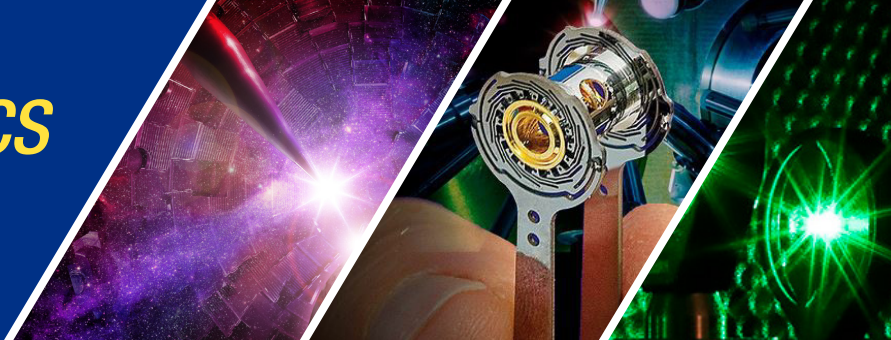


ADVANCED DIAGNOSTICS AND SENSORS



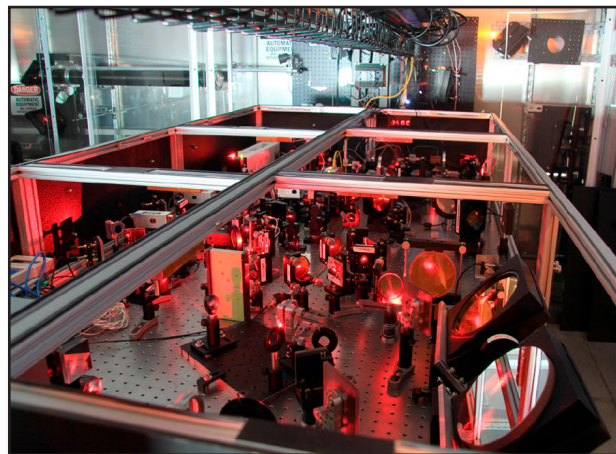
General Atomics has designed and delivered a wide variety of important diagnostic instruments and systems for magnetic and inertial fusion, as well as other applications

GA is designing an array of diagnostic instruments for the international ITER experiment, which will prove the feasibility of fusion energy. These systems include the ITER Toroidal Interferometer and Polarimeter (TIP), upper Wide Angle Viewing System (uWAVS) and the Low-Field-Side Reflectometer (LFSR).

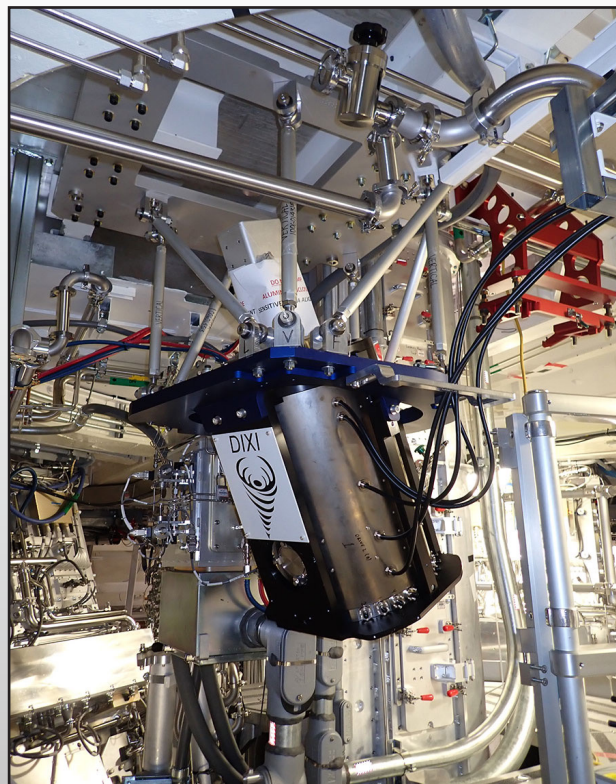
GA has developed a cutting-edge line of high-speed imaging diagnostics. These include the DIXI (Dilation X-ray Imager), a high-speed x-ray framing camera that uses the pulse-dilation technique to achieve a temporal resolution (shutter speed) of less than 10 ps.

The most recent innovation is a single-line-of-sight (SLOS) imager. SLOS can capture multiple images with a shutter speed of 25 ps, roughly 100 times faster than previous technology.

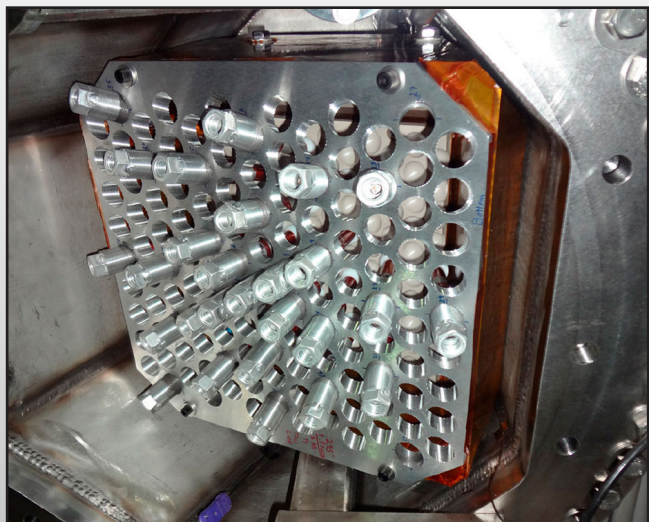
For over 25 years, GA has been making Thomson scattering measurements of high temperature plasmas. With the development of repetitively pulsing Nd:YAG lasers and avalanche photodiode detectors, Thomson scattering measurements have evolved from single point, single time measurements to multipoint, high repetition (over 100 Hz) measurements.



Toroidal Interferometer and Polarimeter (TIP)



DIXI



Gamma-ray imager

Kristel Gordon, Director of Strategic Development

www.ga.com/energy-group



 **GENERAL ATOMICS**

1504-0425