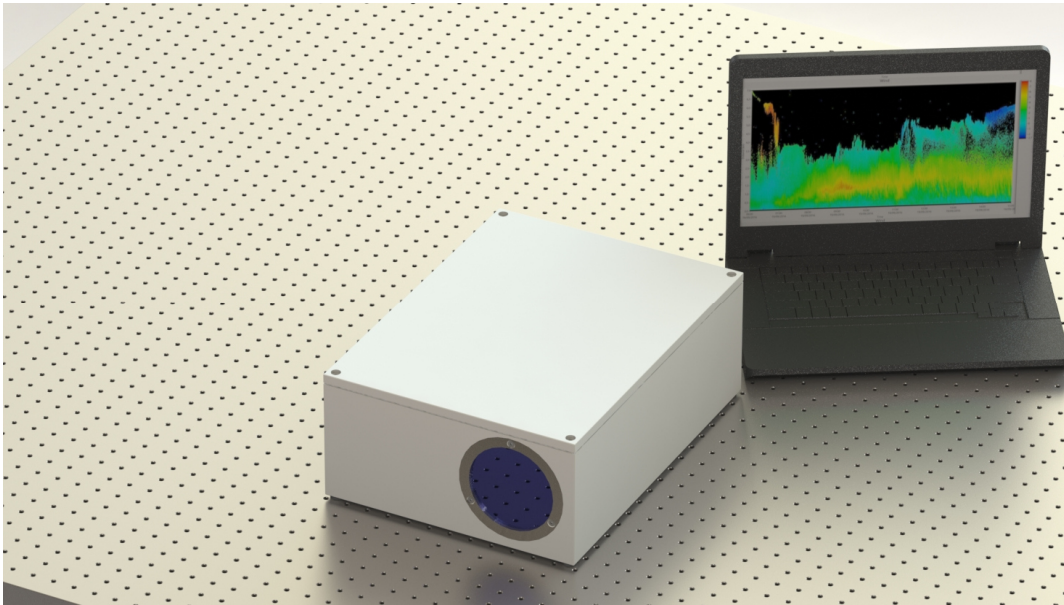


# *Abacus Laser LiTra L Module*



- Upcoming project at Abacus Laser
- 2,1  $\mu\text{m}$  wind lidar transceiver module for long range wind measurements
- Will include a reference laser, a high-energy pulsed Ho:YAG solid-state laser, the transmission and receiving optics and the heterodyne detection
- Laser stabilized by internal electronics
- Advanced solid-State laser technology is suitable for much higher pulse energy (>5 mJ and more) and peak power (well beyond 10 kW peak).

**Expected delivery: end of 2019 /early 2020**

Expected European List Price: 200 000 €  
(Discounts available for orders placed in 2018)

# ***Abacus Laser LiTra L Module***

## **Preliminary Lidar performance specifications:**

Expected lidar range horizontal	20 – 30 km
Expected lidar range vertical	5 – 12 km
Pulse repetition frequency (PRF)	1 kHz
Pulse length $\tau$ (FWHM)	100 – 500 ns selectable at time of order

## **Preliminary laser specifications:**

Wavelength	in the range 2060 to 2130 nm (tuned to atmosph. window)
Energy per pulse	5 mJ (more available)
Average power	5 W (more available)
Pulse peak power at 500 ns / 100 ns	10 kW / 50 kW
Beam quality	Single Mode ( $M2 < 1,1$ )
Pulse frequency offset	41 MHz (others available)
Aperture	71 or 96 mm

## **Preliminary power and environmental specifications:**

Power requirements	24 V DC, 25 A
Power consumption	~500 W
Cooling	Water cooling, 20° C
Expected Size	50 x 35 x 25 cm <sup>3</sup>
Expected weight	25 kg

*All specifications at 500 ns pulse length, 1 kHz and 1 s averaging, unless otherwise stated.*

*Preliminary specifications, please enquire details at time of order.*

