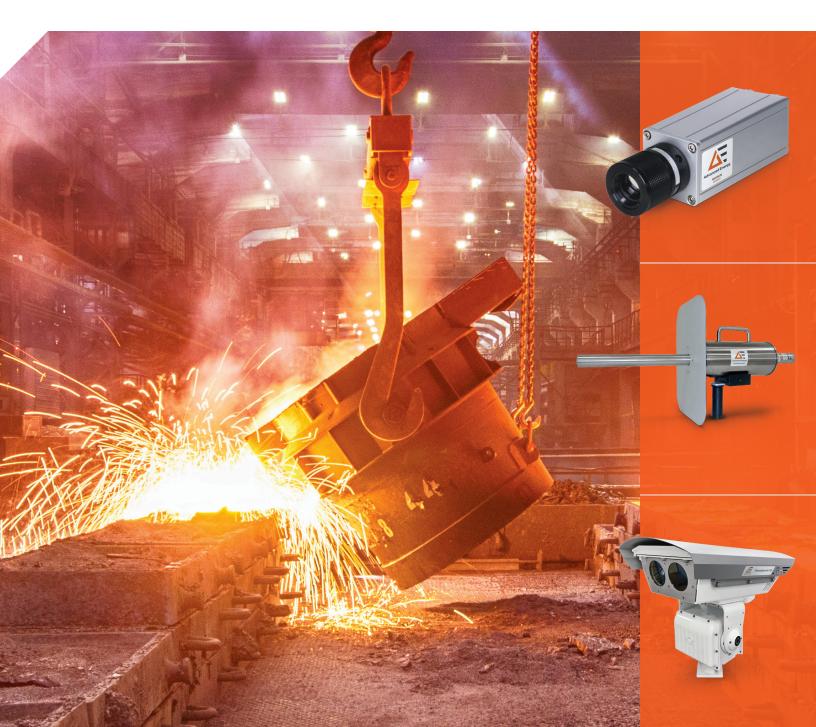


# TOTAL SERVICE PLAN (TSP) FOR THERMAL IMAGERS



# Total Service Plan for Thermal Imagers

Periodic maintenance of thermal imaging systems is essential to ensure accurate temperature measurement and avoid costly shutdowns

# Total Service Plan (TSP) for Thermal Imagers

Periodic maintenance of thermal imaging systems is essential to ensure accurate temperature measurement and avoid costly shutdowns. AE's TSP gives you access to all our available services for thermal imagers.

### INTRODUCTION

Temperature measurement is a crucial parameter for your process. Maintaining measurement accuracy ensures your equipment is operating within design specifications and allows you to refine and optimize precise process steps. Even the most technologically advanced equipment will see reduced performance if not properly calibrated.

Thermal Imagers are often installed in hot environments and the exposure to heat causes accuracy drifts over time. As an equipment manufacturer we are experts in calibrating our equipment. AE Certified<sup>™</sup> service is the only service provider with the software and expertise to program updated calibration parameters into our proprietary firmware.

This adjustment aligns the thermal imagers back to its factory specifications, ensuring accurate temperature measurements.



# Levels of Service

The Total Service Plan is tailored to meet your calibration, maintenance, and service needs. Our Basic and Premium TSP service levels are offered with or without On-Site Service.

	TSP Basic	TSP Basic with On-Site Service	TSP with SafeGuard™	TSP with SafeGuard™ and On-Site Service	
AE Factory Calibration	Adjusted to meet operating specifications				
On-site Calibration & Alignment	$\otimes$	In-Spec Verification**	$\otimes$	In-Spec Verification**	
On-site Commissioning	$\otimes$	$\bigotimes$	$\bigotimes$	$\bigotimes$	
LumaTrend On-Premise Monitoring Software License	$\otimes$	Optional	$\otimes$	Optional	
On-site Annual Health Check	$\otimes$	$\bigotimes$	$\otimes$	$\bigotimes$	
Product Defects	Not covered after warranty expiration	Not covered after warranty expiration	100% coverage	100% coverage	
Accidental Damage*	$\otimes$	$\bigotimes$	Spares and repairs covered up to \$500	Spares and repairs covered up to \$500	
Periodic Preventative Maintenance	$\bigotimes$	$\bigotimes$	$\bigotimes$	$\bigotimes$	
Access to MyAE portal	$\bigotimes$	$\bigotimes$	$\bigotimes$	$\bigotimes$	
Priority Lead Times	$\bigotimes$	$\bigotimes$	$\bigotimes$	$\bigotimes$	
Calibration Certificate	Included with 'as-found' and 'as-left' measurements				
Additional Measurement Points	Optional	Optional	Optional	Optional	
NIST Calibration Reverse Traceable	Optional	Optional	Optional	Optional	

Our service levels:

\* Excludes fiber-optic cables. Spares and repairs over \$2000 receive a \$2000 credit off list price.

\*\* Due to the complexity of Thermal Imagers, on-site Calibration is possible, but verification of whether the unit is operating within speciation is possible in the field up to 1300°C.



# **Overview of Services**



# AE Factory Calibration & Alignment

A fully equipped, expertly staffed laboratory for performing calibrations that meet national standards



#### On Site Calibration & Verification, Preventative Maintenance, and Health Check

Service Engineer visits your site to check Thermal Imager calibration and identify out-ofspec units



On Site Commissioning Service Engineer visits your site to commission new or moved thermal imager installations



#### SafeGuard<sup>™</sup> Protection Plans with TSP Premium Extend factory warranty, insure

against accidental damage, and save on repair costs

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#### **Retrofits and Upgrades**

Help identify existing issues with devices in your equipment and provide recommendations

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#### **Automated Asset Monitoring**

LumaTrend<sup>™</sup> Software enables automated tracking, analysis, reporting, and alarms



# **OVERVIEW OF OUR SERVICES**



### **AE Factory Calibration & Alignment**

#### A fully equipped, expertly staffed laboratory for performing calibrations that meet national standards.

- Calibration to all standard measurement points as defined for new products
- Optional calibration to defined customerspecific temperature points
- Alignment to meet original product specifications
- Full functional test including all interfaces
- Firmware/software updates

- Returned unit is programmed with identical user-specific parameter settings for transparency and ease of install
- Repair and replace recommendations as needed for proper functioning or preventative maintenance
- Calibration certificate



# On Site Calibration Verification, Preventative Maintenance, and Health Check

A dedicated and experienced AE Field Service Engineer visits your site for Calibration Verification, Preventative Maintenance, and Health Check.

- Calibration verification to identify out of spec cameras
- Full functional test including all interfaces
- Software and Firmware Updates
- Repair and replace recommendations as needed for proper functioning or preventative maintenance
- Calibration certificate for verified in-spec units
- System overview and training

- Lens cleaning, thermal imager repositioning and refocusing
- Inspect enclosures, O-rings, seals, mechanical and electrical connections
- Inspect mounting hardware and accessories
- AE Certified<sup>™</sup> On-site service report summarizing by unit: Calibration verifications, Calibration and alignment next steps for out-of-spec units, Component replacement recommendations



### **On Site Commissioning**

#### AE Field Service Engineer visits your site to commission new or moved thermal imager installations.

- Optimize and verify thermal imager positioning
- Ensure all cables and wires are connected properly and functioning
- Basic user training on thermal imager use, parameter setting, care, and troubleshooting
- Ensure all cables and wires are connected properly and functioning: connect servers to ethernet to fiber converter, install software, and configure autostart feature
- Configure LSRT (Lumaspec RT): set up regions of interest (ROI), configure alarm thresholds and settings, set temperature ranges and color palette, set autogain parameters, multicamera configuration
- Establish communications with DCS (Distributed Control System)
- Calibrating to the process when applicable
- Final measurement verification and customer acceptance





## SafeGuard<sup>™</sup> Protection Plans

Integral to the TSP and available on new and existing products. Offers continued protection for your product after the standard warranty expires, ensuring that you're covered for a longer period.

- Extended warranty coverage against factory defects including coverage due to accidnetal damage and fair wear and tear.
- Can save money in the long run by covering repair costs that may arise, sparing you from unexpected expenses
- Simplified and convenient repair processes, making it easier to get your product fixed or replaced.
- Knowing that potential repair costs are covered can help you budget more effectively and avoid unexpected expenses.



# **Retrofits and Upgrades**

AE Service will help identify existing, discontinued, or unrepairable devices in your equipment and provide recommendations to retrofit the equipment with equivalent products, or upgrade to the next generation as needed.

- R&D support for modifications, fixturing and/or cabling to integrate AE replacement products
- Offer equivalent performance and functionality, possible to enhance overall performance and functionality.
- Extend the lifespan of the existing equipment, saving on replacement costs
- Reusing existing structures reduces waste and minimizes environmental impact
- Ensure that the new components are compatible with the existing structure
- Conduct thorough testing to validate the upgraded system's performance

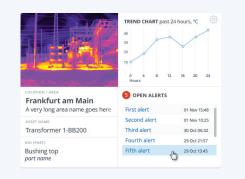
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### Automated Asset Monitoring with LumaTrend™

#### On-premise software enables automated tracking, analysis, reporting, and alarms.

- Offered as part of our Total Service Plan with On-Site Service
- Create alerts and warnings based on user-defined thresholds
- Review asset performance using time-lapse video
- Create, edit, and schedule reports
- Create user-specific dashboards which display specific assets
- User authentication and login
- Live, remote access to cameras
- Archive images database

- User interface by browser compatible with PCs, tablets, and phones
- Archive temperature data
- Exporting tools to PDF, CSV, or email





#### ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than four decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

AE's power solutions enable customer innovation in complex semiconductor and industrial thin film plasma manufacturing processes, demanding high and low voltage applications, and temperature-critical thermal processes.

With deep applications know-how and responsive service and support across the globe, AE builds collaborative partnerships to meet rapid technological developments, propel growth for its customers and power the future of technology.



For international contact information, visit advancedenergy.com

technical.support@aei.com +1 970 221 0108 PRECISION | POWER | PERFORMANCE | TRUST

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