

PRELIMINARY

DATA SHEET

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Subject to change Rev May 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: 7,000 fps at 640 x 480

CXP6 Protocol

GPIO & Metadata Header



Phantom S210 and S200 - Back

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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.



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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	1730 fps	7,000 fps
Max frame rate @ reduced res.	63,750 fps	67,000 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		
W	H	FPS
1280	1024	1,730
1280	480	3,550
1280	256	6,450
1280	128	12,050
1280	8	63,750

S200 – 0.3Mpx VGA		
W	H	FPS
640	480	7,000
640	256	12,600
640	128	22,000
640	16	67,000

Signaling: Hirose 12-pin connector Part number: Hirose H1210A-10P-12SC(73)		
GPIO 0-3 - Bi-directional	Input: Event In Trigger In Memgate	Output: Trigger out SW Trigger Out Strobe Ready Time Code Out
GPIO 4	Isolated Input: Event In Memgate	
GPIO 5		Isolated Output: SW Trigger Out Strobe Ready Time Code Out
Time Code In		

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.