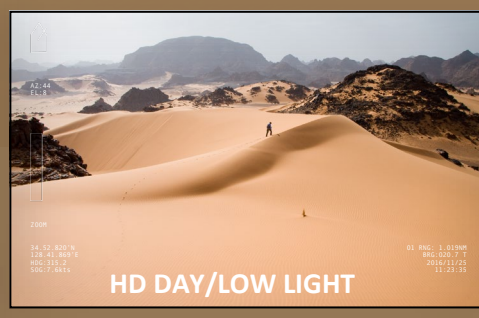


## Mobile Surveillance & Intelligence

CS 3000 Series



### Electro-Optical / Infra-Red camera system

CURRENT SECURITY electro-optical infrared camera are the new generation of rugged, compact, and low maintenance turrets for land based missions. The **CS 3050** is a gyro-stabilised payload integrating a **MWIR Cooled thermal imager** and **High-Definition Day/Low light camera** for mobile surveillance and intelligence, as well as border surveillance and critical infrastructure surveillance applications. It is controlled through IP network on board or remotely. This COTS system is built to MIL Std.

### APPLICATIONS

- Mobile Surveillance & Intelligence
- Critical Infrastructure Surveillance Applications
- Border Surveillance
- Port Security
- Facility Protection
- Wind Turbine Fields

### BENEFITS

- **Rugged, low maintenance** design
- **Zooms 56x** in MWIR cooled thermal and 360x in HD Day
- **Detects** a NATO target over 14km, night and day
- **Provides a clear, highly detailed image**, in HD day camera, even into the digital zoom range
- **Increases object detection** in low level of light with best of class low light sensitivity
- **Tracks** third party sensor targets
- **Video Tracking**
- **Streams H.264 (HD)** video with PiP or video streams and **communicates digitally** over IP network (Ethernet)
- **Outputs video in dedicated coax cable in SDI**
- **Enables Picture in Picture (PiP)** of two live video signal outputs (zoom synchronized or independent)
- **Single LRU** with no junction boxes or interface modules simplifies installations and retro fits, while reducing maintenance
- **Standard mounting and cabling** for all CS 3000 series enables ease of payload swaps and future upgrades
- **Designed to withstand marine environmental conditions** and proven by over 15 years and hundreds of successful operating installations worldwide

# CS 3050

## SYSTEM FEATURES

COOLED THERMAL CAMERA		THREAT CONFIRMATION & INTELLIGENCE	
Sensor type:	MWIR		
Spectral Range:	3 – 5 $\mu$ m Cooled thermal imager		
Resolution:	640x512 pixels		
Field of View:	28° (wide) to 2° (narrow)		
<b>Focal length:</b>	<b>19-275mm</b>		
<b>f/stop:</b>	<b>f5.5</b>		
Zoom:	14x continuous optical, 4x digital zoom		
Frequency:	30 fps, full frame rate for export		
Detection range <sup>1</sup> :	NATO target over 14km/ Human over 5km		
HD DAY / LOW LIGHT CAMERA			
Sensor type:	1/2.8" CMOS		
Field of View:	63° to 2.3° FoV in HD mode, 1080p30		
Optical zoom:	30x continuous		
Digital zoom:	12x continuous		
Window coating:	Hydrophobic		
LOW LIGHT HD CAMERA (FUNCTION)			
Sensor type:	1/2.8" CMOS		
Low light sensitivity:	0.0015Lux in B&W mode		
RADAR, GROUND SIGNALS TRACKING & THE THIRD-PARTY SENSOR			
Slew-to-cue allows target detected from the Radar & Ground signals to be tracked automatically by the EO/IR. Interface between Radar, Ground signals over NMEA0183 communication standard in RS232 or RS422, through supplied Network Interface Box. GPS data is also fed through NMEA 0183 communication to register and display the position in Latitude, Longitude, Date and Time. Interface to other sensors as required.			
VIDEO TRACKING			
Automatic pursuit of an object of interest or threat selected on the display by the operator, without any continuous input. Both the infrared and day sensors automatically track the target, even with small obstructions in their path.			
CONTROLLER: HARDWARE OR GUI, IP BASED AND REMOTE-CONTROLLED SOLUTIONS			
<ol style="list-style-type: none"> <li><b>1. Video GUI</b> with optional USB joystick (two-button joystick or Rugged Rigid Grip)</li> <li><b>2. Control GUI (Graphical User Interface)</b>, either on <b>dedicated touchscreen</b> display (Panel PC) or as pop up window in PC; with optional USB joystick (two-button joystick or Rugged Rigid Grip)</li> <li><b>3. Protocol for interface to Command &amp; Control System</b></li> </ol> All controllers offer Built-in Test for remote diagnostic and are configured for optional additional controllers or remote control			
PAYLOAD SPECIFICATIONS			
System type:	Gyro-stabilization <sup>2</sup> , c./w. enhanced video stabilization		
Pan Range:	Continuous 360° AZ rotation		
Tilt range:	+/-90° elevation movement, including stow position		
Colour:	Low Gloss Plastic Sand. Custom colour upon request.		
SYSTEM INTERFACE			
Video format:	SDI		
Video streaming:	H.264 in HD with PiP or 2 video streams		
Data:	Radar cursor / ARPA target / AIS over NMEA 0183 via RS422 or RS232		
Control:	Over IP network		
ENVIRONMENTAL			
Ingress Protection Mark:	IP67		
Compliant to:	MIL-STD 810 & MIL-STD 461		
Operational temperature:	-20°C to +55°C		
WEIGHT AND DIMENSIONS			
Weight:	<20 kg		
Diameter payload <sup>3</sup> :	239.7mm		
Height payload <sup>3</sup> :	431.5mm		
POWER REQUIREMENTS			
Voltage:	24 to 36 VDC		
Max. Consumption:	320W		
OTHER OPTIONS AND ACCESSORIES			
Other sensors: Contact us with your specific requirements.			

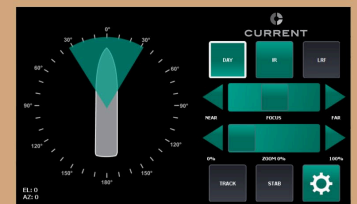
<sup>1</sup> theoretical calculation using Johnson's criteria & not accounting for atmospheric attenuation - <sup>2</sup> resolved by 2 axis positioning - <sup>3</sup> Larger movement space required



## CONTROL SOLUTIONS



1. Video GUI



2. Control GUI



3. Protocol for interface to Command & Control System



2-Button Joystick



Rugged Rigid Grip

Specifications subject to change or improvement without notice. All Night Navigator sales are conditional to Canadian export license approval – March 21



**CURRENT**

CURRENT Scientific Corporation – 2933 Murray Street, Port Moody, BC, V3H 1X3, CANADA

Tel: +1 604 461 5555 – sales@currentcorp.com – [www.currentcorp.com](http://www.currentcorp.com)