



LAYERZERO
POWER SYSTEMS, INC.

The Foundation Layer

INSIGHT IR®

Thermal Monitoring System for Power Distribution



Product Brochure

Safely Obtain Thermal Images of Power Distribution Systems

With INSIGHT IR®

INSIGHT IR® Provides Early Detection of Thermal Issues

Infrared scanning is a predictive maintenance procedure used to identify areas in power distribution equipment that emit excessive amounts of heat. Higher-than-normal rises in temperature can indicate a potential problem, such as a loose connection. If a problematic area is detected early, repairs can be made on equipment before the problem leads to downtime.

INSIGHT IR® is a thermal monitoring system for LayerZero Power Systems products, designed to continuously monitor the temperatures of critical components. INSIGHT IR® captures data from a network of fixed infrared cameras and continuously looks for abnormal changes in thermal conditions.

Benefits of LayerZero INSIGHT IR®

- Generates live thermal images
- Continuously analyzes temperature
- Isolates image regions into “hot zones”
- Displays temperatures on a timeline
- Saves heatmaps as JPG files
- Reduces reoccurring preventive maintenance costs

INSIGHT IR® blends a heatmap with a visible image, and provides image processing features including as custom colors, temperature overlays, and animated heatmaps. Measurements of the INSIGHT IR™ heatmap can be isolated by phase to make it easier to identify the specific location of potential problems. INSIGHT IR® is accessible from the local display or remotely with a web browser.

Still images and movie clips can be captured from the front display, and are stored and organized in an internal filesystem. A picture of each event is automatically generated when alarm occurs. INSIGHT IR® supports up to 16 cameras.

INSIGHT IR™ is designed to address the limitations with hand-held thermal scanning, as well as lower the long-term cost of PMs for critical facilities.

LayerZero INSIGHT IR™ is compatible with all LayerZero Power Systems products.



INSIGHT IR® uses a Network of Fixed-Mount Infrared Cameras to Capture and Record Temperatures Of All Customer Connections In Real-Time

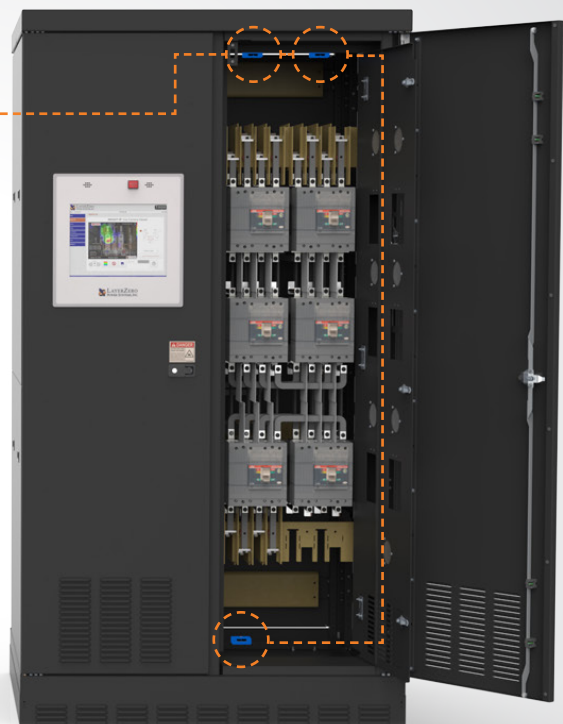


Image Controls for Enhanced Visibility

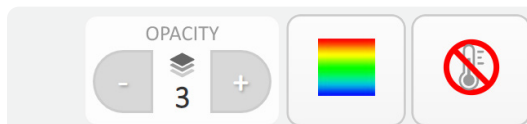
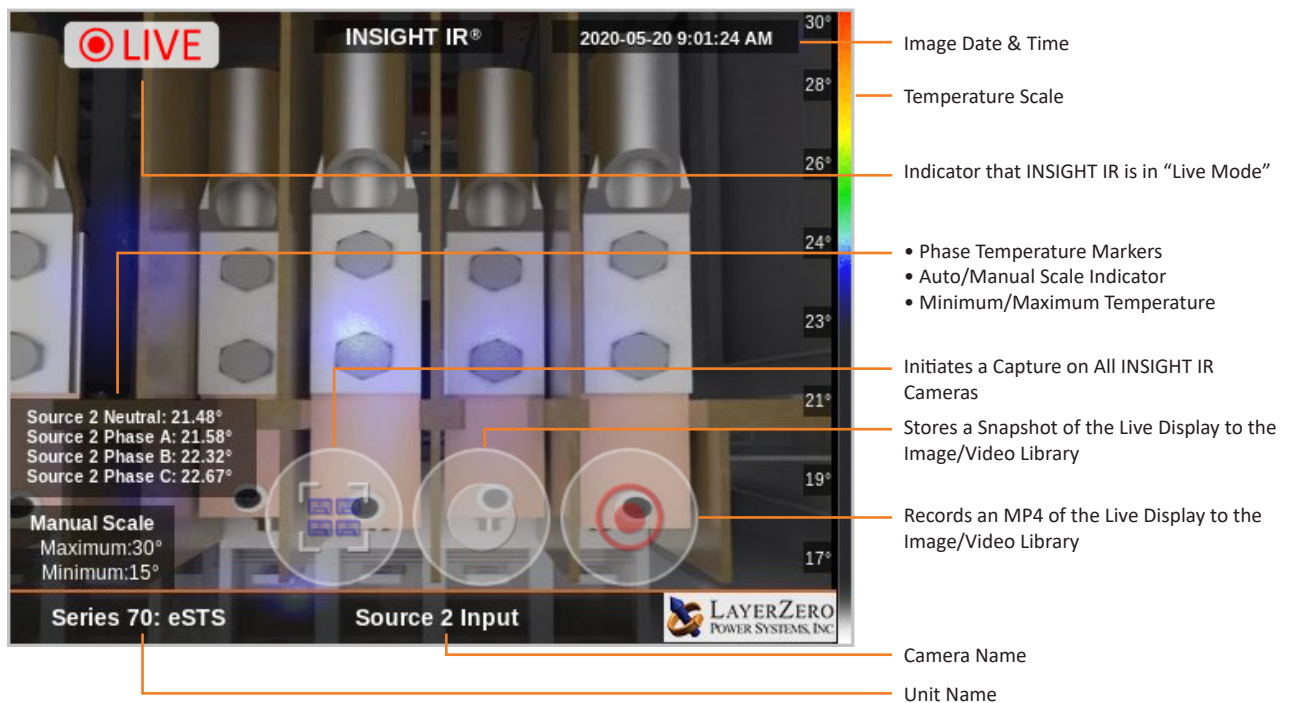
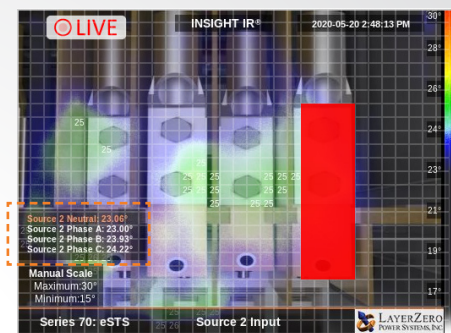


Image Controls, such as the ability to adjust heatmap and backplate opacity, colors, and temperature overlays help make temperature information more visible.

Phase Isolation

Users have the ability to define zones of the heatmap to represent specific phases.

The averages for each phase is displayed on the heatmap. If a temperature in a phase exceeds a settable "mid" or "high" mark, the temperature on the screen will change color to alert the viewer.



Access and Export Historical Data to Use in Reports

Data from INSIGHT IR cameras is saved into the internal database at regular intervals, and this information can be retrieved and used to generate still images and animated MP4 movies for inclusion in reports.

INSIGHT IR includes an Image/Video library to store and organize saved photos and movie clips.

