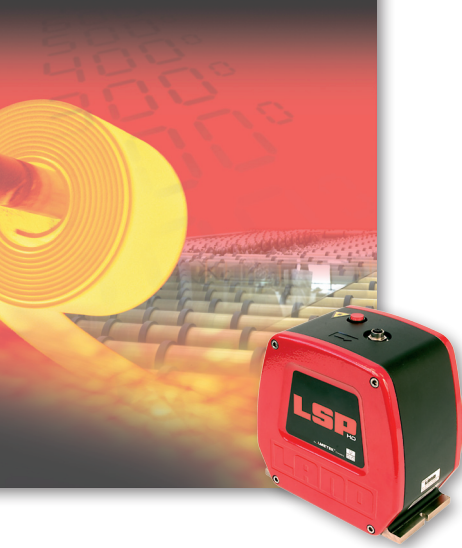


Thermal Imaging and Temperature Profiles for Continuous Process Monitoring and Quality Control



LSP_{HD} 71

50 to 350 °C / 122 to 662 °F

Compact, high performance linescanners which provide high definition thermal imaging from a combination of fast scan speeds and high resolution optics. The real-time processed data is provided via an industrial ethernet connection which is plug and play, installed by means of a single cable connection, which reduces installation time and costs.

**+industry leading 150 Hz scan speed
1000 samples at all scan frequencies+**

Key Benefits

- + Plastic Thermoforming**
 - + Rapid adjustment of heaters for proper heating of sheet
 - + Detect product defects and failing heating elements quickly
 - + Split, merge or override individual heater elements
- + Quality Control**

Accurate thermal records are a critical aspect of product quality information
- + Process Control**

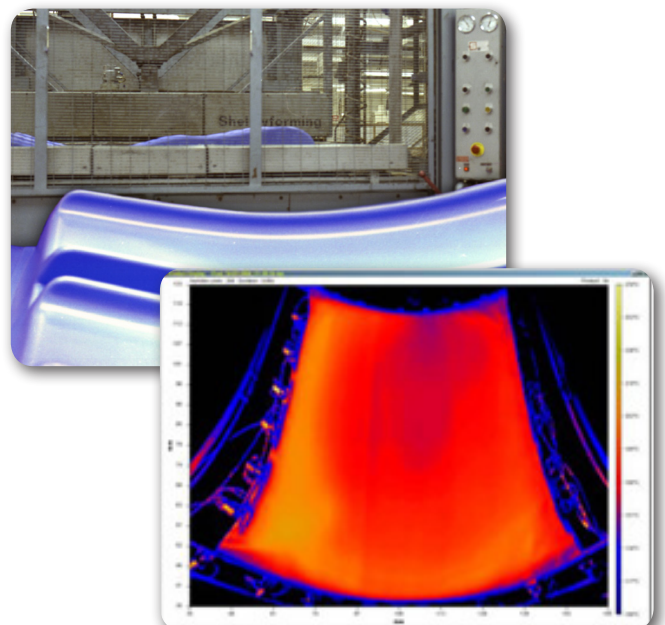
Provide real time thermal displays of the product in different display formats.

Key Applications

- + Non-wovens - Polymers
- + Plastics - Thin plastics, thermoforming
- + Steel - Paint coating lines

LSP_{HD} - Key Features

- + High resolution, optical system
- + Designed for operation in harsh industrial environments
- + Plug and play installation via a single Ethernet cable connection
- + Range of data output formats



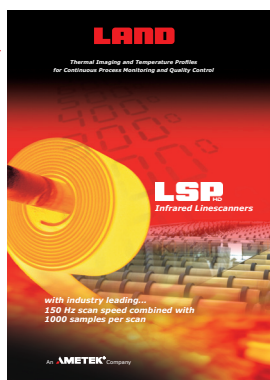
Photos (top - bottom): Thermoforming - plastic slides, Thermal map - Plastic sheet entering a rotary thermoforming machine

Performance Specifications LSP _{HD} 71 (P/No. 804807)	
Temperature Range:	50 to 350 °C / 122 to 662 °F
Wavelength:	3.4 µm nominal
Measurement Accuracy(1):	±2°C / 3.6°F
Repeatability:	<0.5°C / <0.9°F
Temp. Resolution typical:	≤ 2 °C / ≤ 3.6 °F
Drift with ambient temp:	≤ 1° indicated / 10° ambient
Emissivity:	0.20 to 1.00
Speed of Response:	≤ 10 µS
Scan angle:	80° (software adjustable to 40°)
Scan Speed:	10 to 150 Hz (User adjustable in 1 Hz steps)
Samples/scan:	1000
Field of View:	12mm / 0.5 in for target distance less than 1200mm / 47.2 in 100:1 for target distance greater than 1200mm / 47.2 in static to 95% radiance 300:1 for target distance greater than 1200mm / 47.2 in static to 50% radiance
Focus Distance:	Fixed Focus at 1200mm / 47.2 in
Connection (signal/power):	Industrial Ethernet via M12 Connector / Power over Ethernet
Signal Processing:	Up to 14 user configurable zones with min. / max. / average / quantile / average threshold
Inputs/Outputs:	PoE (IEEE 802.3at) enabled TCP/IP Industrial Ethernet
Ambient Temperature	5 to 60°C / 41 to 140°F (specified) 5 to 70°C / 41 to 158°F (operating)
Dimensions (w x h x d):	206 x 209 x 100 mm / 8.1 x 8.2 x 3.9 inches
Alignment Laser:	Class 2, maximum output 1.0 mW at 635 nm, IEC60825-1:2001 / Indicating scan plane & extent
Environmental Sealing:	IP65
EMC:	EN 61326 Class A; Low Voltage Directive EN61010-1
Notes: (1) Applies 5 to 95% of range	

LSP_{HD} Overview

A complete overview of the entire product range, including the key features and benefits of all models.

Ref **LSP_{HD}** Overview 0310



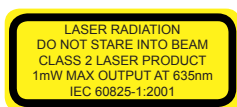
LSP_{HD} Mountings and Accessories

A complete overview of the entire range of mountings and accessories for the entire **LSP_{HD}** product range

Ref. **LSP_{HD}** M&A 0310



Non-Contact Temperature Measurement Solutions



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