

# OPTRA

## RPA Laser Scanner

OPTRA, Inc. introduces a new family of laser scanners based on a pair of rotating Risley prism wedges. The RPA laser scanner offers a complete turnkey solution ideal for laser machining and drilling, optical communications, and laser ranging and imaging applications.

The Risley Prism geometry has a number of advantages for laser beam steering applications. The inline geometry has the benefit of reduced system size and less complex optical arrangement. The rotational symmetry is ideal for machining applications with improved circularity of drilled holes. The low inertia achieves high scanning speeds at lower overall power. These advantages provide a viable economical solution suitable for laser beam steering applications.

The modular design of the RPA Laser Scanner is easy to integrate with laser systems and industry standard scanning lenses. The RPA Laser Scanner is digitally controlled and can be directly commanded via a serial interface or integrated with standard laser/scanner control electronics. The compact size and rugged capability of the RPA laser scanner provide simple and durable OEM integration and long term performance.



RPA Laser Scanner Product Specifications	
Aperture sizes*	25, 50 mm
Scan angle range	Up to 60°
Operating modes	Step, Continuous scan
Scan speed	Up to 6000 RPM
Resolution	≤ 0.1 milliradian
Accuracy	≤ 1 milliradian
Command interface	RS-232
Output interface	RS-232, Custom parallel
Output data rate	Up to 100 kHz
Power requirements	28 – 48 VDC
Operating temperature	0 to +50 C
Closed loop bandwidth	≥ 75 Hz
Field response time	100 – 250 milliseconds

\*Others available upon request – consult factory

Contact OPTRA today to discuss how an RPA system can solve your specific application need.

### CONTACT INFORMATION

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### MECHANICAL SPECIFICATIONS

Specifications	RP-25S	RP-25F	RP-50S/F
Clear Aperture	25 mm	25 mm	50 mm
Diameter	86 mm	86 mm	130 mm
Length	50 mm	76 mm	116 mm
Weight	1.0 kg	1.3 kg	2.8 kg

### ADDITIONAL INFORMATION

Technical background, Risley prism beam steering papers, specifications and mechanical drawings are available at our website at:

[www.optra.com/products/risleyprismbeamsteering.html](http://www.optra.com/products/risleyprismbeamsteering.html)