

SHXI

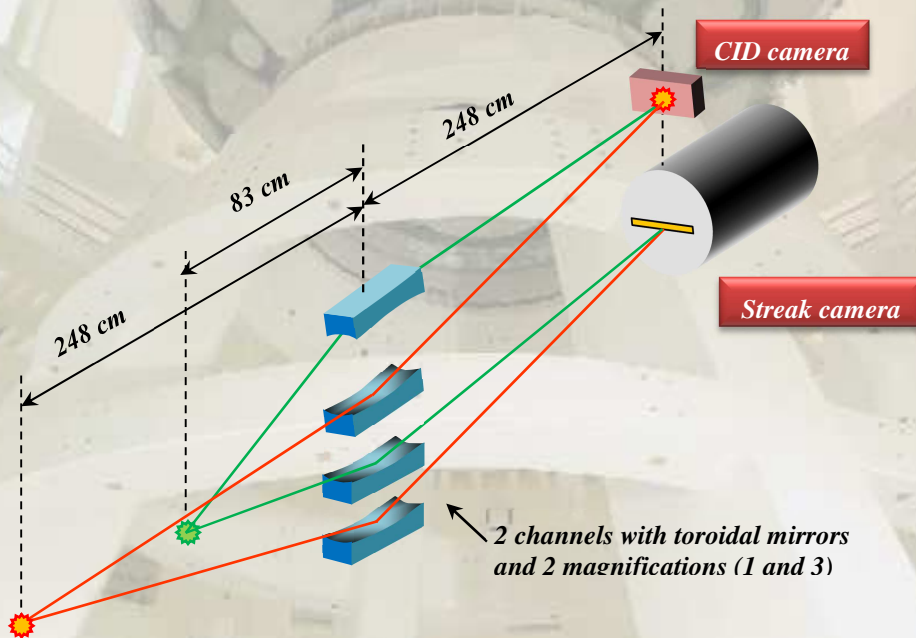
Streaked Hard X-ray Imager

The streaked X-ray imager, SHXI, records time-resolved 1D image in the hard X-ray spectral region. It is dedicated to X-ray radiography of target motion and to hard X-ray target emission.

The SHXI has two X-ray channels per magnification, all of them consisting of grazing angle-of-incidence toroidal mirrors and a filter. One image of the two X-ray channels is produced on the streak camera while the other image is formed on a time integrated detector (CID).

A protective holder contains three films to protect optical components from damages caused by target debris and UV radiation.

SHXI is set up in the target chamber by a SID (System for Insertion of Diagnostics).



Characteristics	Spectral range	Spatial resolution (μm) / Field of view (mm)	Time resolution (ps) / Dynamic (ns)	Setting/Operational
Magnification = 1 or 3				SID
1 time-resolved toroidal mirror channels	0.5 - 10 keV	150 / 15 or 50 / 5	17 / 2 to 120 / 25	
1 time-integrated mirror channel	5 - 10 keV	130 / 20 or 50 / 6.5	without	2017