

ITAR FREE

Ground support equipment



Description

STAR-D Simulator is a simple, robust, and cost-effective Optical Ground Support Equipment (OGSE) designed for testing high-precision Star Tracker in-orbit performance.

This compact, plug-and-play equipment consists of a screen where full star field is shown and can simulate real satellite trajectories and star patterns ensuring reliable and repeatable test conditions.

With its cost-effective design and user-friendly PC interface, this innovative solution, adptale to any type of Star Tracker, reduces complexity in ADCS design and development during flat-sat stage.

Technical Characteristics

Type	Dynamic Simulator
Full Field of View	19.5° (Customization upon request)
Screen resolution	1020x1080
Optics	Collimation system
Star pattern	Full Star Field (both dynamic and static patterns)
Simulated objects	Up to 6.5 apparent magnitude of simulated stars (customization upon request)
Pressure	Ambient
Operational temperature range	0° to 35°

Mechanical and Electrical Interfaces

Envelope volume
(nanoST configuration) 350 x 150 x 195

Mass 4.16 kg

Power Supply AC: 0-240 VAC 50-60 Hz

Electrical connections US, UK and UE Plugs

Features

Dynamic sky patterns to validate the nominal performance of star tracker

Performing of different trajectories with configurable spin rates

From 1 to 2 optical heads controlled by control unit

PC control through a user-friendly interface

Optical system inmune to irregular light conditions

Portable handling due to its weight and dimensions

Designed to be used in clean rooms