PRODUCT DESCRIPTION
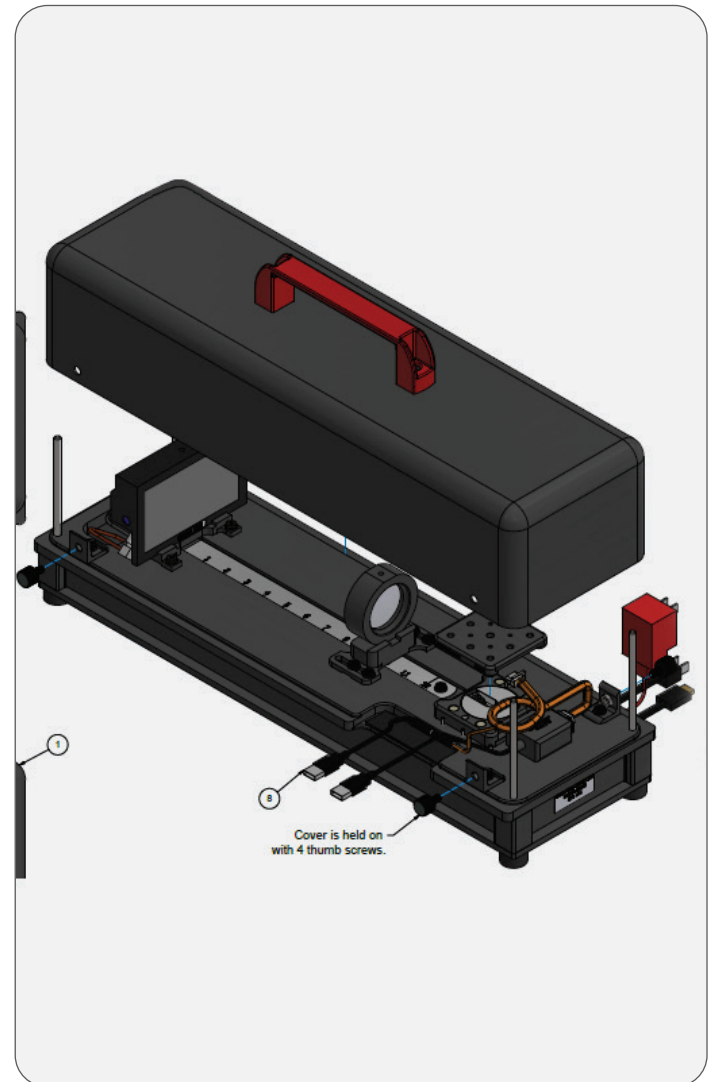
The Redwire Space Star Field Simulator is a hardware in the loop simulator that provides as-you-fly operation of the Redwire Model 82920 Star Tracker in a simulated night sky enviroment. The Star Field Simulator offers several modes including predefined flight through user-defined night sky segments, externally driven orientation used in a closed-loop environment, and prerecorded night sky tracking data. This mode flexibility enables the star field simulator to accelerate the entire vehicle flight control development cycle from initial star tracker integration to full flight simulations. For example, flight systems engineers can use the star field simulator to explore operational scenarios such as different rates of motion, vehicle control scenarios, or pointing transitions.

In addition to system integration and simulation support, the star field simulator provides a testbed to verify star tracker operation saving valuable system troubleshooting labor and schedule time during build and test cycles.

When combined with Redwire's Advanced Configurable Open-system Research Network (ACORN), the star field simulator enables full digital mission engineering, mitigating risk and increasing mission assurance.

Cover is held on with 4 thumb screws.

APPLICATIONS

+ Star Tracker Test and Validation.

MADE IN THE USA
V3FEB2022

PARAMETERS

+ **Dimensions (W x L x H)**
  8" x 24" x 7"
  (200 mm x 610 mm x 180 mm).

+ **Mass**
  11 LBS (5 Kg).

+ **Included**
  Star Field Simulator Fixture, Cabling, Power Supply,
  Star Field Driver, Laptop, SFS Software Suite.

+ **Mode Support**
  Mode 1: User defined flight segments from initial inertial frame.
  Mode 2: Externally driven star field display update.
  Mode 3: Predefined night sky tracking data.

+ **User-Supplied Equipment**
  Windows 10 computer system to run "Space Sextant"
  Star Tracker Telemetry interface.
  Model 82920 Star Tracker or Model 83190 SpectraTRAC.

MISSION HERITAGE

Based on software written at JPL to qualify star trackers.

Star Field Simulators are export controlled through an ECCN (Export Control Classification Number) issued by the United States Department of Commerce, ECCN 7A104. Export shipment requires successful applicacion for an export license.

FOR MORE INFORMATION ABOUT OUR SPACE CAPABILITIES, CONTACT REDWIRE SPACE SALES AT

DISCOVER@REDWIRESPACE.COM

HERITAGE

Redwire is a new leader in mission critical space solutions and high reliability components for the next generation space economy. With decades of flight heritage combined with the agile and innovative culture of commercial space platform, Redwire is uniquely positioned to assist its customers in solving the complex challenges of the future space missions. For more information, please visit **www.redwirespace.com**

MADE IN THE USA
V3FEB2022

FIND OUT MORE ABOUR REDWIRE SOLUTIONS
REDWIRESPACE.COM | @REDWIRESPACE | SALES@REDWIRESPACE.COM