

# ***Technologica cfmager***

The **Technologica cfmager** is a versatile chlorophyll fluorescence imaging system for rapid, non-invasive screening. Designed by scientists in the Department of Biological Sciences University of Essex to be the best instrument of its kind available, sales to academic and industrial plant biologists in Europe, North America and Australasia have confirmed the outstanding performance and reliability of this product. If you are considering purchasing a chlorophyll fluorescence imaging system or would like more information, visit [www.technologica.co.uk](http://www.technologica.co.uk) and see the benefits of the **Technologica cfmager**. We invite you to compare our key features with other imaging systems. By combining sophisticated analytical software, an advanced blue lighting system and very high reliability, this patented technology<sup>(1)</sup> sets the standard for chlorophyll fluorescence imaging.

## **Some key features.**

- PWM blue lighting,- PPFID over  $6000 \mu\text{mol}/\text{m}^2/\text{s}^{-1}$ .
- Minimum  $150\text{cm}^2$  imaged area. Precision, calibrated, PWM lighting -16 self-contained light panels for optimum uniform illumination over a standard well-plate or individually adjusted for non-uniform samples.
- Very stable irradiance +/- 2% throughout the entire lighting regime.
- Advanced easy to use software – automated identification and analysis of individual colonies in a 96 well plate – will rapidly screen up to six well plates per minute<sup>(2)</sup>. User- programmable analysis routines for automated analysis.
- High performance AVT Dolphin SXGA  $2/3$ ” progressive scan Fire Wire camera with Tamron High Resolution (Megapixel) 100l/mm Lens.
- Unique virtually light-tight design with re-entrant Dutch-Folded panels - easily removed for in-situ applications. Lightweight all aluminium design.
- Precision Rack and Pinion camera and sample stage adjustment.
- Simple competitive pricing with no hidden extras.
- Optional on-site training.

## **Talk to the experts:**

If you would like to discuss applications for the **Technologica cfmager** contact [sales@technologica.co.uk](mailto:sales@technologica.co.uk)

Please let us know any questions you may have concerning the use of chlorophyll fluorescence imaging whether for commercial screening or scientific research. In cases where specialist advice on applications of the instrument is required, Professor Neil Baker, an authority on the use of chlorophyll fluorescence in plant physiology, can be consulted. Let me know your requirements and I will forward your request.

Please contact me for prices, discounts and any other information that you may require.

Best regards.

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<sup>(1)</sup> Patent No. GB2380790

<sup>(2)</sup> Area, Fo, Fm, Fv/Fm Fv/Fm (XE) data and associated images.

# Technologica cflmager

## SPECIFICATIONS.

### Electrical.

<b>Mains input</b>	IEC connector
<b>Voltage</b>	85-264 VAC
<b>Frequency</b>	47-440 Hz
<b>Inrush Current</b>	40A peak maximum
<b>Power Factor</b>	0.99 typical-meets EN61000-3-2
<b>Average Current</b>	2-3A typical
<b>Radiated EMI</b>	See Technologica Manual - CE conformity certification
<b>Fuse</b>	15A internal
<b>Safety and Disposal</b>	See Technologica Customer Safety Notice TD002/003

### Lighting.

<b>Source</b>	Blue LED 470 nm. 16 TSL100 <sup>®</sup> panels
<b>Control</b>	PWM- software control
<b>Calibration</b>	Pre-calibrated and pre-aligned
<b>Irradiance</b>	6000 $\mu\text{mol}/\text{m}^2/\text{s}^{-1}$ minimum saturating pulse
<b>Stability</b>	+/- 2% typical for entire lighting regime
<b>Uniformity</b>	Uniform for 120mm (4.7") x 170mm (6.7") sample stage

### Camera.

Pre-calibrated AVT Dolphin SXGA+  $2/3$ " CCD progressive scan camera mounted on precision +/-20mm adjustable rack and pinion

### Imaged area

Minimum 150 cm<sup>2</sup> (23in<sup>2</sup>)

### Software.

Fluorimager Two<sup>®</sup>

### Mechanical

<b>Construction</b>	Dutch-Folded light- excluding panels - tubular frame
<b>Finish</b>	Satin black stove enamelled
<b>Ventilation</b>	Axial fan
<b>Standard sample stage</b>	120mm (4.7") x 170mm (6.7") aluminium with lockable sample location cams for 96 Well Plates or user configured. Mounted on precision 20mm adjustable rack and pinion.
<b>User access</b>	Dutch-Folded 250mm (9.9") x 250mm (9.9") x detachable hinged door
<b>External dimensions</b>	Overall height-580mm (22.8") Width 450mm (17.7") Depth 450mm (17.7")
<b>Internal volume</b>	0.085 m <sup>3</sup> (3ft <sup>3</sup> )
<b>Height above Sample Stage</b>	120mm (4.7") typical
<b>Net weight</b>	24Kg (53lb)

### Environmental

<b>Operating temperature</b>	0°- 40°C ambient 32° – 100°F
<b>Storage temperature</b>	-40°-70°C -100°- 160°F
<b>Operating humidity</b>	5%-95% non-condensing

Design and specification of the described product are subject to change without notice.

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