### PHANTOM

when it's too fast to see, and too important not to.°

```
PRELIMINARY
```







Phantom S210 and S200

### **Key Benefits:**

The Phantom S210 and S200 bring high speed imaging capabilities to machine vision applications, with up to 2 Gpx/sec (16 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 (16 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		

# Phantom<sup>®</sup> S210 & S200

2Gpx/sec throughput for Machine Vision.

### **Key Features:**

High Speed Streaming Capability CXP6 Protocol GPIO & Metadata Header



Phantom S210 and S200 - Back



## PHANTOM

when it's too fast to see, and too important not to."

# Phantom<sup>®</sup> 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.





100 Dey Road Wayne, NJ 07470 USA +1.973.696.4500

### www.phantomhighspeed.com

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		S200 – 0.3Mpx VGA		
Н	FPS	W	н	FPS
1024	1,730			
480	3,550	640	480	7,000
256	6,450	640	256	12,600
128	12,050	640	128	22,000
8	63,750	640	16	67,000
	H 1024 480 256 128	H  FPS    1024  1,730    480  3,550    256  6,450    128  12,050	H  FPS  W    1024  1,730	H  FPS  W  H    1024  1,730

Signaling: Hirose 12-pin Connector				
GPIO 0 - 3 - Bi-directional	Input: Event In Trigger In Memgate	Output: Strobe Trigger out Ready Time Code Out		
GPIO 3 - Bi-directional	Time Code In			
GPIO 4	Isolated Input: Event In Trigger In Memgate			
GPIO 5		Output: Strobe Ready Time Code Out		

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.