

Delivering true 15"-class performance in a compact 13" SWaP envelope, the PV1315 enables higher-altitude ISR and multi-domain flexibility—without the costly airframe modifications imposed by legacy 15" systems.

## 15" Class Power Any Mission



# pv1315

## Performance Beyond its Class

### PAYOUT SPECIFICATIONS

#### Sensor Suite

HD MWIR Spotter:	Step Zoom
Type:	MWIR, HOT MOVPE MCT (Independent from WFOV Zoom)
Resolution:	1280 x 1024 pixels
Fields-of-View:	30.2° to 1.3° Continuous Optical Zoom
UHD Colour Daylight Zoom:	Step Zoom with E-FOV to Native Resolution
Type:	CMOS sensor, Back Side Illuminated, Stacked Global Shutter
Resolution:	5120 x 4096 pixels
Fields-of-View:	Optical 1.3° WFOV with 4x E-Zoom to 7.7° at 1280 x 1024
UHD Color Spotter	E-FOV to Native Resolution
Type:	CMOS sensor, Back Side Illuminated, Stacked Global Shutter
Resolution:	5120 x 4096 pixels
Fields-of-View:	Optical 1.3° NFOV with 4x E-Zoom to 0.32° at 1820 x 1024

#### HD SWIR Spotter (Optional)

Type:	InGaAs with optional US & NATO code Multi-Laser Spot Tracking
Resolution:	1280 x 1024 pixels
Fields-of-View:	1.3°

#### Laser Suite

Eye-Safe Laser Rangefinder:	
Wavelength:	1535nm
Energy:	Class 1M
Range:	up to 39km

#### Laser Pointer: (Optional)

Wavelength:	808 nm
Power:	Class 4
Notes:	NVG Compatible

Despite its 10" footprint, the [pv1012](#) delivers 12" class performance with the same advanced Gen 5 stabilization, class-leading aperture, sensor clarity, and modular architecture as its larger counterparts — ensuring mission-critical imagery reaches decision-makers in real time, whether the objective is ISR, offensive targeting, or life-saving search and rescue.



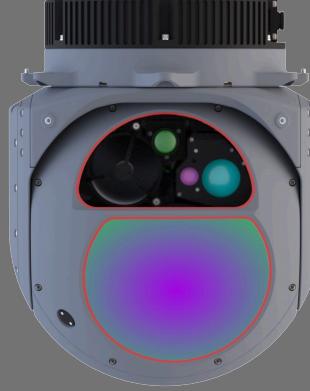
SIZE

WEIGHT

POWER

PERFORMANCE

COST



## pv1315

### OPERATIONAL EDGE

15"-class performance with significant weight reduction

Long-range DORI tuned for medium-altitude ISR profiles

Step-stare LOS-axis control for orbit stability

Integrated INS for high-confidence geolocation

Simultaneous raw sensor outputs for mission-system integration

ITAR-free for unrestricted deployment

With a substantial weight advantage (~58 lbs vs ~95 lbs typical), the PV1315 preserves aircraft endurance while extending operational reach.

This is performance without platform penalty.

## Performance Beyond its Class

Delivering true 15"-class performance in a compact 13" SWaP envelope, the PV1315 enables higher-altitude ISR and multi-domain flexibility—without the costly airframe modifications imposed by current-generation 15" systems.

## FAST Platform Advantage

The PV1315 inherits the full stabilization performance of the FAST platform, balancing optical reach, endurance, and stability in the mid-size ISR class.

This allows operators to deploy higher-performance payloads in smaller turret sizes—without oversizing the aircraft or compromising mission flexibility.

FAST enables the PV1315 to sit cleanly between lightweight ISR and long-range systems, covering a wide operational envelope with a single architecture.

## Multi-Mission Profile

- Covert surveillance and persistent ISR
- Medium stand-off identification and tracking
- High-altitude ISR on light and medium aircraft
- Multi-domain manned and unmanned operations
- Operations in permissive and contested electromagnetic environments

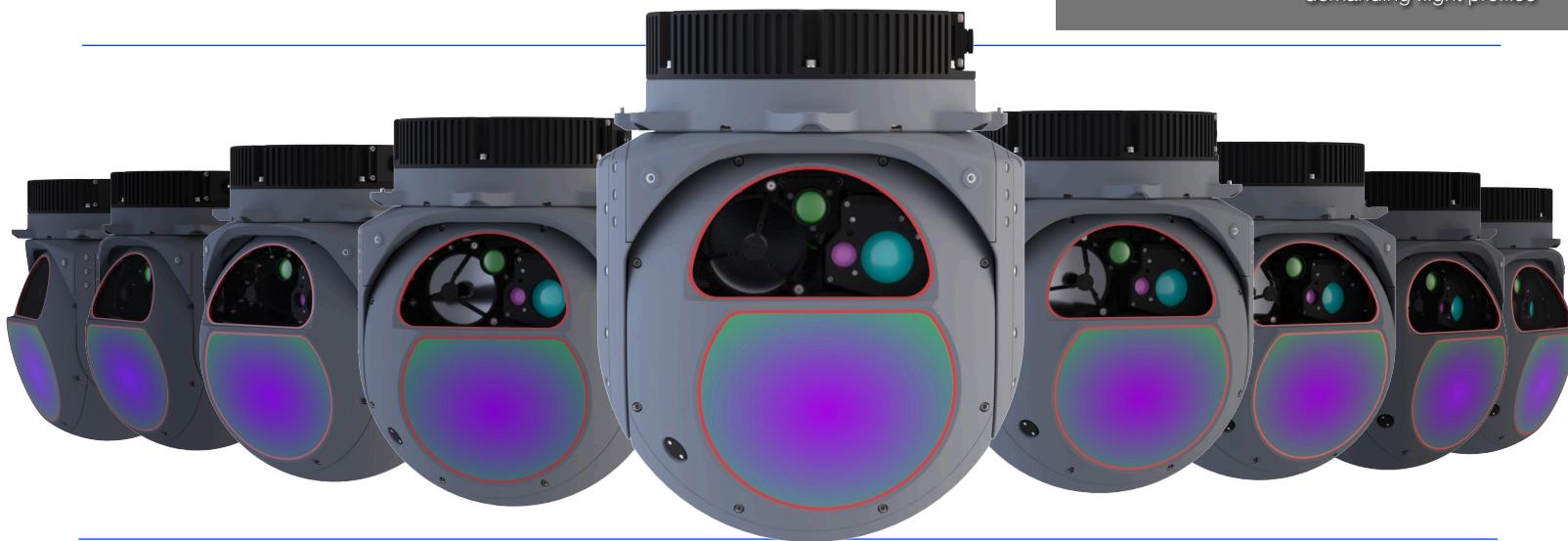
The PV1315 is tuned for missions where clarity, stability, and operator confidence define success:

Step-Stare Stability — LOS-axis control mitigates motion blur during sustained orbits at medium altitude

High-Accuracy Geolocation — integrated INS with higher-grade inertial sensors delivers precise target fixing

Reduced Operator Workload — INS-based steering modes simplify tracking of fixed and moving land or maritime targets

These capabilities combine to preserve long-range detection, recognition, and identification in evolving, operationally demanding flight profiles



### TURRET SPECIFICATIONS

Stabilization and Steering:  
5 Axis + 6 DOF Active Isolator featuring FAST technology  
Azimuth Range: Continuous 360°  
Elevation Range: +45° to - 225°  
LOS range: +/- 1° (with Step-Stare Capability)

### SYSTEM SPECIFICATIONS

PV1012 Turret: <60.6lbs/ 27.5kg, 13.8" (D) x 17.1" (H), 350mm (D) x 435mm (H)  
Power: MIL-STD-704E, 220W (Typ.), 475W (Max.)

### ENVIRONMENTAL SPECIFICATIONS

Shock and Vibration: MIL-STD-810H, RTCA DO-160G  
EMC Compatibility: MIL-STD-461

### VIDEO INTERFACES

Built-in video switch matrix for output configuration flexibility  
4 independent HD-SDI outputs with clean sensor output or symbology overlay  
Gigabit Ethernet video using H.264 or H.265 format  
Fiber Optic interface with all video data available using ARINC 818-2 or SMPTE 297 format  
STANAG 4609 KLV Metadata

### DATA INTERFACES

Interface Types: RS-232/422, Ethernet, MIL-STD-1553B  
Functional Interfaces: Aircraft GPS/INS, Remote Control, Metadata, Maintenance/Logger

PATENTS - PV Labs' FAST technology is protected by patents in the following countries: Austria, Australia, Canada, Czech Republic, Finland, France, Germany, Great Britain, Greece, Hungary, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Republic of Korea, Spain, Sweden, Turkey, and the USA – by the following Patent Documents: AU2014373639; CA2934801; DE602014046620.6; ES2734393; EP3105492; HUE045198; IL246433; IT50201900032702; JP6524100; KR102322149; NZ722456; PT3105492; TR201908881; US9348197; US9765925; WO2015095951

