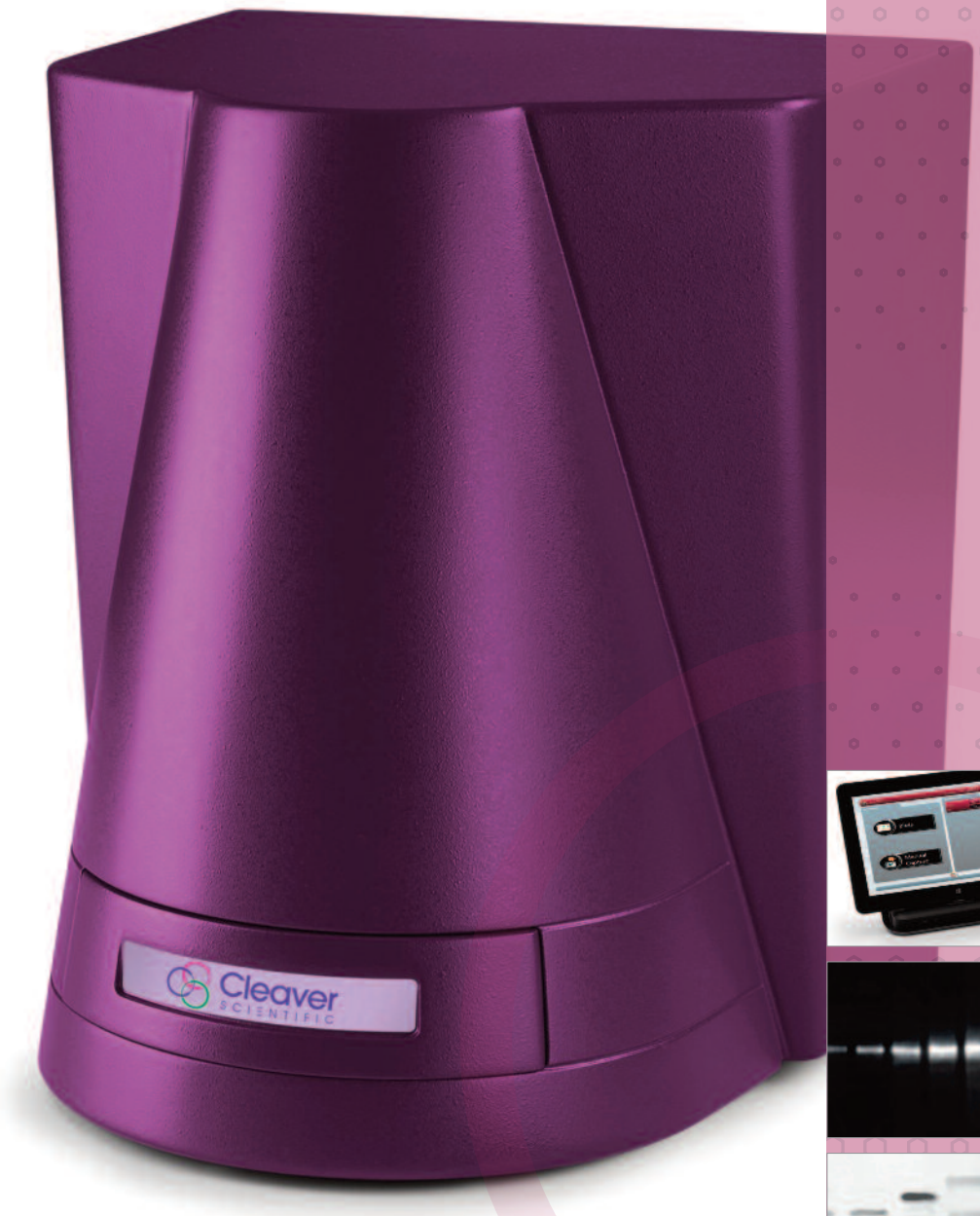
EZ chemiLITE



Delivering simplicity and sensitivity **through a dedicated chemi-luminescence imaging system**

Cleaver SCIENTIFIC

WWW.CLEAVERSCIENTIFIC.COM

CHL/2018

chemiLITE

Western blot imaging has never been so easy - great Westerns without film

The chemiLITE system allows the capture of chemiluminescence signals to detect target proteins on Western blots with sensitivity comparable or better than films

SMALL FOOTPRINT
Compact size takes up minimal bench space, allowing more room for experiments

HIGH QUANTUM EFFICIENCY (QE) CAMERA
Detects faintest bands

AUTOMATED CHEMILUMINESCENT CAPTURE
Perfect exposure without film

COOLED CAMERA
No annoying background noise on blots

FIXED LENS CONTROLLED BY GENEPIX SOFTWARE
One click to image any manufacturer's chemiluminescence reagents

GENEPIX APPLICATION DRIVEN IMAGE CAPTURE SOFTWARE
Contains extensive database of dyes and imaging protocols. Select the type of blot and genePIX automatically selects the optimal lighting and filters to produce the perfect image

GENEQUANT ANALYSIS SOFTWARE (UNLIMITED COPIES)
Analyse data on your own computer

OPTIMISED – FOR IMAGING CHEMILUMINESCENCE WESTERN BLOTS
chemiLITE is configured for maximum sensitivity to ensure even the faintest band on a blot can be captured.

SENSITIVE COOLED CAMERA
The high quantum efficiency cooled CCD camera is very sensitive to low level light emissions from a blot. The peltier cooled camera has exceptional 'signal to noise' performance resulting in virtually undetectable background noise. The short 'camera to sample' distance further enhances the ability to work with chemiluminescence samples and reagents. When compared to film, the chemiLITE has more than double the dynamic range. This allows for extremely accurate quantification.

"DELIVERING SIMPLICITY AND SENSITIVITY"

chemiLITE LOAD AND GO IMAGING

ADVANCED LENS
The F/0.95 fixed focus lens gives optimum image quality

HIGH QUANTUM EFFICIENCY CAMERA
The 4-megapixel resolution CCD camera is very sensitive to low level light emissions, producing images of up to 16m pixels, allowing visibility and separation of faint, close bands on blots up to 11cm x 8cm. The chemiLITE camera has double the dynamic range of film and with a quantum efficiency of greater than 73% @ 425nm provides outstanding sensitivity for chemiluminescence imaging

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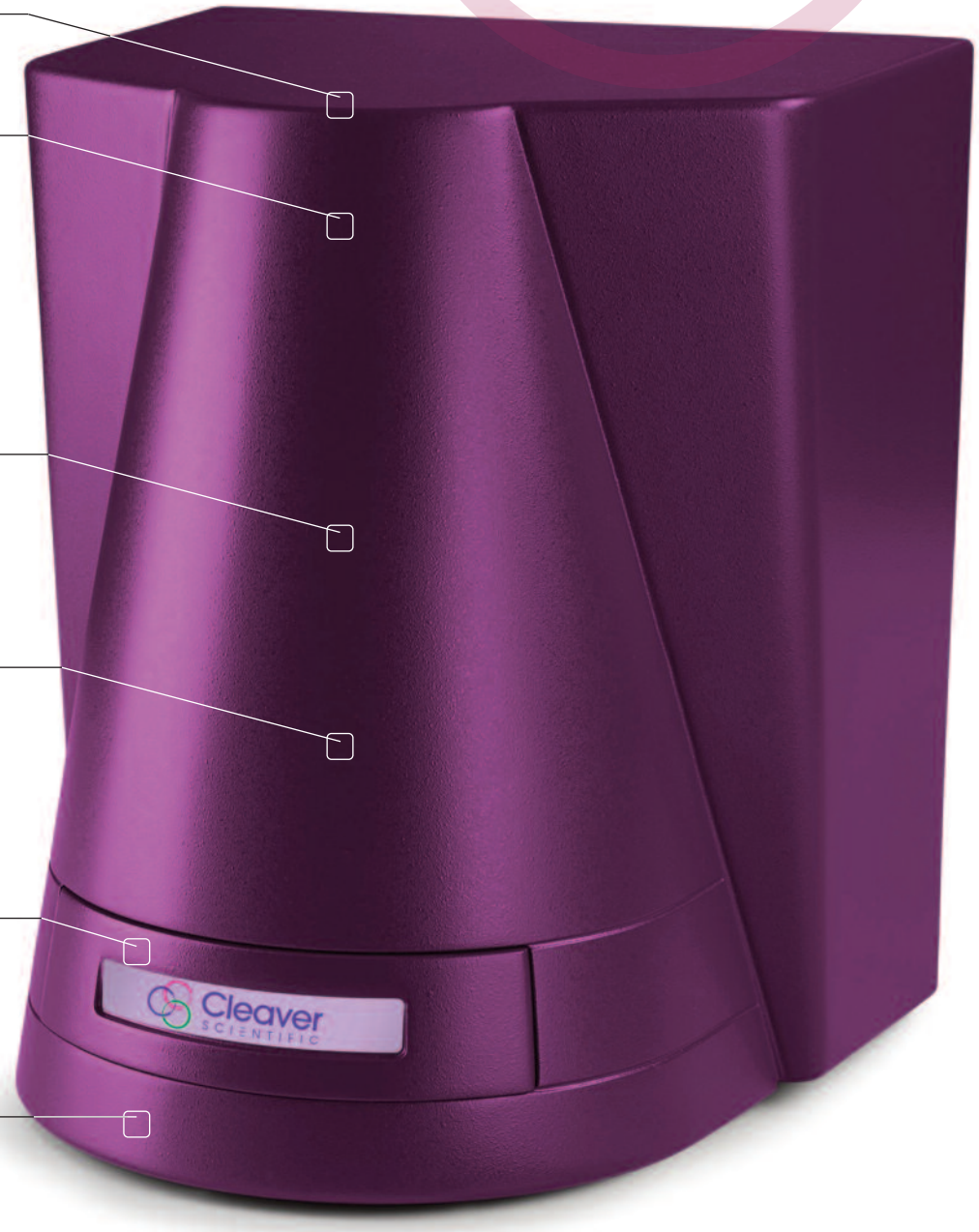
SUPER LOW COOLING
Peltier cooling with exceptional signal to noise performance allows long exposure times. Both weak and strong chemiluminescent bands can be detected on one crisp image, without any annoying background noise.

WHITE LIGHT
To position blots and detect coloured markers, chemiLITE features overhead, long-life white LED EPI lighting.

SLIDE-OUT DRAWER
The automatic slide-out drawer saves bench space and allows the easy positioning of blots. Its magnetic lock ensures that the darkroom is completely light-tight, resulting in perfect image capture every time.

PC CONTROL
chemiLITE easily connects to the user's choice of computer and printer offering great flexibility.



chemiLITE
LOAD AND GO IMAGING

genePIX acquisition software can be set up for single auto-capture, series capture or manual capture of Westerns to generate a choice of one or a series of timed images.

BRIGHTER WESTERNS

When low light chemiluminescence Westerns are being imaged, the binning feature can be used to reduce exposure times. Binning combines pixels into larger formats to produce a super pixel which collects more light, increasing sensitivity or speeding up image capture time.

PICTURE PERFECT

To produce publication ready pictures of Westerns, simply choose high-resolution images in the genePIX software effective resolution settings.
It is even possible to generate images of colorimetric molecular weight markers alongside chemiluminescent bands as genePIX allows the automatic overlay on Western images.

FAST IMAGE ANALYSIS

chemiLITE comes with geneQUANT image analysis software which can be used for applications such as automatically calculating molecular weight and relative quantitation of protein bands. Using geneQUANT image edits can be made and the data saved easily as image files, or exported to Microsoft Excel and Word.

APPLICATIONS

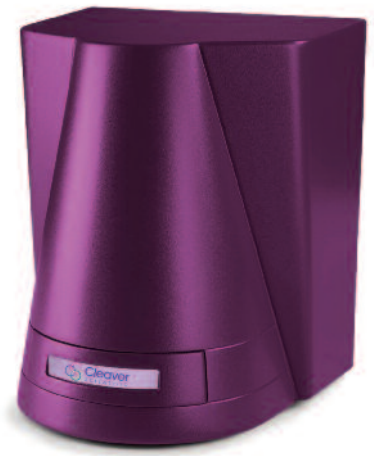
A Western blot of diluted transferrin was prepared on a PVDF membrane. The membrane was treated with chemiluminescence substrate and imaged using chemiLITE system.

Exposure time of 3 minutes was used.
Antibodies used: Prim AB anti-trasferrin 1:1000
Sek AB anti-human 1:2000
0.01 µg/µl, 5 ng/µl, 2 ng/µl; 0.1 ng/µl; 0.05 ng/µl; 0.02 ng/µl; 0.01 ng/µl

Simultaneous imaging of a chemiluminescent blot and coloured molecular weight markers. Images are captured separately and then overlaid automatically using genePIX software

TECHNICAL SPECIFICATION

SYSTEM	CHEMILITE
IMAGE RESOLUTION (MEGAPIXELS)	4
EFFECTIVE RESOLUTION (MEGAPIXELS)	16
A/D	16 BIT
GREYSCALE	65,536
QUANTUM EFFICIENCY (@ 425NM)	73%
LENS (MOTOR DRIVEN, FIXED FOCUS)	F/0.9
COOLING	PELTIER
FIXED STAGE	TRUE LENS IMAGING
USE WITH EXTERNAL PC AND PRINTER (NOT INCLUDED)	YES
LIGHTING	
EPI LED WHITE LIGHTS	YES
DIMENSIONS	
MAX IMAGE AREA (CM)	11 x 8
MIN IMAGE AREA (CM)	11 x 8
W x H x D (CM)	37.5 x 44 x 43
WEIGHT (KG)	APPROX. 20
POWER INPUT (V)	100-240



ORDERING INFORMATION

chemiLITE	**Chemiluminescence detection system** includes acquisition and analysis software

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