



STR SeaSpyder Nano Drop Camera System



The SeaSpyder Nano is part of a family of field proven camera systems manufactured by STR for the marine survey and environmental communities. The Ultra Compact SeaSpyder Nano Underwater Drop Camera System offers high resolution digital imaging and photographic quality illumination from within a highly compact form factor. The system comprises of the latest generation STR SeaCam Mini IP camera and two ultra-efficient STR SeaLight LED Lights installed on a lightweight camera deployment frame.

A dedicated Kevlar re-enforced umbilical up to 100m in length is used for frame deployment and communication to the camera system electronics. The system can be mobilised quickly and has been designed for simple operation.

Real time HD video is captured using the supplied STR VidOverlay software. The software driven interface is easy to use and supports typical requirements such as serial and graphical overlay input, field reporting, jpeg still frame capture and adjustment of video recording and display parameters. To ensure safe operation, the subsea electronics operate using a low voltage DC supply from the Surface Integration module. This small waterproof enclosure also provides the data connection to the laptop running STR VidOverlay software.

KEY FEATURES

- Ultra compact design
- Single person operation
- High resolution digital imaging

- Photographic quality illumination
- Easy to use software
- Field reporting capability

STR SeaSpyder Nano Drop Camera System

SEASPYDER NANO SURFACE INTEGRATION MODULE - SP-NDC-SIM

Functions: Low Voltage DC Power supply to subsea units,

IP Video communication, LED intensity control

Physical format: Waterproof IP66 aluminium enclosure
Dimensions: 90mm H x 163mm W x 304mm L
Power input: 90-264V AC @ <70W

SEASPYDER NANO FRAME - SP-NDC-FR

Sensors: 1* SeaCam Mini IP Video Camera

2* SeaLight LED-1-DC

Material:Stainless steelAdjustment:Adjustable tow point position

Adjustable camera & LED angle

Removable legs/skis

Dimensions: 315Hx359W (without skis),

468Hx524W (with skis)

Weight: 9kg in air / 6.6kg in water

Transit case dimensions: Peli 0350 case @

571x571x540mm

Umbilical: 50m length 13.5mm Kevlar reinforced umbilical C/W Kellums grip

Umbilical weight: 9kg in air / 2kg in water (50m)

STR VIDOVERLAY SOFTWARE / TYPICAL LAPTOP

Features: 720/1080P HDIP low latency video recording

with text & graphical overlay,

3*serial data overlay,

still frame capture to .jpg,

report file generation,

adjustable recording & display parameters.

CPU: Intel Core i5

Display: 14.1" TFT @ 1600*900 resolution **CPU:** Intel Core i5

HDD: 320GB

Operating System: Windows 7 Pro

Input-Output: USB, DVD, LAN, RS232/485



STR SEACAM MINI IP VIDEO CAMERA - SC-IPC-500S

Viewport: Acrylic Viewport Field of view: 1080p 70° air/ 52° water

720p 85° air/ 64° water

Sensor: 1/2.5" Aptina 5 Mega Pixel CMOS
Min illumination: 0/0.1Lux (LED on/off)
Signal to noise ratio: >50dB (AGC = OFF)
Focus: Fixed Focus

Image enhancement:Brightness, Saturation,
Sharpness, Contrast

Digital interface: Real Time Streaming Protocol RTSP 1080P 25/30 fps, 720p 25/30 fps

(up to 2592x1920 10 fps to 1024x768 30fps available)

Digital latency: 100-200mS typical **Data bitrate:** Configurable 500-8000 kbps

Power input: 10 - 28VDC

(Max 150mA @ 24VDC, typical 100mA)

Fault protection: Reverse polarity input

protection with self reset fuse **Depth rating:**500m **Housing material:**Stainless steel

Housing material: Stainless steel
Connector: MCBH8M

Dimensions: 65D*95L (without connector) **Weight:** 1.35kg in air / 1kg in water

STR SEALIGHT LED-1-DC

Input supply voltage: 15 to 32VDC **Input supply power:** 9W typical @ 100% illumination

Colour temperature:5000KLumen output:1200lm typicalBeam angle:120° to 50%Luminous efficacy:130lm/W typical

Depth rating:

Operating temperature:

-10°C to 45°C

Housing material: Stainless-steel housing / Sapphire lens

Connector: MCBH3M / MCIL3F mating half Weight: 550g in air / 380g in water Dimensions: 123mm L (145mm inc. connector)

x 35mm Dia @ head / 30mm Dia @ body **Dimming control:**0-10V Analogue

(Approx. 10KOhm load)

Circuit protection: Reverse polarity protected,

Over voltage,

Thermal shut down