

Design of the Multi-point Thomson scattering diagnostic for TCSU (Translation, Confinement & Sustainment Upgrade) Experiment

Kiyong Lee

Abstract: Thomson scattering diagnostic is a non-perturbing method for measuring electron temperature and density in plasma physics. TCSU Multi-point Thomson scattering diagnostic uses five polychromator attached with four pre-amplifier modules to measure five spatial points in a plasma discharge. A brief introduction to the new TCSU experiment with main focus on mechanical parts, optical components and control system design for Thomson scattering diagnostic is described in further detail.