

Thermal Imager FTI-800E		
Measurement range	-20 to 120°C / -4 to 250°F	
Spectral response	nominal 8 to 14 µm	
Frame rate	7.5 frames per second	
Image pixels	320 x 240	
Detector type	Uncooled amorphous silicon focal plane array	
Field of view	16° x 12°	32° x 24°
Focusing range	1 m to infinity 39 in to infinity	0.5 m to infinity 19 in to infinity
System temperature measurement accuracy	± 1.5°C / ± 3°F	
System thermal resolution (rms value)	< 0.08°C < 0.15°F	
Ambient temperature range	Suitable for outdoor operation in all ambient conditions	
Sealing	IP 65 / NEMA 4	
Vibration	0.5mm, 10 to 60Hz; 3g, 60 to 300Hz	
CE Certification	EN 61326: 1999 B	
Industrial Housing		
Dimensions	258 x 305 x 330mm / 10 x 12 x 13in	
Weight	20kg / 44lb (with imager installed)	
Pan & Tilt		
Pan range	365°	
Tilt range	+ 20° to -90° from horizontal	
Ambient temperature range (Operating)	- 40 to 60°C -40 to 140°F	
Dimensions	255 x 181 x 223mm 10 x 7 x 9in	
Weight	6.5kg / 14lb	
Sealing	IP 67 / NEMA 4	



Coal Pile Fire Monitor

Fixed Thermal Imaging Systems



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Non-Contact Temperature
Measurement Solutions

An AMETEK Company



Intelligent Systems

System Overview

The storage of coal in large piles carries with it a risk of spontaneous combustion. Increased demand on coal reserves has led to alternative, more volatile, types of coal being used more frequently. There are many industry guidelines for safe storage of coal in piles, including recommendations for pile angles, compression and surface smoothing. Even strict adherence to these guidelines may, in some circumstances, not be enough. An early warning system to prevent the onset of fire remains the best and most reliable solution.

Continuous Monitoring

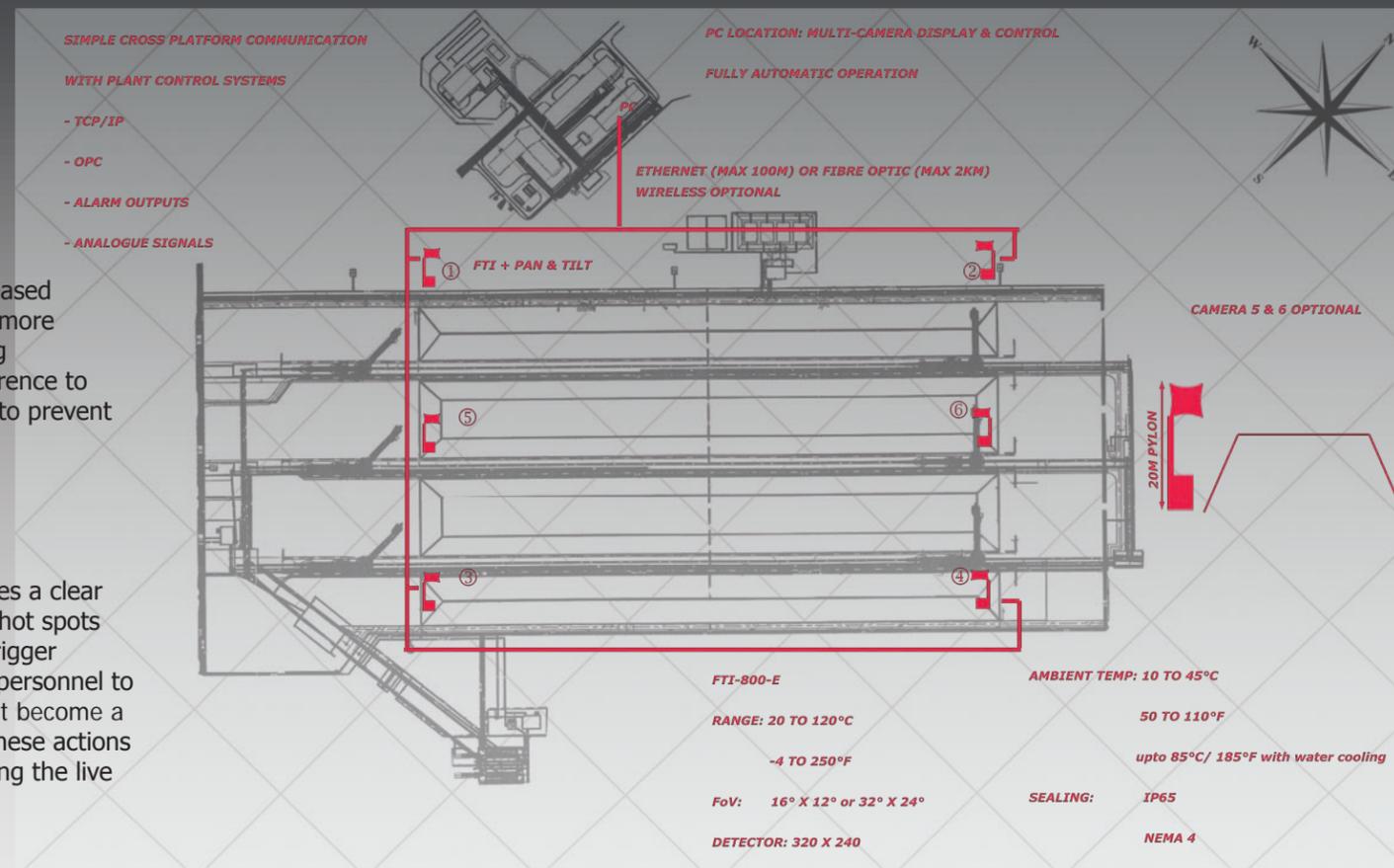
In the case of large or remote storage areas, a continuous and fully automated monitoring system is the only option. A Coal Pile Fire Monitor located at a suitable viewing point can successfully provide an effective solution to these requirements.

High Resolution Imaging

The Coal Pile Fire Monitor is designed to provide hot spot detection in the harshest environments while providing the connectivity required for simple plant integration.

Preventative Action

The Coal Pile Fire Monitor provides a clear display and alarm outputs when hot spots are detected, these alarms will trigger preventative action by the plant personnel to ensure that the hot spot does not become a dangerous fire - the success of these actions can be immediately assessed using the live thermal image.



Designed For Your Plant

Every plant has different needs and legal requirements from a monitoring system; to meet these needs, each Coal Pile Fire Monitor is designed and implemented by our experienced team of application engineers. This is backed up by a trained team of regional commissioning and service engineers to provide on-site support.

Contact LAND today to discuss how the Coal Pile Fire Monitor could be configured for your requirements.

Coal Fire Detection



The Coal Pile Fire Monitor is part of a range of Coal Fire Detection Systems which are designed to monitor for the conditions in which serious fires and explosions can occur. By monitoring different parameters (temperature, CO, CO₂) the systems can prevent expensive repairs and downtime as well as helping to ensure the safety of personnel, plant and equipment.

- Mill Fire Detector - CO monitor for early detection and advance warning of mill fires.
- Hot Spot IR - scanning temperature measurement for detection of hotspots on a conveyor.

Contact Land for further information on Coal Fire Detection and Monitoring Systems.



Typical thermal image of a coal pile

Features and Benefits

- ◆ Early hotspot detection using a thermal imager.
- ◆ Simple alarm to initiate preventative action.
- ◆ Designed to cover large storage areas.
- ◆ Simple installation and fully automatic operation.
- ◆ Designed for harsh environments, ensuring ultimate measurement reliability and availability.

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