

DATA SHEET

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Subject to change Rev October 2019






Phantom S210 and S200

Phantom® S210 & S200

2Gpx/sec throughput for
Machine Vision.

Key Benefits:

The Phantom S210 and S200 bring high speed imaging capabilities to machine vision applications, with up to 2 Gpx/sec (25 Gbps) data throughput. Built on the same platform, the Phantom S210 and S200 provide flexibility to meet specific machine vision needs while bringing inherent benefits from world class high speed imaging technology.

-  **Expertise in super fast image capture and transfer:** The Phantom S210 and S200 leverage the high speed know-how developed in traditional Phantom cameras.
-  **Metadata ready:** Important metadata is available in each frame's header for precision analysis.
-  **Signaling for any situation:** GPIO offers standard machine vision signals, plus time code in and out.

In addition to 2Gpx/sec (25 Gbps) streaming throughput, for demanding machine vision applications, the Phantom S210 and S200 both have:

CXP6 protocol with 4 CXP6 ports	GPIO with common signals and header for important metadata
Power over CXP (PoCXP)	Global shutter
Color or Monochrome availability	Output resolution in 8-bit and 10-bit
C-mount lensing	Continuous or Controlled Image Acquisition
Defect Pixel Correction	

Key Features:

High Speed Streaming Capability

S210: 1,730 fps at 1280 x 1080

S200: 6,950 fps at 640 x 480

CXP6 Protocol

GPIO & Metadata Header



Phantom S210 and S200 - Back

Phantom® S210 & S200

Environmental Specs:

Dimensions: 76mm x 76mm x 39mm

Weight: 333 g

Operating Temperature: -10C - +50C

Power: 6W 24V

Compliance: CE, RoHS



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.phantomhighspeed.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

AMETEK®
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FEATURE	S210	S200
Resolution	1.3Mpx	0.3Mpx
Maximum Resolution	1280 x 1024	640 x 480
Max frame rate @ Max res	1,730 fps @ 8 bit 1,370 fps @ 10 bit	6,950 fps @ 8 bit 5,515 fps @ 10 bit
Max frame rate @ reduced res.	64,550 fps	75,310 fps
Pixel size	5.6µm	11.2µm
Sensor Size	9.18 mm diagonal	8.96 mm diagonal
ISO	Mono: 2500D Color: 640D	Mono: 16,000D Color: TBD
Noise(e-)	10	6.3
Dynamic Range (dB)	58.0	59.7
Minimum Exposure	5µs	5µs

S210 – 1.3Mpx				S200 – 0.3Mpx			
W	H	Bit Depth	FPS	W	H	Bit Depth	FPS
1280	1024	8 bit	1,730	640	480	8 bit	6,950
		10 bit	1,370			10 bit	5,515
1280	720	8 bit	2,440	640	384	8 bit	8,525
		10 bit	1,935			10 bit	6,965
1280	576	8 bit	3,030	640	256	8 bit	12,210
		10 bit	2,405			10 bit	9,690
1280	480	8 bit	3,610	640	128	8 bit	21,515
		10 bit	2,865			10 bit	17,080
1280	256	8 bit	6,545	640	80	8 bit	30,125
		10 bit	5,195			10 bit	23,915
1280	128	8 bit	12,210	640	16	8 bit	64,550
		10 bit	9,695			10 bit	51,250
1280	8	8 bit	64,550	640	8	8 bit	75,310
		10 bit	51,250			10 bit	59,790

AMETEK Vision Research's digital high-speed cameras are subject to the export licensing jurisdiction of the Export Administration Regulations. As a result, the export, transfer, or re-export of these cameras to a country embargoed by the United States is strictly prohibited. Likewise, it is prohibited under the Export Administration Regulations to export, transfer, or re-export AMETEK Vision Research's digital high-speed cameras to certain buyers and/or end users.

Customers are also advised that some models of AMETEK Vision Research's digital high-speed cameras may require a license from the U.S. Department of Commerce to be: (1) exported from the United States; (2) transferred to a foreign person in the United States; or (3) re-exported to a third country. Interested parties should contact the U.S. Department of Commerce to determine if an export or a re-export license is required for their specific transaction.