*Phantom S640
Side View*

*Phantom S640
Front View*

Phantom® S640

6Gpx/sec throughput in 4Mpx resolution for Machine Vision.

Key Benefits:

The Phantom S640 provides **extreme high-speed imaging capabilities** in 4Mpx resolution for machine vision applications. It achieves up to 6 Gpx/sec (75 Gbps) data throughput via up to 16 CXP6 ports.
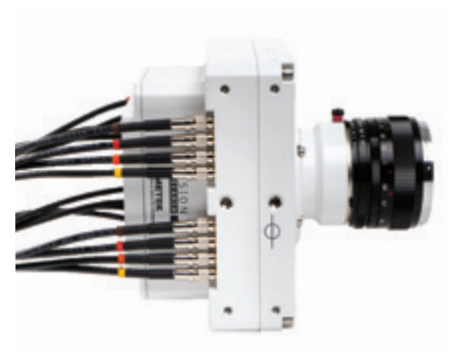
⬤ **Large 10-micron pixel:** The Phantom S640's large pixel design is inherently light sensitive, offering the perfect solution for difficult, light challenged applications.

⬤ **Metadata ready:** Important metadata is available in each frame's header for precision analysis.

⬤ **Truly high-speed imaging capabilities:** The Phantom S640 builds on decades of expertise in delivering high resolution 4Mpx images at truly high speeds of 1,480 fps up to over 200,000 fps at reduced resolutions.

The Phantom S640 also has:

Lens mount options; F (Std.), C, or EOS	Mechanical Shutter for easy Black Reference
Defect Pixel Correction	Output resolution in 8-bit and 12-bit
GPIO with common signals and header for important metadata	Continuous or Controlled Image Acquisition

Key Features:

Extreme high-speed imaging at 4Mpx

1,480 fps at 2560 x 1600

Scalable - Up to 4 banks of 4 CXP ports available

CXP6 Protocol, Gen-i-Cam compliant

Sturdy, Metal body construction

Made in USA

Phantom S640 - Side with cables

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Phantom® S640

Environmental Specs:

Dimensions: 146mm x 146mm x 89mm
(5.75 x 5.75 x 3.5 in)
Without lens mount

Weight: 1.62 Kg (3.6 Lb)

Operating Temperature: -10C - +50C

Power: 20-28 VDC

Cooling: Fan

Compliance: CE, RoHS

S640 – Specifications			
Resolution (H x V)	2560 x 1600	**Sensor**	Phantom VEO 640
Resolution Mpx	4 Mpx	**Sensor Type**	CMOS Color or Mono
Frame Rate	1480 fps @ 8bit 1465 fps @ 12bit	**Image Data Interface**	CXP6 (CoaXPress)
Max FPS at Reduced Res.	200,715 FPS	**Sensor Size**	25.6 x 16 mm
Minimum Exposure	1µs	**Sensor Diagonal**	30.18 mm
Bits/Pixel	12, output in either 8 or 12	**Pixel Size**	10µm
Electronic Shutter	Global	**ISO**	6400 (M), 1250 (C)
Dynamic Range	55.9 dB	**Noise**	20.5e-

Resolution			FPS		
H	**V**	**Bit Depth**	**4 Banks 8 Gpx/sec**	**2 Banks 4Gpx/sec**	**1 Bank 2 Gpx/sec**
2560	1600	8 bit	1,480	1,095	550
		12 bit	1,465	731	365
2560	1280	8 bit	1,845	1,370	685
		12 bit	1,825	910	455
1920	1280	8 bit	2,340	1,825	910
		12 bit	2,340	1,215	610
1920	720	8 bit	4,135	3,235	1,615
		12 bit	4,135	2,155	1,080
1280	720	8 bit	5,640	4,845	2,425
		12 bit	5,640	3,235	1,615
640	480	8 bit	13,060	13,060	7,205
		12 bit	13,060	9,575	2,420
128	16	8 bit	200,715	200,715	200,715
		12 bit	200,715	200,715	197,875

Vision Research Global Support - for wherever you are

Our ultrahigh-speed camera line is supported by Vision Research's Global Service and Support network offering AMECare Performance Services from multiple sites around the globe. Maximize the value of your Phantom camera with a full menu of professional support services. Learn more about our service and support options at www.**phantom**highspeed.com/Support

Focused

Since 1950, Vision Research has been designing, and manufacturing high-speed cameras. Our single focus is to invent, build, and support the most advanced cameras possible.

VISION RESEARCH

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