STAR TRACKER TEST EQUIPMENT

Dynamic Optical Ground Support Equipment

T1/T3 DOGSE
Terma has developed a miniaturized Dynamic Optical Ground Support Equipment ideally suited for both open- and closed-loop star tracker tests.

The DOGSE features a high-resolution µ-OLED display. The star scene generation software is running on a Raspberry Pi connected via RS232 or Bluetooth to a PC configured with a user friendly MMI.

The dynamic OGSE can easily be adopted to fit any baffle, providing repeatable and stable mounting required for closed loop testing.

FEATURES

- Highly compact and very low mass.
- Easy to install and simple to use.
- Can be used directly with any Terma star tracker.
- Simulation of bright objects in FOV (Moon, planets, etc.).
- Injection of high-rate transient radiation events.

SALES OPTIONS

- The DOGSE can be ordered to fit any baffle.

Interested parties are invited to write our team, terma.space@terma.com.







Dynamic Optical Ground Support Equipment

DOGSE	
Display	OLED micro-display, 60 Hz
Hardware Platform	Raspberry Pi
Control Software	In-house developed real-time image simulator. Linux operating system.
Control Interface – Open Loop	In-house developed (Java client) software running on standard PC. Bluetooth or RS232 interface to Raspberry Pi computer
Control Interface – Closed Loop	Up to 100 Hz quaternion and rate input to Raspberry Pi computer via RS232 interface
Star Catalogue	Instrumental corrected Hipparcos catalogue
Star Brightness	Default down to magnitude 7
Star Position Accuracy and PSF	2 as, 3x3 pixels (73 as per pixel)
Field-of-View (Standard Version)	20 deg full cone
Slew Rate (Dynamics)	> 10 deg/s
Dynamic Spot Shape Generation	Integrated 240 Hz sub-frames
Radiation Simulation	>50.000 false star projections per second. User defined streak length distribution.
Non-Stellar Objects in FoV	Moon and Planets
Power Supply (Included)	Standard Raspberry Pi 5.1V dc, 110/230 V AC/DC-adapter
Cable Harness Length (Display to Raspberry Pi)	> 2 m

ORDERING INFORMATION

See T1 or T3 data sheets for ordering details.