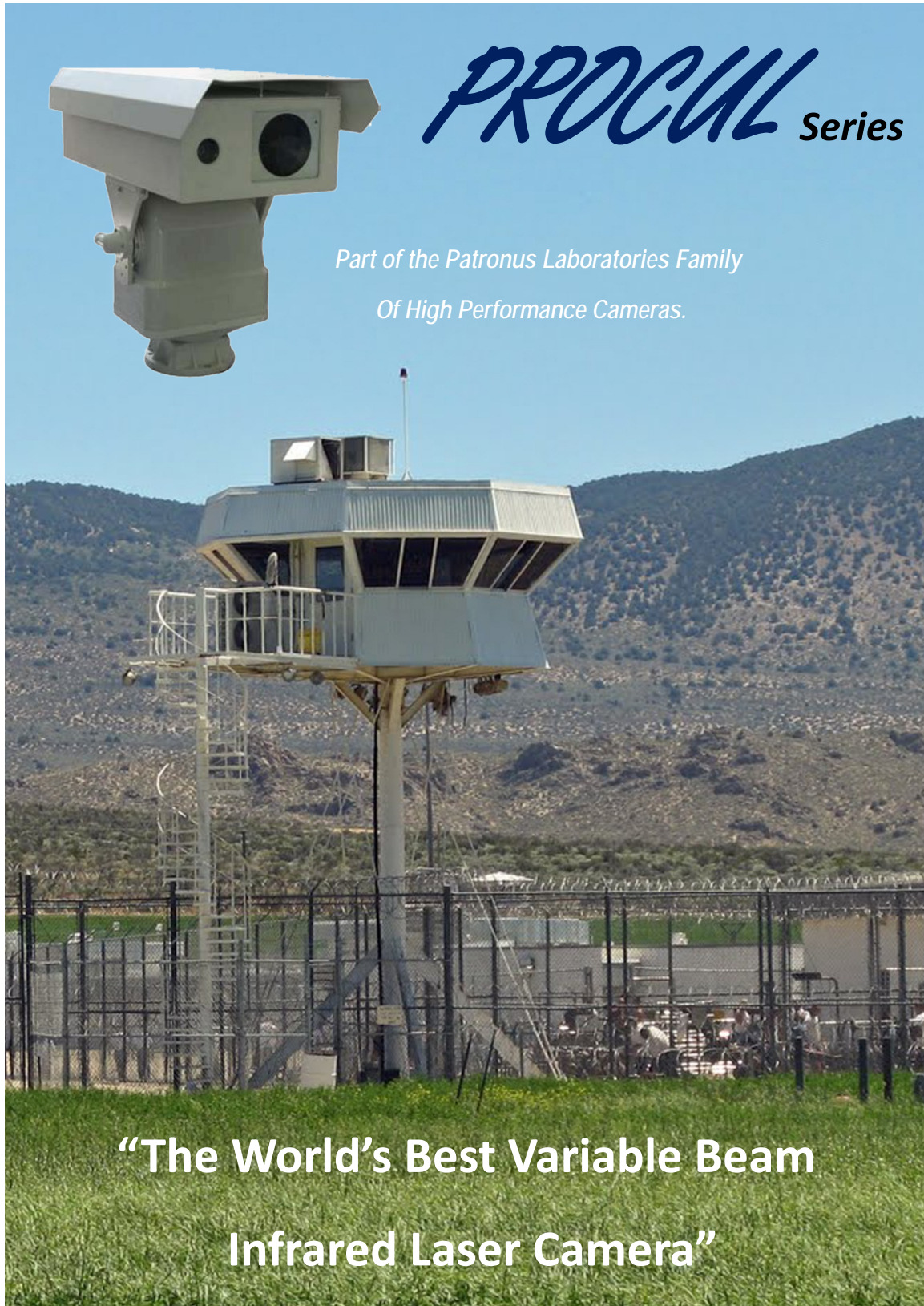


## DATA SHEET

Video Surveillance Division

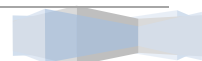
Security Camera



**PROCAL** Series

*Part of the Patronus Laboratories Family  
Of High Performance Cameras.*

**“The World’s Best Variable Beam  
Infrared Laser Camera”**



## Features

- Variable Beam Infrared LASER**  
 The **PROCUL Infrared Camera** from **PATRONUS LABORATORIES** comes equipped with the first variable beam infrared LASER. The **PROCUL** automatically adjusts the LASER beam dispersion angle to approximately match the optical Field Of View (FOV). This industry first functionality eliminates both under exposure at long distance, and/or infrared "spot" at a short or medium distance. Unmatched flexibility ensures the best possible infrared exposure on any target.
- Multiple Long Range Optical Options**  
 The **PROCUL** is available in three (3) models: 15~320mm, 15~500mm, or 12.5~750mm with an in-line Optical Doubler (OD) providing a 12.5~1500mm capability. The 810nm LASER light is invisible to the human eye, but the emitter glows red at the source. Night-time human detection up to 1km, 1.5km and 3km respectively; day-time human detection up to 8km (VSCS0712), the **PROCUL** has been designed to meet the demanding needs of the military within the confines of a law enforcement budget.
- No blind spots**  
 Continuous 360°Pan Rotation and 180° tilt provides unhindered directional tasking.
- Weather Resistant**  
 IP66 compliant weather resistant design facilitates installation in the most remote security applications, under the harshest environmental conditions.
- Triple Voltage - Low Wattage Draw**  
 Available in 12VDC, 24VAc, 24VDC, 110AC and 220AC. All models draw less than 150W maximum, substantially lower wattage draw than other cameras.
- Tough Construction**  
 Designed to be vehicle mountable, the **PROCUL** boasts a heavy duty aluminum housing, scratch resistant mineral glass lens, and industrial grade motor assembly.

# PROCUL Series

...From Patronus Labs

## DAY/NIGHT – LONG RANGE

- ✓ **VSCS0710** – 15~320mm, 810nm LASER, 1km Range
- ✓ **VSCS0711** – 15~500mm, 810nm LASER, 1.5km Range
- ✓ **VSCS0712** – 12.5~1500mm, 810nm LASER, 3km Range

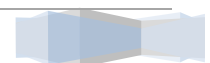


## Overview

**Patronus Labs** offers an exclusive line of Laser infrared laser illuminator technology cameras. The **PROCUL's** variable infrared laser beam provides up to 3,000 meter night-time visibility in conjunction with a 60x optical imager. The camera shell is made of high strength aluminum alloy, providing impact and corrosion resistance. The **PROCUL** carries an IP 66 rating for all weather applications, a 15m/s<sup>2</sup> 5-200Hz anti-vibration rating, a 150m/s<sup>2</sup> 11ms anti-shock rating and a Salt Fog Proofing of PH 6.5~7.2 – with 48hrs continuous spray.

Penetrating fog, explosion resistance and -40°C custom modifications/upgrades available.

PRODUCT IDENTIFICATION CHART		
Division	Category	
Access Control	Camera, Board	IR Illuminator
Computer Components	Camera Bullet	Joystick
Fixed Platform	Camera, Dome	Lens, Board
Housings/Mnts/Enclosures	Camera, Mini	Lens, C/CS Mount
Mobile Platform	Cam, Professional	Recorder, Embedded
Power Gen./Storage	Camera, Specialty	Recorder, Mobile
Tools/Equipment	Cam, Speed dome	Recorder, Network
Video Surveillance	Decoder	Recorder, PC-Based
Wire/Cables/Connectors	Encoder	Software
Wireless Equipment	Encoder/Recorder	

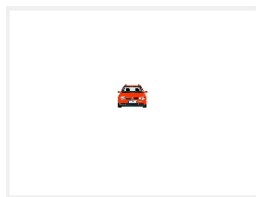


## Camera Configurations

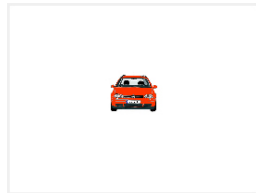
VSCS0710	2MP, 22x Optical Zoom/15~320mm, 1000 meter Variable Infrared LASER, 810nm
VSCS0711	2MP, 34x Optical Zoom/15~500mm, 1500 meter Variable Infrared LASER, 810nm
VSCS0712	2MP, 60x(120x) Optical Zoom/12.5~1500mm, 3000 meter Variable Infrared LASER, 810nm

## Options

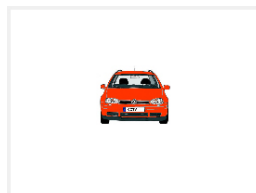
Customizations	Fog Penetration; 940nm IR (Invisible); -40C° (Ultra Low Temp.); Explosion Resistance
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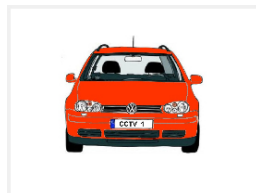
Optical Zoom  
320mm @ 1km



Optical Zoom  
500mm @ 1km



Optical Zoom  
750mm @ 1km



Optical Zoom  
1500mm @ 1km  
(750mm doubled)

Mountain Top Observatory  
– Distance 13km  
Zoomed to 12.5mm



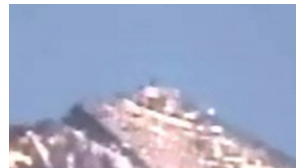
Mountain Top Observatory  
– Distance 13km  
Zoomed to 320mm



Mountain Top Observatory  
– Distance 13km  
Zoomed to 500mm



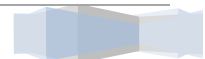
Mountain Top Observatory  
– Distance 13km  
Zoomed to 750mm



Mountain Top Observatory  
– Distance 13km  
Doubled to 1500mm



Night Vision with LASER Illuminator



# DATA SHEET

Video Surveillance Division

Security Camera

## Specifications

PROCVL Series Specifications			
Model	VSCS0719	VSCS0711	VSCS0712
Alarm Inputs	1		
Alarm Outputs	1		
Backlight Compensation	ON/OFF		
Compatibility	ONVIF, PSIA, CGI		
Cruise	8 (Tracking Paths)		
Day & Night	ICR (Interchangeable Cut Filter)		
Electronic shutter	1/30~1/100,000s		
Focal length	15~320mm	15~500mm	12.5~750mm (12.5~1500mm w/ built-in optical doubler)
Image Resolution	2 Mega-Pixel		
Illuminator	Variable Beam Infrared LASER Illuminator		
Illuminator zoom control	Automatic		
Imager	1/3" Progressive Scan CMOS		
Impact Resistance	150m/s <sup>2</sup> 11ms		
Intelligent Alarms	Motion detection, Video tempering, Network disconnect, IP address conflict, Storage exception		
IP Protocols	TCP/IP, HTTP, DHCP, DNS, DDNS, RTP, RTSP, PPPoE, SMTP, NTP		
Infrared range	1000 meters	1500 meters	3000 meters
Iris	DC-Dive		
Laser IR MTBF	≥10,000 hour		
Laser Power Consumption	20W (max)		
Laser Wave Length	Near Infrared (NIR), 810nm		
Lighting Angle	1.2°~25° (Auto)	1.2°~25° (Auto)	0.2°~15° (Auto-Continuous)
Light Sensitivity	Color: 0.05 lux @ (F1.2, AGC ON) - B/W: 0.005 lux @ (F1.2, AGC ON)		
Operating temperature	-25C°~+60C° (Extreme Temperature Versions Available)		
Pan Manual Speed	0.1~9.0°/s		
Pan Range	360°		
Pixels	1920H x 1080V		
Power consumption	≤150W		
Power Input	24VAC (12VDC, 24VDC, 110VAC, 220VAC Optional)		
Pre-sets	255		
Protection Level	IP66		
Protocol	RS485, Pelco Protocol D RS-422 Extended Pelco Protocol		
PTZ Control	RS485, RS-422		
Relative Humidity	90%		
Salt-spray testing	Continuous Spray - 48 hours under PH6.5-7.2		
Signal-to-noise	≥50db		
Storage temperature	-40°C~85°C		
Synchronous system	Internal or External		
Tilt Manual Speed	0.1~4.0°/s		
Tilt Range	-90°~+90°		
Vibration resistance	150m/s <sup>2</sup> 11ms		
Video Bit Rate	32 Kbps~16Mbps		
Video Control	Saturation/Brightness/Contrast adjustable through client software or web browser		
Video Output	Composite Output (75Ω1Vp-p, BNC) / H.264/Mpeg4/M-JPEG		
White balance	Automatic		

- ❖ ALL LASERS CAN BE DANGEROUS IF USED IMPROPERLY.
- ❖ PLEASE CONTACT PATRONUS LABORATORIES FOR APPLICATION SPECIFIC GUIDELINES AND LIMITATIONS.
- ❖ REFER TO PRODUCT MANUAL PRIOR TO OPERATION AND/OR IMPLEMENTATION.

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