



## Thermographic NDT



### Safe, Fast and Easy Identification of Defects

#### Opgal's NDTherm™ quickly and safely inspects parts and identifies internal defects

NDTherm™ enables fast realtime inspection of parts on the production line or flight line.

Our patent pending state-of-the-art technology, dedicated radiation sources, and proprietary image processing algorithms enable deeper detection capabilities. Opgal's NDTherm™ thermography quickly detects defects in various materials and structures such as CFRP, sandwich structures and porous materials. Capable of inspecting materials at various stages of the manufacturing process, NDTherm™ thermography is suitable for large surface inspection including applications where access is only available from one side of the structure. The technology can be utilized in manufacturing processes and service and maintenance for damage assessment and repair.

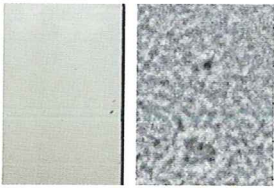
- » Contactless active infrared imaging
- » Safe and easy operation
- » Realtime examination of parts
- » Single side access
- » Tests a variety of materials, composites and structures
- » Industrial or field configuration
- » Customizable to your product or process
- » Compact and cost effective



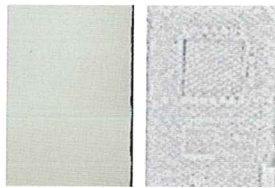
## NDTherm™ Features

### NDTherm™ thermography can identify:

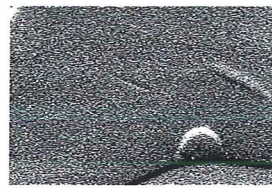
- Adhesive bonding
- Corrosion
- Contamination
- Structural cracks
- Delamination
- Fiber orientation
- Impact damage
- Moisture ingress
- Paint adhesion
- Porosity
- Skin to core disbond
- Spot weld defects
- Thermal diffusivity
- Voids
- Thickness of paint, walls, and coating



Delamination  
Rohacell Core



Delamination  
Honeycomb Core



CFRP Delamination

### NDTherm™ Portable - General Specifications

Sub-system	Description	
Detection Performance	Inspection area (in single test)	400x500 mm
	Operating distance	300-500 mm
	Minimum flaw size	6 mm
Dimensions	Connecting cable	5 m
	Weight	<8 Kg
	Size	450x450x350 mm
Thermal Imaging	Thermal camera	640x480 17 μm
	Frame rate	>30 Hz
	Thermal sensitivity	<30 mK
Computer Platform	Type	Laptop
	Display	13" touch panel
	Operating SW	Win 7

### About Opgal

Opgal is a leading global provider of innovative infrared imaging systems and advanced vision and surveillance solutions. Using state-of-the-art thermal and active-imaging technologies, Opgal leverages advanced electro-optics and image processing expertise to create high performance, versatile visualization hardware and software products for a variety of markets. Founded more than 30 years ago, Opgal is a major supplier to leading contractors and integrators, as well as corporate and professional customers in over 50 countries.