



# UV Laser calibration system for LCTPC costing estimate

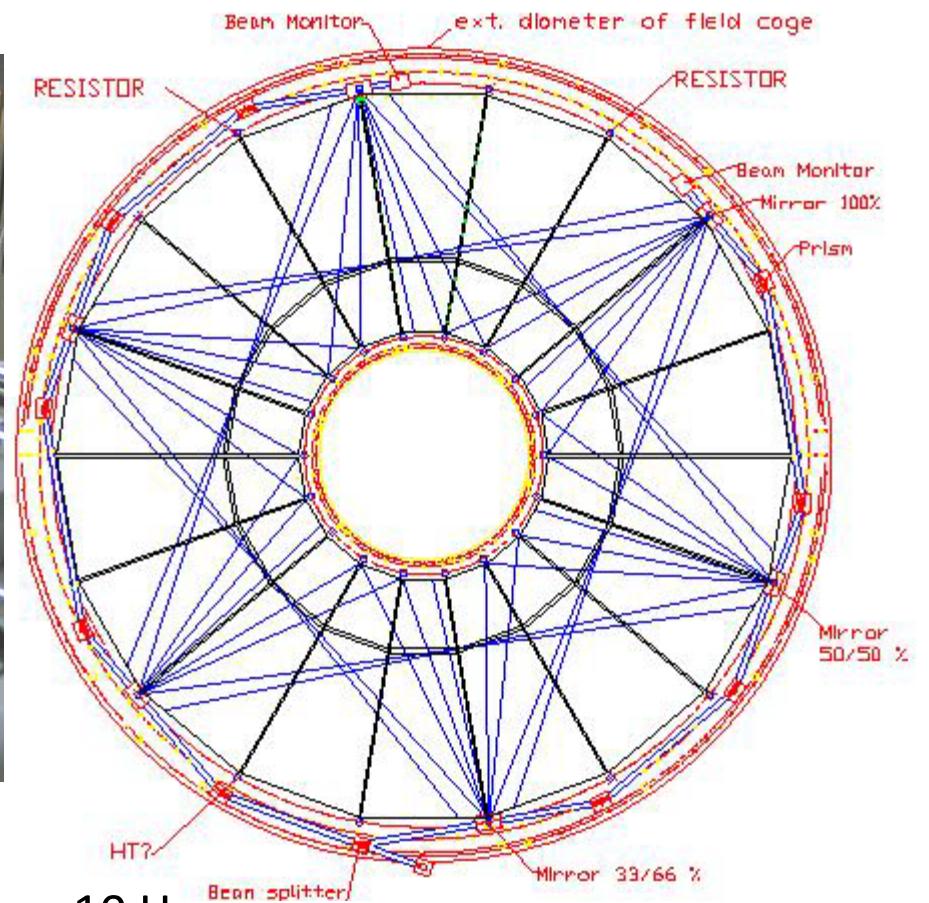
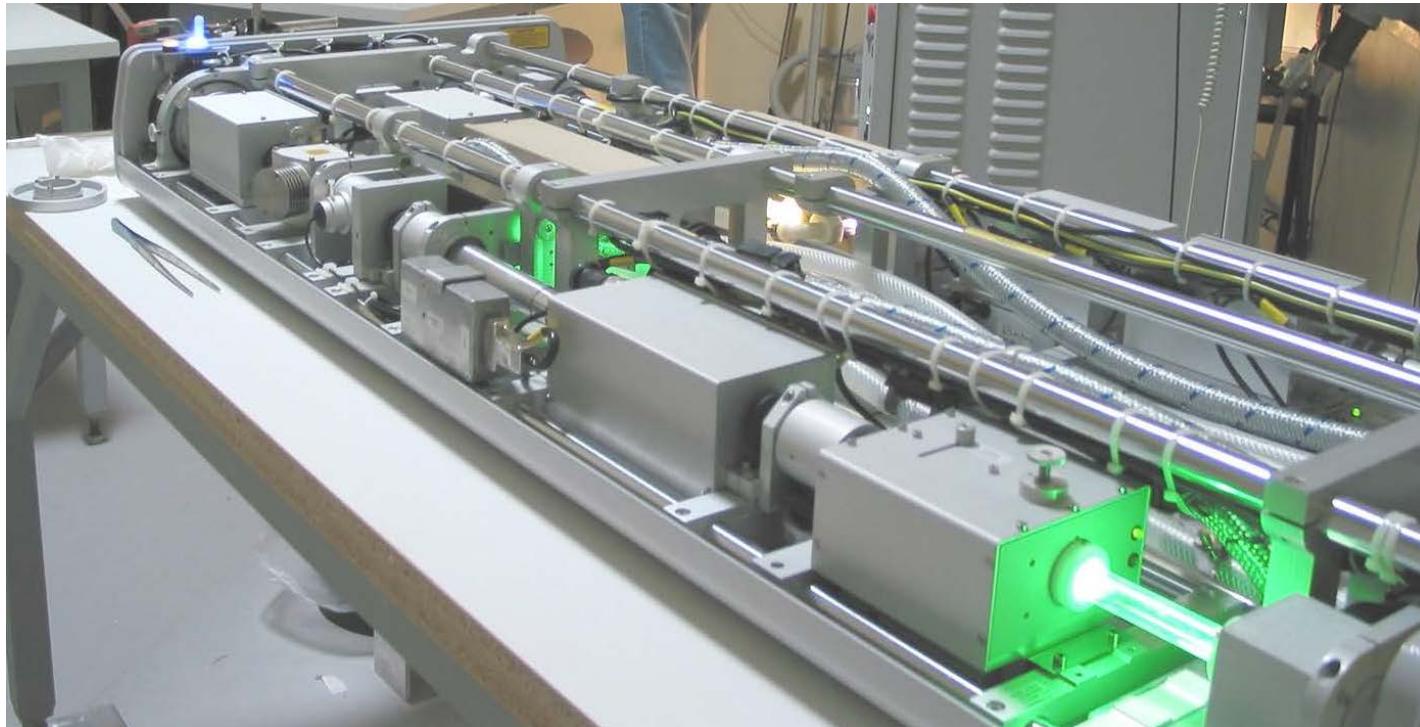
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# UV laser system for TPC costing estimate

- Costing for UV Laser device: **200k Euros**
  - Laser power supply
  - Laser supporting device
- Costing for Laser split and transmission system:**300k Euros**
  - UV mirrors
  - UV laser rods
  - Additional UV mirrors supporting device
- Costing for Laser monitor and controller:**100k Euros**
- Total cost without manpower: **600k Euros**



# Reference#1 Laser module for ALICE TPC



Spectron Laser Systems (UK): model SL805-10-UPG

Pulsed UV laser (Nd:YAG): 100 mJ / 5 ns pulse @ 266 nm, max 10 Hz

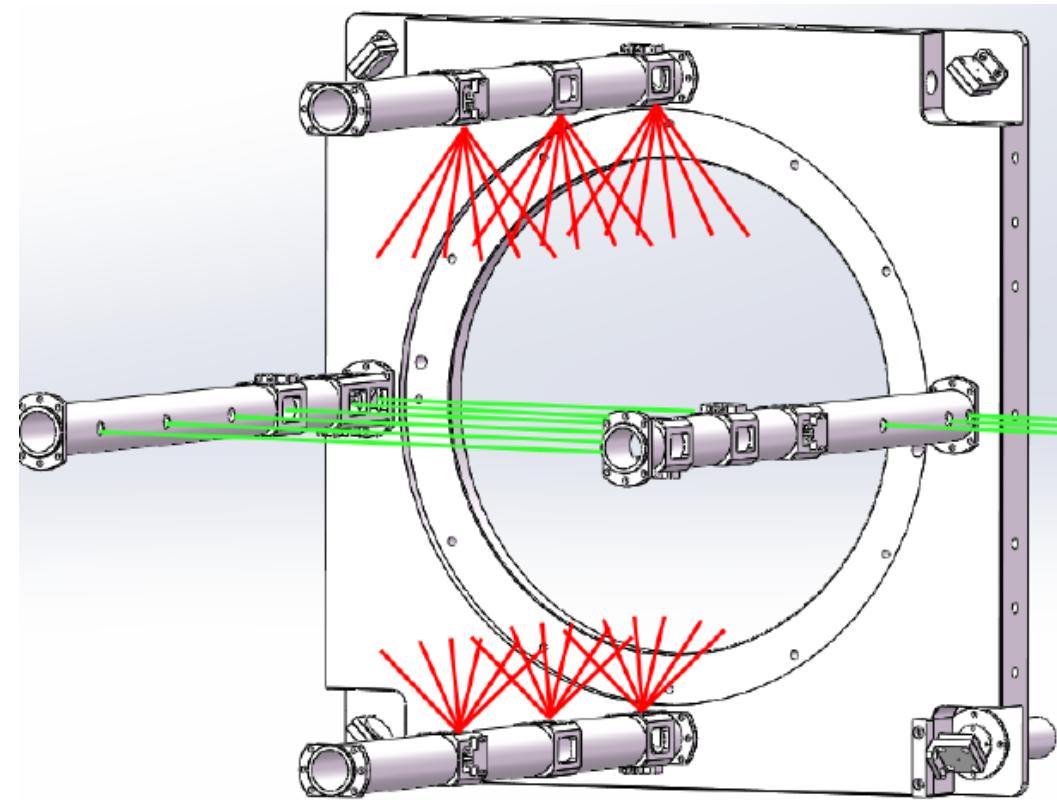
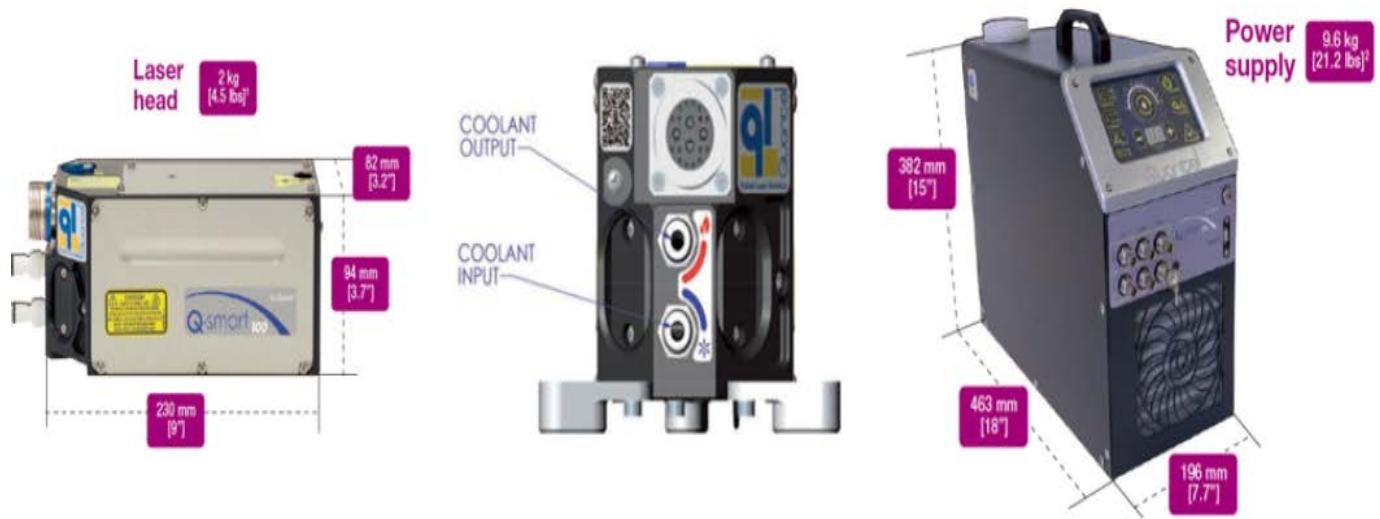
expanded beam  $\varnothing = 25$  mm

divergence < 0.35 mrad, pointing stability < 0.1

mrad

remote controllable (RS-232)

# Reference#2 Laser module for small TPC prototype



Spectron Laser Systems (FR): Quantel Q-Smart Na:YAG  
Pulsed UV laser (Nd:YAG): 20mJ / 5 ns pulse @ 266 nm, max 10 Hz  
expanded beam  $\emptyset = 5 \text{ mm}$   
divergence < 0.15 mrad, pointing stability < 0.1  
mrad  
remote controllable (USB, Ethernet)