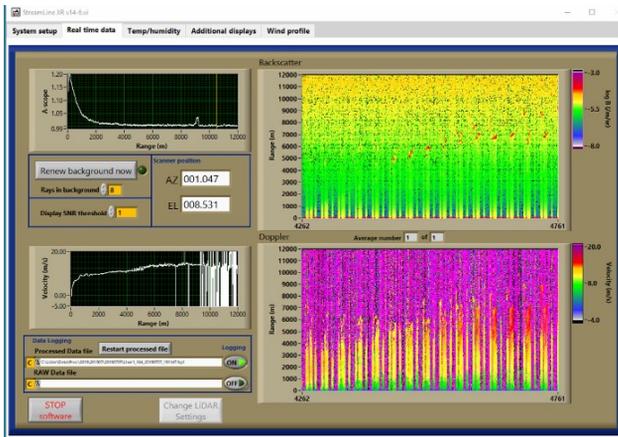


# Doppler Lidar Stream Line XR

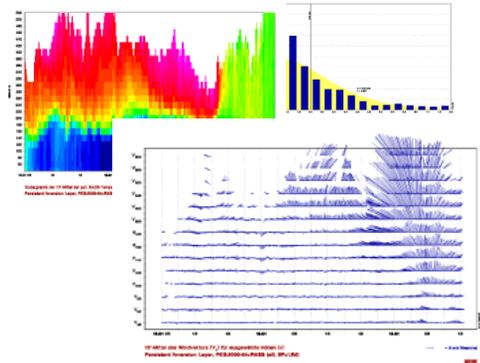


- Compact pulsed Doppler lidar for high quality wind measurements
- Very robust optics and mechanics, wide operational temperature range -20 ... +40 °C
- 24/7 unattended day and night measurements
- All-sky scanner, elevation range  $\pm 105^\circ$
- Full control of all scanner parameters
- User defined 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 ... 12.000 m
- Experienced vertical range of radial wind within atmospheric boundary layer, typ. 3000 m (max. rating depending on weather conditions)
- Sounding of cloud bases up to 12.000 m
- Output rate 10 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.)
- Wind range 0 ... 60 m/s (@ elevation angle  $60^\circ$ )
- Range gating  $\geq 18$  m, increments 6 m
- Overlapping mode shift range gates by 3 m
- Precision of the wind speed measurement  $\leq \pm 0.5$  m/s or  $\leq \pm 2$  % (max. rating applies)
- Precision of the wind direction measurement  $\leq \pm 3^\circ$
- Raw data storage, UDP output
- 2 RJ45 Ethernet ports, 1 x monitor
- Access by LTE/UMTS/GPRS-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 data presentation



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).



### 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 A
- 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)



### Transit case

- 4 lockable wheels
- 2 lifting handles on each side
- 4 main legs can be adjusted to even ground level
- 4 support pillars with rubber-cones
- dimension approx. 100 x 70 x 120 mm, weight incl. lidar 135 kg



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