

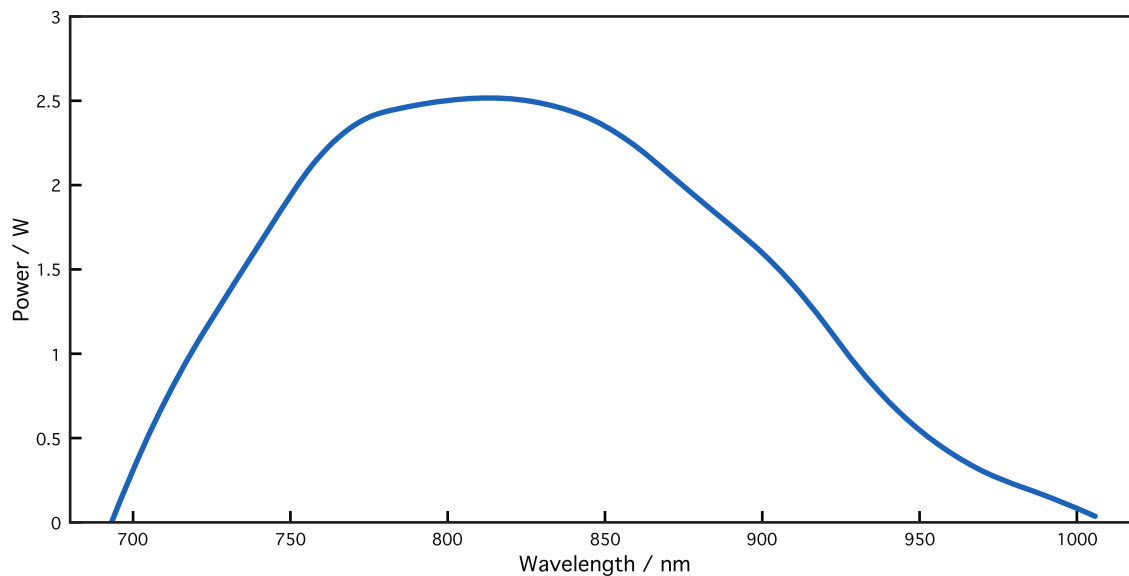
Credo Ti:Sa Laser

High Repetition Rate Credo Ti:Sa-Laser

The compact solid-state high repetition rate Credo Titanium:Sapphire-Laser is designed for applications where a wide tuning range and high pulse intensity with narrow linewidth is needed. Typical applications are atmospheric research, combustion research, material science, semiconductor technology, and environmental analysis.

The Credo Ti:Sa is pumped by an Ascend 40 with adjustable pulse repetition rates between 1 and 3 kHz at 527 nm, pulse durations approximately 120 ns. The long pump pulse duration will result in more than one pulse from the Credo Ti:sa. Therefore, the Credo Ti:Sa cavity can use a Pockel's cell, which is used to generate a single powerful pulse.

Power Output



General Characteristics

Tuning Range	700 .. 980 nm
Pulse Duration	approx. 35 ns at maximum
Repetition Rate	1 .. 3 kHz
Output Power	2.5 W (at maximum, 1kHz, 25W)
Beam Size	1 mm (typical)
Linewidth	< 0.2 cm ⁻¹

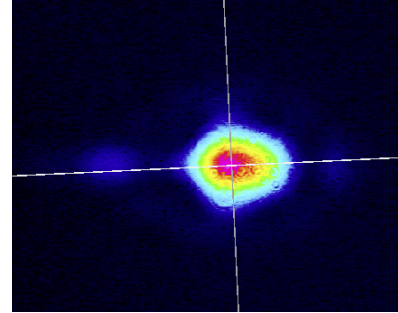
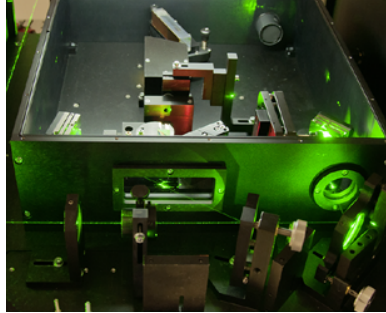
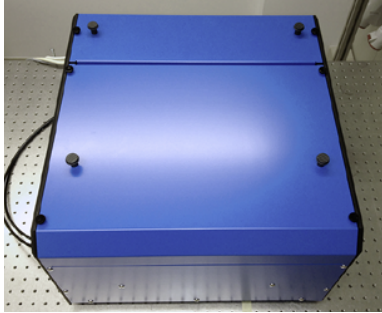
Requirements

Pump Laser	Ascend 40/60 (please contact Sirah for other pump lasers)
Ambient Conditions	constant temperature in the 20 .. 25°C range
Cooling Water	Water required for crystal (< 20 W)
Laboratory	dust-free air (flow box recommended)
Voltage	110 .. 230 V, single phase, 50 / 60 Hz
Computer Control	Windows 7 - 8 / Windows 10 - 11 (32 & 64 bit), USB Port

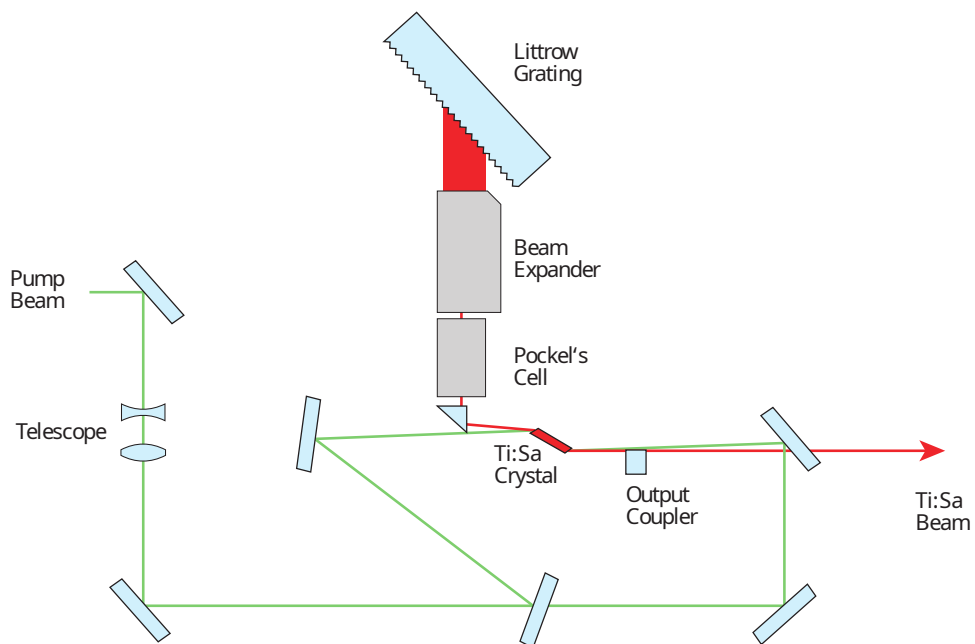
Options

Pockel's cell for single pulse generation
 Frequency conversions: SHG, THG, 4HG, 5HG in the range 470 nm - 192 nm

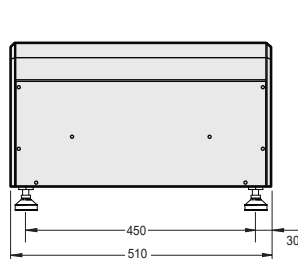
Credo Ti:Sa Laser



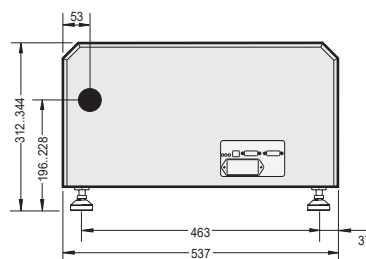
Optical Layout



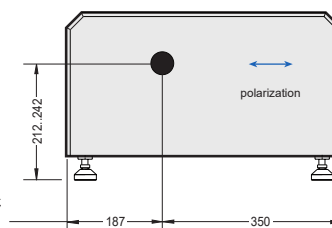
Dimensions



Credo Ti:Sa (side view)

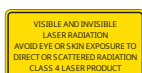


Credo Ti:Sa (pump laser input end)



Credo Ti:Sa (dye laser output end)

All Dimensions in mm
Specifications are subject to change without notice



Heinrich-Hertz-Straße 11
D-41516 Grevenbroich

phone +49 21 82.82 98 18-0
fax +49 21 82.82 98 18-40