

Test Cable for Cameras

Model Number: THRSLTCA1151

Overview

The **Test Cable for Cameras** is a standard THRSL product designed to provide reliable connectivity and diagnostics for a wide range of vision systems. It supports **multiple analog camera types** as well as a **thermal imager**, enabling quick validation, integration, and field testing.

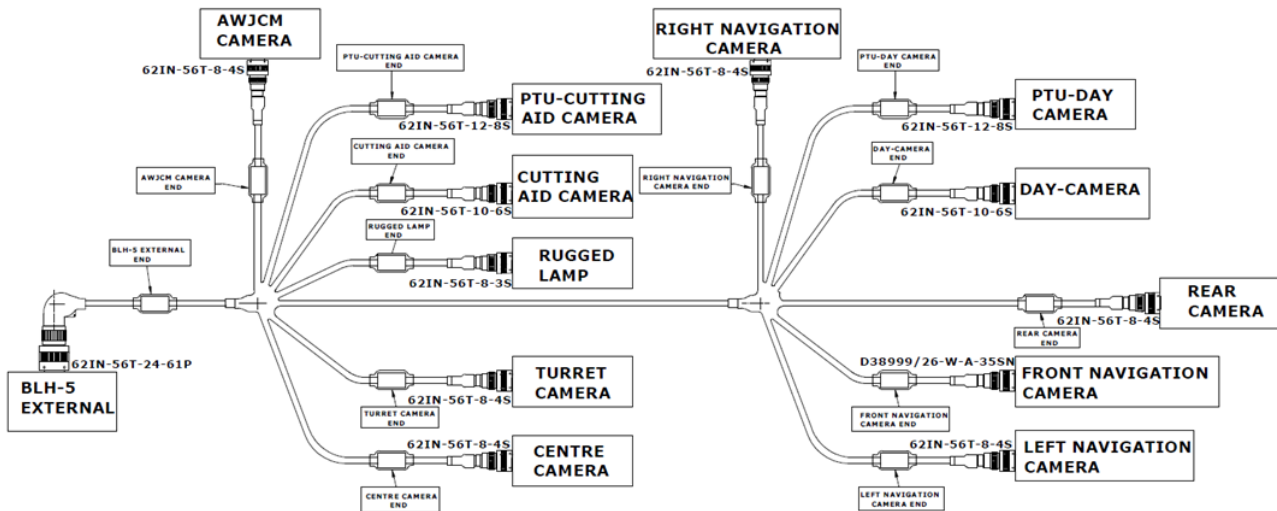
Built with rugged MIL-grade connectors, shielded PTFE wiring, and standardized pinouts for **power, video, and communication**, the cable ensures high reliability and interference-free operation. Proven in the **UXOR project supplied to the Indian Air Force (IAF)**, it has demonstrated field-ready performance in demanding defense environments.

Technical Specifications

Parameter	Specifications
Function	Multi-camera testing and interface validation
Supported Cameras	Analog video cameras (various types) + Thermal Imager
Supported Signal Lines	- Video + / Video – - TX / RX channels - GND - Shield
Power Supply Lines	+12V DC (standard) +24V DC (for PTU / cutting aid cameras)
Connectors	- Amphenol 62IN series (8-pin, 10-pin, 12-pin variants) - Deutsch D38999 (for select navigation/front camera interfaces) - MIL-grade circular rugged connectors
Cable Construction	Shielded PTFE wiring with protective boots, transitions, and braiding
Harness Layout	Centralized harness branching to multiple camera and imager interfaces
Protection Standard	IP65

Operating
Temperature

-20°C to +55°C



Key Features

- Supports **multiple analog cameras and thermal imager** in one harness
- Provides **power, video, and serial communication** over shielded lines
- Ruggedized connectors ensure secure operation under field conditions
- EMI/EMC-protected with braided shielding and grounded lines
- Simplifies integration with **plug-and-play harness design**
- IP65-rated with wide operating temperature range

Applications

- Testing of analog and thermal cameras during integration
- Video signal diagnostics in robotic and defense platforms
- Industrial automation vision system validation
- UXOR platform camera harness (**field-proven in IAF deployment**)

Pin Configurations

Camera / Device	Connector Type	Pin Assignments
PTU-Day Camera	62IN-56T-12-8S	A: +24V, B: GND, C: TX1, D: RX4, E: GND
Day Camera	62IN-56T-10-6S	A: +12V, B: GND, C: TX1, D: RX1, E: GND, F: Video+, Body: Video–
PTU-Cutting Aid Camera	62IN-56T-12-8S	A: +24V, B: GND, C: TX5, D: RX5
Cutting Aid Camera	62IN-56T-10-6S	A: +12V, B: GND, C: TX2, D: RX2, E: GND, F: Video+, Body: Video–
Rugged Lamp	62IN-56T-8-3S	A: +12V, C: GND
Left Navigation Camera	62IN-56T-8-4S	A: +12V, B: GND, C: Video+, D: Video–
Right Navigation Camera	62IN-56T-8-4S	A: +12V, B: GND, C: Video+, D: Video–
Right Navigation (Alt.)	D38999/26-W-A-35 SN	Pin 1: +12V, Pin 2: GND, Pin 3: Video+, Pin 4: Video–
Rear Camera	62IN-56T-8-4S	A: +12V, B: GND, C: Video+, D: Video–
Centre Camera	62IN-56T-8-4S	A: +12V, B: GND, C: Video+, D: Video–
Turret Camera	62IN-56T-8-4S	A: +12V, B: GND, C: Video+, D: Video–
AWJCM Camera	62IN-56T-8-4S	A: +12V, B: GND, C: Video+, D: Video–
Thermal Imager	Custom 4-pin connector	Pin 1: +12V (Yellow), Pin 2: GND (Black), Pin 3: Signal, Pin 4: Shield

Note

The **Test Cable for Cameras** is part of **THRSL's standard technology suite**, designed for **plug-and-play deployment** across industries. Its proven use in the **UXOR project for the Indian Air Force (IAF)** demonstrates its robustness and adaptability under mission-critical conditions.

Custom harnesses can be designed to support different camera standards, connector types, or environmental requirements.