



PURE SPECTRA

Passion for prisms

Model B

"Complex assembly of sensors on prism is our passion"

1. Using multi-spectral camera's today by customers



- Using an off-the-shelf product, today, means also that the intellectual property can not be utilized in your added value.
- The complete cameras are based on optical prism technology, electronics and software for interfacing. Even with large volume, price elasticity is not available.
- Due to high variation of possibilities the standard cameras focus on limited (probably not your) application.

2. Your solution to this



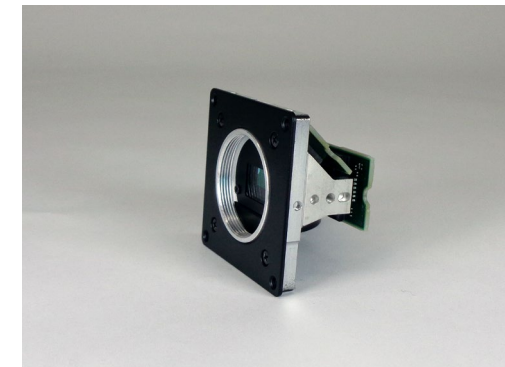
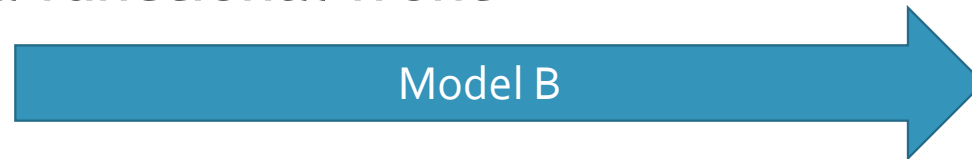
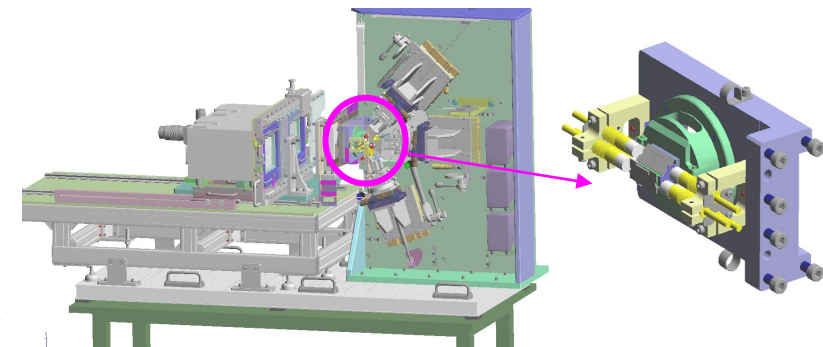
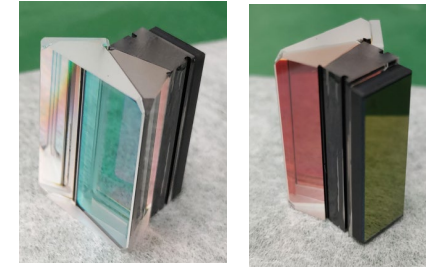
- Buying of the shell technology where you need to accept the product as is. So limited flexibility
- Use multiple camera “multi-modus” where the system has more than one lens. And accepting the parallax effects. Not ideal.
- Building your own beam splitter with multiple cameras as part of an optical design adventure. This can be a challenging journey.

We have the solution

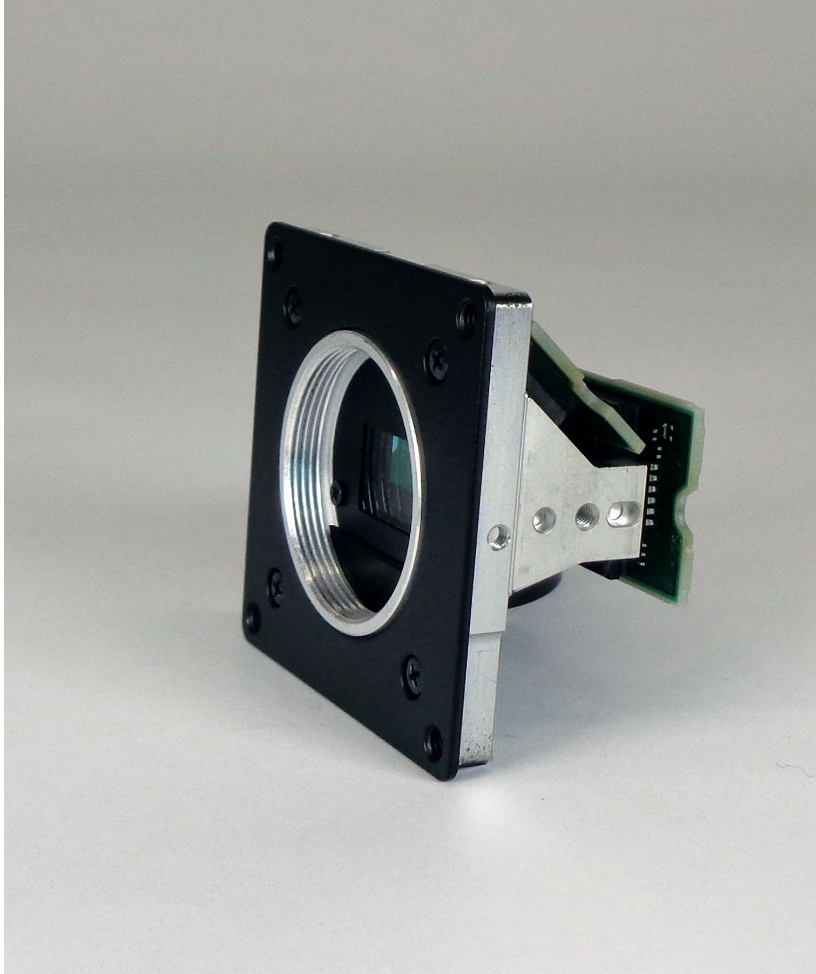


What is our solution?

- With our unique production technology we have designed a common prism block which can be used as a flexible OEM front end module
- Resulting in high quality prism clusters, no parallax effect
- Our bonding machine allows (<1 micron) accuracy when gluing the prism and the image sensors. Offering accurate cross correlation
- Creation of Model B which is a functional front-end module



2. Model B



Model B has 3 functions:

1. Lens interface (C-Mount, 1/2" & 1/3")
2. Mounted prism with bonded sensors
3. Output PCB with SLVS interface to the sensor. The sensors support 8 channels with a clock

Sensors used by Pure Spectra



Model	Sensor / SONY	Interface	
B1	IMX273	Sub LVDS 8 Ch	594Mbps/ch
B2	IMX548	SLVS 8Lane	891Mbps or 594Mbps or 445.5Mbps or 297Mbps /lane *1
B5	IMX548	SLVS 8Lane	891Mbps or 594Mbps or 445.5Mbps or 297Mbps /lane *1
	IMX990	SLVS 4 Lane	SWIR 594Mbps or 297Mbps /lane *1

Interface		Power			Standard	Speed [max]
		Rate	Common [V]	Diff [mV]		
LVDS	Low Voltage Differential Signaling.	H	1,25	350	TIA/EIA-644	800Mbps/ch
Sub LVDS	Sub Low Voltage Differential Signaling	L	0,9	150	Standard Mobile imaging Architecture	800Mbps/ch
SLVS	Scalable Low Voltage Signaling	L	0,2	200	JEDEC JESD8-13 SLVS-400	3Gbps/lane

*1 : User can choose in settings.

*For more information, see the image sensor specification.

Our Proposition

Custom Design

- Customized spectrum response
- Wavelength & bandwidth control
- Select 380nm~1680nm

Products

- Model B - : Prism block with sensors
- Model C -

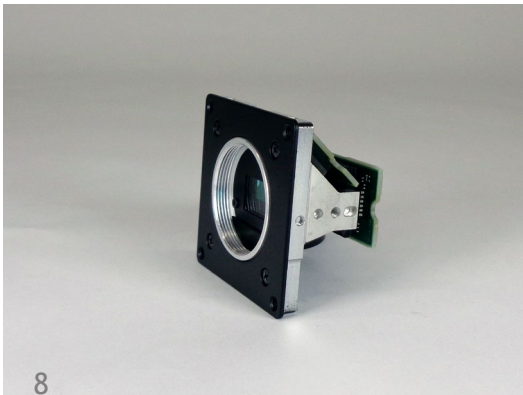
High Quality Data

- More reliable information
- Solving your application

No Parallax

- Co-site imaging
- Cross correlation

"Model B" Prism block with sensors.



"Model C" camera prepared with MIPI interface and SDK for jetson Nano



The complexity of assembly sensors at the prism is our passion

Thank you for your attention! Any questions?

