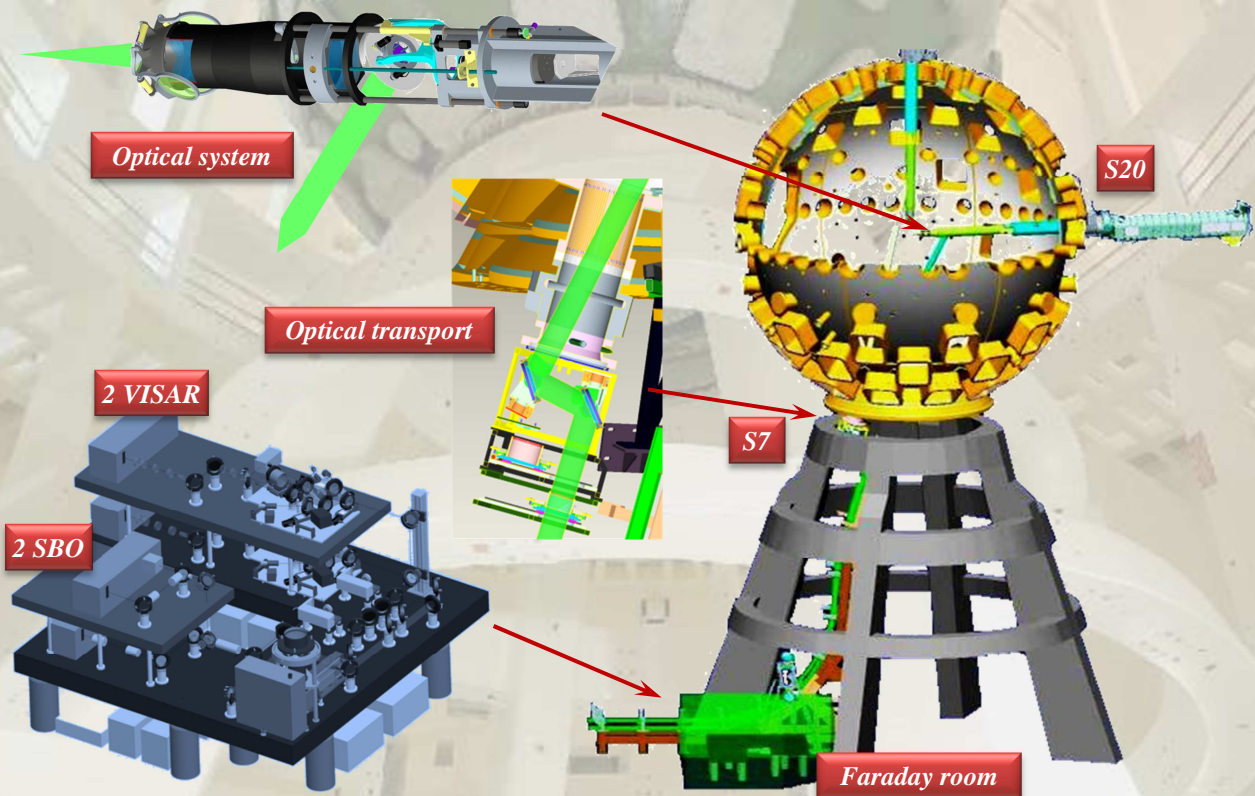


EOS Pack

Diagnostics set for EOS experiments

This diagnostic combines an optical system, positioned close to the target with the help of a SID (System for Insertion of Diagnostics), an optical transport system and an analysis table.

The use of the EOS Pack requests the S20 location for the insertion of the optical system inside the chamber and the S7 location for laser injection, laser and self-emission collection. The diagnostic (laser and optical analyzers) will be hardened and protected against EMP inside a Faraday cage. The goal is to be fully operational with PETAL so that simultaneous EOS measurements and side-on shock radiography may be possible.



Characteristics	Measurement or Spectral range (nm)	Spatial resol. (μm) / Field of view (mm)	Time resol. (ps) / Dynamic (ns)	Setting/ Operational
2 VISARs (1064 and 532 nm)	Velocity 0.5 - 200 km/s	30 / 1 to 50 / 5	50 / 5 to 500 / 100	SID
Reflectivity	$R > 0.1$			
2 Shock Break Out (SBO)	490 - 750	30 / 1 to 100 / 10	50 / 5 to 500 / 100	2019
Pyrometer	Temp. > 0.1 eV			
2 x 2 D images	490 - 750			