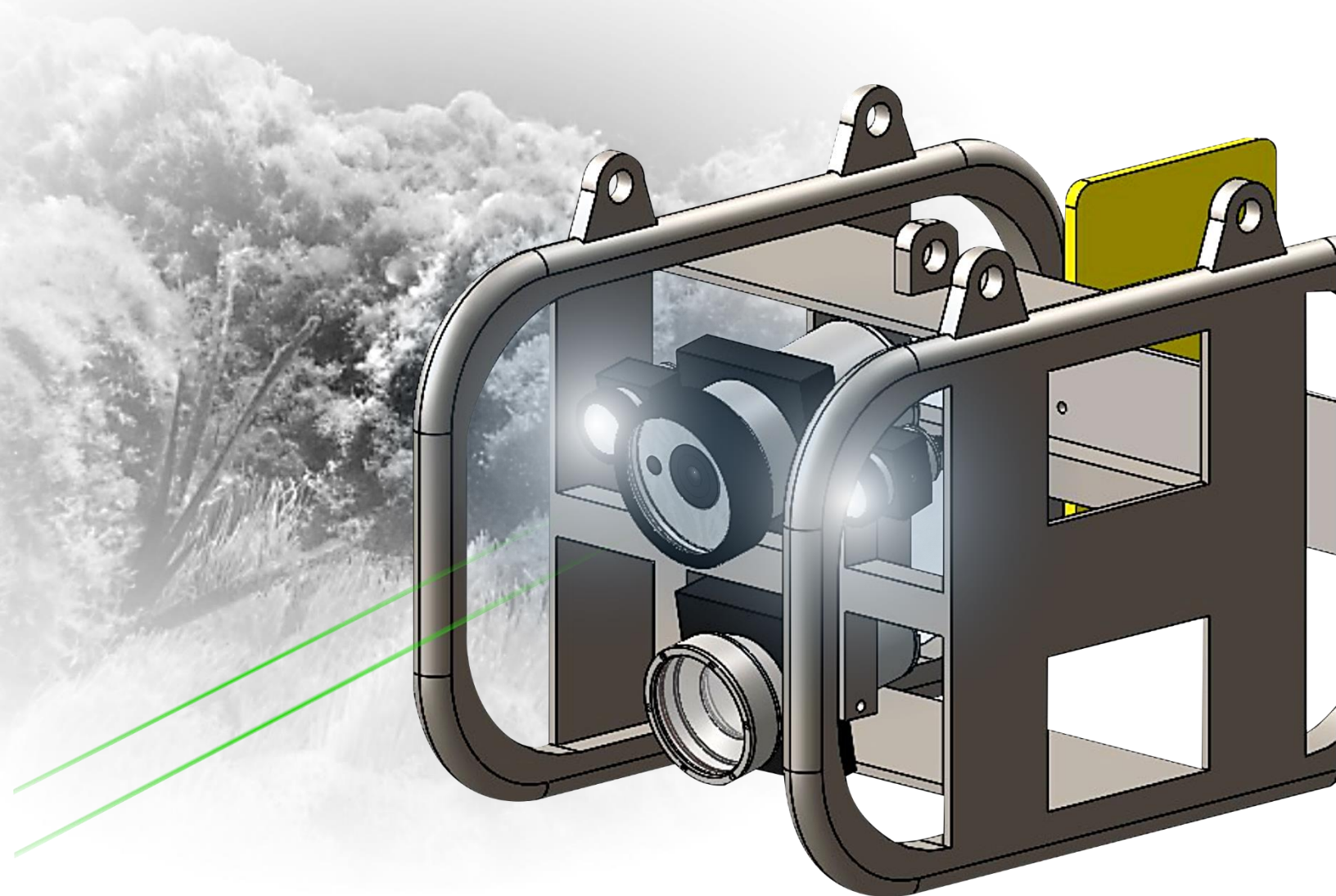


MARINE & SCIENTIFIC



Products & Solutions

In the 1980's, staff at C-Tec originally produced cameras and lights for a leading Scottish Marine Research Institute, and then branched out to become an independent company. Using knowledge of the marine scientific environment we then continued to develop products, including drop frames and landers on which we mounted our products.

We are now a key supplier to the subsea community, both in underwater and hyperbaric equipment, and our C-Vision video control and recording systems are to be found around the world due their robustness and reliability.

Recently, we have developed several products for in-field marine and oceanographic researchers who require such portable video systems.

We continue to innovate and work closely with the scientific community. We find every job interesting and look forward to discussing your requirements and challenges.

Our principle is based upon affordability, reliability and performance.



What we do



**Surface Video
Control and
Recording**

**Subsea Cables
and Connectors**



**Speciality
Cameras**

LED Lights



Lasers

Digital Still Camera

Model no. CT3022

The CT3022 Digital Stills Camera can capture 20.8 MP images as a remotely triggered system or an autonomous system.

When active, an external trigger can be interfaced with the camera allowing an operator to capture images. Live SD video feed can be used as a visual reference by the operator.

The camera is optimised for power management when in autonomous mode so that maximum power is conserved for long term deployments.



Specifications

Image Resolution:

20.8MP (5568 x 3712)

Lens Focal Length:

6.7 - 13mm (6.7mm standard)

Angle of View:

90o (6.7mm) to 60o (13mm) diagonal in water

Control:

RS232, RS485.

Visual Reference:

via SD video feed

Internal memory:

256GB

Power Consumption:

0.3mA during standby

850mA during 30 second snapshot routine
(2850mA for 1 of 30 seconds)

Image Format:

RAW, JPEG, RAW + JPEG

Typical Battery Lifespan (10 Ah battery):

4 snapshots per day - 200 days

6 snapshots per day - 142 days

10 snapshots per day - 93 days

12 snapshots per day - 79 days

Image capture cycle:

minimum 2 minutes

Upgrade your old Stills camera with our new, powerful specifications. Our competitors will try to sell you a totally new camera, but C-Tec offers an upgrade service for clients, utilising the old housing and fitting the camera out with all-new C-Tec internals for a fraction of the price. Save that budget!

Stills-Laser-Video Camera

Model no. CT3023

The CT3023 SLV System records HD video and captures full resolution stills images without interrupting the video recording.

A live SD video feed can be used as a visual reference by the operator, while the HD video and stills are recorded locally on internal memory for download via USB.

The built-in lasers are set at 100mm apart for scaling. The camera is controlled through RS232/RS485 connection via software.

The CT3023 is the perfect camera for drop frame monitoring systems and other scientific applications where premium image quality is essential.



Specifications

Image Resolution:
20.8 MP (5568 x 3712)

Lens Focal Length:
6.7 - 13mm (6.7mm standard)

Focus:
41-point Auto-focus or Manual

Angle of View:
72o (6.7mm) to 45o (13mm) diagonal in water

Light Sensitivity:
ISO200 to ISO12800

Scene Illumination:
1 lux

Visual Reference:
Via SD video feed

Internal Memory:
256GB

Power Input:
12 – 24V DC

Control:
RS232, RS485

Video Resolution:
1080/60p 1920x1080p Full HD @60fps
1080/30p 1920x1080p Full HD @30fps
4K/15p 3840x2160p @15fps
720/60p 1280x720p 'HD Ready' @60fps
720/30p 1280x720p 'HD Ready' @30fps

Flashgun

Model no. CT4015

The CT4015 Flashgun is an LED-powered flashgun, capable of providing a synchronised 'flash' when in use with the C-Tec CT3022 Digital Stills Camera or CT3023 Video and Stills Camera. The high-powered LED will enhance the image by illuminating the entire area of view when triggered by a signal received from the camera.



Specifications

Light Output:

1300 lux @ 1m max

Power Input:

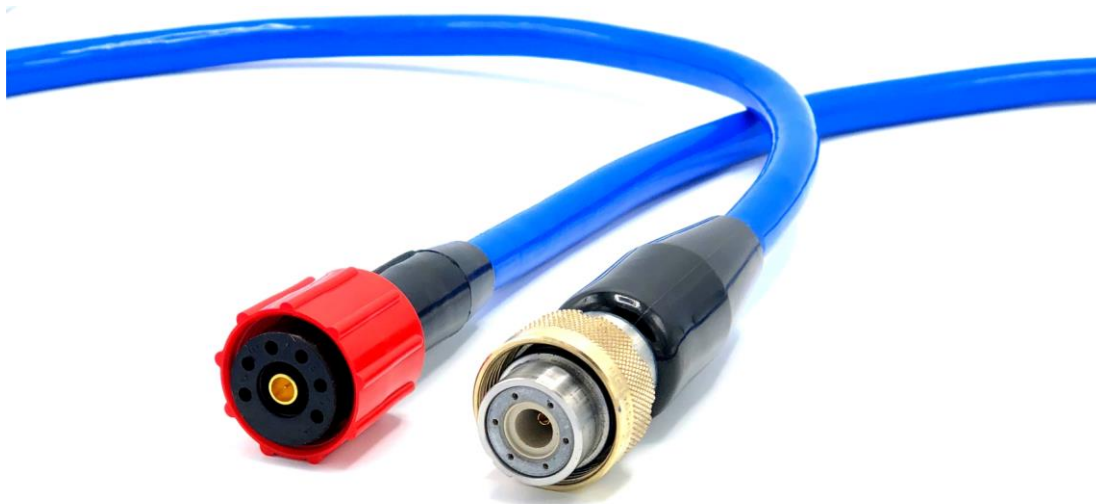
12 - 24V DC

Light Output Adjust:

Automatically when used with CT3022 Stills Camera, OR, manually when used on other systems

Subsea Cables

We can supply a range of custom terminated umbilicals to suit new or existing systems.



Get in touch with our team to discuss your requirements.

10x Zoom Full HD Camera

Model no. CT3009

The 1/3- inch CMOS sensor provides exceptional picture quality with the highest level of resolution with full 1080p HD output signal and 10x optical zoom.

Resolution:	1080p 30fps
Light Sensitivity:	0.5 lux (0.125 lux DSS)
Sensor Type:	2.4MP 1/3-inch CMOS
Video Output:	HD-SDI
Control Options:	RS485/RS232
Depth Rating:	2000 metres (aluminium) 4000 metres (titanium)



Compact Full HD Camera

Model no. CT3017

The CT3017 HD Camera offers full 1080p HD output in a small, robust housing. Capture every little detail from your marine operations in stunning HD quality with this reliable and affordable camera.

Weight (air):	400g
Dimensions:	139 x 40mm
Video output:	1080p 30 or 25 fps
Output format:	HD-SDI
Angle of view:	H52° V29° (options available)
Depth Rating:	4000m (titanium)



Compact Analog HD Camera

Model no. CT3026

Why you may ask? Some installations and operations have twin wire or coax cables and yet this camera allows you to receive HD quality using the old cables – what a saving!

The lowlight sensitivity coupled with high resolution combine to make an extremely versatile camera for close inspection work through to general observation tasks.

Resolution:	1080p
Light Sensitivity:	0.01 lux
Sensor:	2.4MP 1/3-inch CMOS
Lens:	3.6mm
Video Output:	1920x1080p 25fps (AHD)
Depth rating:	4000 metres (titanium)



High Speed Subsea Camera

Model no. CT3024

The CT3024 High Speed Camera offers multi-frame, high resolution 2.3MP imaging tills photography with frame rates adjustable between 1fps and 116fps at full resolution. The system permits viewing, recording and playback and is supplied complete with surface control console and a Kevlar reinforced fibre-optic umbilical cable assembly. The robust titanium housing makes the camera ideal for use in extreme environments and for use in research applications and marine life observation.

Resolution:	2.3 MP (standard)
Frame Rates:	1-116 fps adjustable
Power Consumption:	19.2 watts
Housing Material:	Titanium
Viewing Platform:	via PC (USB3 interface)
Lighting support:	CT4004Ti LED Light (included)



1000 Lumens Mini LED Light

Model no. CT4006

The CT4006 is one of the smallest & most economical LED lights available on the market, and deal for most diving and subsea operations, while the Titanium model will be suitable for ROV operations at depths of up to 3000m.

Weight (air):	144g
Dimensions:	80 x 30mm
Luminous flux:	1000 lumens
Input voltage:	24 VDC
Beam angle:	125°



2100 Lumens LED Light

Model no. CT4004

The CT4004 light projects a soft wide angled white light, producing an even illumination to adequately cover the angle of view for C-Tec Technics cameras. Utilizing one of the latest LED arrays the lamp produces a high light output for minimal power input.

Weight (air):	400g
Dimensions:	88 x 65mm
Luminous flux:	2100 lumens
Input voltage:	24 VDC
Beam angle:	54°



4800 Lumens LED Light

Model no. CT4013

A compacted version of the powerful CT4011, the CT4013 provides the same generous light pattern from its 10 element LED array, in a package perfectly sized for diver helmet mounting.

Weight (air):	480g
Dimensions:	92.5 x 70mm
Luminous flux:	4800 lumens
Input voltage:	24 VDC
Beam angle:	125°



9000 Lumens LED Light

Model no. CT4011

The CT4011 is fitted with a clear domed port for maximum light spread. the 18 element LED array provides an ample blast of light to enhance the divers view, whether it is hand held or fixed in a diving bell.

Weight (air):	760g
Dimensions:	97.5 x 90mm
Luminous flux:	9000 lumens
Input voltage:	24 VDC
Beam angle:	125°



18000 Lumens Compact LED Floodlight

Model no. CT4012

A high-powered LED floodlight in a compact and robust housing. Well suited to use in diving bell internal and external lighting.

Power Input	110VAC
Resolution	18000 Lumens
Depth Rating	6000m
Operating Life	50,000 hours



Subsea Laser

Model no. CT4005 (Red) / CT4007 (Green)

The C-Laser is a compact, rugged solid-state subsea laser designed for underwater highlighting or used in pairs for scaling and ranging operations. The laser can be powered from a 9-30V DC supply and is equipped with over-voltage and reverse polarity protection.

Laser Type:	Diode, Class 3R, 4mW
Beam Divergence:	0.75mrad
Wavelength:	635nm (Red - CT4005) 532nm (Green - CT4007) Available as dot or line
Depth rating:	4000 metres (titanium)



Video Control and Recording Stations

The C-Vision is a leading product in monitoring, recording and controlling lights, cameras and even voice communications during surface-supplied operations. A variety of specifications are available to suit operational complexity and budgets.



C-Vision Rack

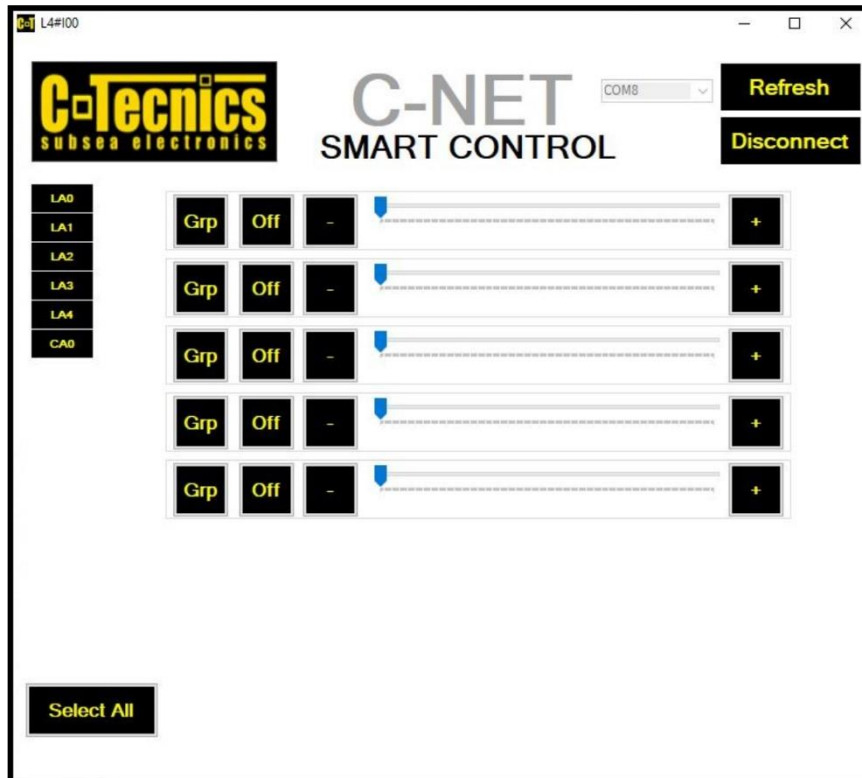
E-Vision HD Portable



Call us to discuss the specifics of your perfect control station - our experienced team will be happy to help.

RS232/485 Serial Control Software for LED Lights

CT4011 RS485 lights can be controlled via use of C-Tecnic's proprietary software program 'CNET Smart Control'. The software is designed to run on any windows OS support .NET4.5 and above. Dimming control of multiple lights up to 16 devices, is supported by the software utilising a single serial port on a PC and RS485 daisy chaining topology. Therefore multiple lights can use the same twisted pair for data communications, thus reducing the cable core count to power and control multiple lights.



Portable Power Supply

The C-Tec nics Portable Power Supply (PPS) offers a real advance in operating in remote locations where there isn't access to mains power supplies.



A step-up inverter provides mains voltage at 240V to the C-Vision system from the batteries contained within the heavy duty transport case. The batteries can be recharged from universal mains power once back at base.

The Portable Power Supply is available in two different capacity options - 50Ah or 100Ah - and is supplied with 1x 2 metre Mains to PPS charging cable and 1x 2 metre PPS to C-Vision power cable.

Order Code **CT9030 (100Ah)**
 CT9031 (50Ah)

Bespoke Products

We take pride in our ability to work with customers to ensure that they are getting 100% out of the equipment we supply. This includes non-standard and customised solutions ranging from engineered-to-suit camera drop frames, multi-feed monitoring systems and built-for-purpose cameras.

Just ask!

