FEATURES CHECK LIST

INDUSTRIAL CAMERAS
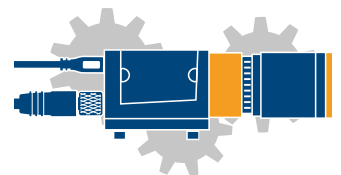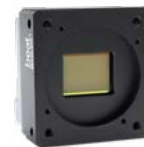
SENSOR FAMILY ACE 2 CAMERA MODELS	SONY PREGIUS a2A1920-165g5xBAS	SONY PREGIUS S a2A2448-105g5xBAS a2A2840-67g5xBAS a2A4096-44g5xBAS a2A4504-27g5xBAS a2A5320-34g5xBAS a2A5328-22g5xBAS		GPIXEL a2A2600-20gxBAS/PRO a2A4200-12gxBAS/PRO a2A4508-20gxBAS/PRO		SONY STARVIS a2A2590-22gxBAS/PRO a2A3840-13gxBAS/PRO	
		mono	**color**	**mono**	**color**	**mono**	**color**
Physical Interface and I/O Control							
Configurable Input/Output Lines							
Inputs		1		1		1	
General Purpose I/O		2		2		2	
Minimum Output Pulse Width		●		●		●	
Line Source Signals							
Acquisition Trigger Wait / Frame Burst Trigger Wait		●		●		●	
Exposure Active		●		●		●	
Frame Trigger Wait		●		●		●	
Input Filter		●		●		●	
Serial Communication (UART)		● Pro		● Pro		● Pro	
Timer Active		●		●		●	
User Output		●		●		●	
Image Acquisition Control							
Acquisition Abort		●		●		●	
Acquisition Single Frame		●		●		●	
Acquisition Start		●		●		●	
Acquisition Status		●		●		●	
Acquisition Stop		●		●		●	
Frame Burst Start Trigger		●		●		●	
Frame Start Trigger		●		●		●	
High Speed Burst Mode		●		●		●	
Trigger Delay		●		●		●	
Triggered by Hardware		●		●		●	
Triggered by Software		●		●		●	
Standard Features							
Auto Function Profile		●		●		●	
Binning Horizontal	●			●		●	
Binning Vertical	●			●		●	
Black Level		●		●		●	
Digital Shift		●		●		●	
Exposure Auto		●		●		●	
Exposure Mode: Timed (Control via API)		●		●		●	
Exposure Mode: Trigger Width (Control via external trigger)		●		●		●	
Exposure Time		●		●		●	
Gain		●		●		●	
Gain Auto		●		●		●	
Gamma Correction		●		●		●	
Lookup Table (LUT) 12Bit		●		●		●	
Multiple ROI		●		●			
Region of Interest (ROI)		●		●		●	
Reverse X (Horizontal Mirroring)		●		●		●	
Reverse Y (Vertical Mirroring)		●		●		●	
Sequencer		● Pro		● Pro		● Pro	
Test Images		●		●		●	
Ultra Short Exposure Time Mode		●[1]		●[1]			
GigE Vision 2.0							
Action Commands (Synchronous Triggering)		●		●		●	
Precision Time Protocol (IEEE 1588)		●		●		●	
Scheduled Action Commands		●		●		●	

[1] Not all models support this feature.
Pro = available in ace 2 Pro models only.

SENSOR FAMILY / ACE 2 CAMERA MODELS

Sensor Family	Camera Models
SONY PREGIUS	a2A1920-165g5xBAS
SONY PREGIUS S	a2A2448-105g5xBAS, a2A2840-67g5xBAS, a2A4096-44g5xBAS, a2A4504-27g5xBAS, a2A5320-34g5xBAS, a2A5328-22g5xBAS
GPIXEL	a2A2600-20gxBAS/PRO, a2A4200-12gxBAS/PRO, a2A4508-20gxBAS/PRO
SONY STARVIS	a2A2590-22gxBAS/PRO, a2A3840-13gxBAS/PRO

	SONY PREGIUS	PREGIUS S mono	PREGIUS S color	GPIXEL mono	GPIXEL color	STARVIS mono	STARVIS color
Beyond Features							
Compression Beyond		● Pro	● Pro	● Pro	● Pro	● Pro	● Pro
Pixel Beyond		● Pro	● Pro	● Pro	● Pro	● Pro	● Pro
Miscellaneous							
Device Information Parameters		●	●	●	●	●	●
Device Temperature		●	●	●	●	●	●
Static Defect Pixel Correction		●[1]	●[1]	●[1]	●[1]	●[1]	●[1]
User Defined Values		●	●	●	●	●	●
User Sets (Configuration Sets)		●	●	●	●	●	●
Color Creation and Enhancement							
Balance White (Manual White Balance)			●		●		●
Balance White Auto (Automatic White Balance)			●		●		●
Brightness			●		●		●
Color Adjustment (6 axis Hue/Saturation)			●		●		●
Color Transformation (RGB to RGB)			●		●		●
Contrast Enhancement			●		●		●
Hue/Saturation			●		●		●
Light Source Presets			●		●		●
sRGB Gamma Correction			●		●		●
PGI		● Pro	● Pro	● Pro	● Pro	● Pro	● Pro
Unilinear Demosaicing Mode		●[2]	●[2]	●[2]	●[2]	●[2]	●[2]
Chunks							
Auto Brightness Status		●	●	●	●	●	●
CRC Checksum		●	●	●	●	●	●
Counter Value		●	●	●	●	●	●
Exposure Time		●	●	●	●	●	●
Frame ID		●	●	●	●	●	●
Gain		●	●	●	●	●	●
Line Status All		●	●	●	●	●	●
Timestamp		●	●	●	●	●	●
Event Reporting							
Action Late		●	●	●	●	●	●
Exposure End		●	●	●	●	●	●
Frame Buffer Overrun		●	●	●	●	●	●
Frame Start		●	●	●	●	●	●
Frame Trigger Missed		●	●	●	●	●	●
Overrun		●	●	●	●	●	●
Temperature Status Changed		●	●	●	●	●	●
Test		●	●	●	●	●	●
Pixel Formats							
Mono 8		●	●	●	●	●	●
Mono 10		●	●	●	●	●	●
Mono 10p (Mono 10 Packed)		●	●	●	●	●	●
Mono 12		●	●	●	●	●	●
Mono 12 Packed (Mono 12 Packed)		●	●	●	●	●	●
YCbCr422_8 (YUV422_8)			●		●		●
Bayer 8			●		●		●
Bayer 10			●		●		●
Bayer 10p (Bayer 10 Packed)			●		●		●
Bayer 12			●		●		●
Bayer 12p (Bayer 12 Packed)			●		●		●
RGB 8			●		●		●
Light Control Features							
SLP Feature		●[2]	●[2]	●[2]	●[2]	●[2]	●[2]

Pro = available in ace 2 Pro models only.

[1] Available in GigE models only. Coming soon for 5GigE.

[2] Coming soon.

SENSOR FAMILY ACE 2 CAMERA MODELS	SONY PREGIUS a2A1920-160uxBAS/PRO	SONY PREGIUS S a2A5320-23uxBAS/PRO a2A4504-18uxBAS/PRO a2A5328-15uxBAS/PRO a2A2448-75uxBAS/PRO a2A2840-48uxBAS/PRO a2A4096-30uxBAS/PRO		GPIXEL a2A2600-64uxBAS/PRO a2A4200-40uxBAS/PRO a2A4508-20uxBAS/PRO		SONY STARVIS a2A2590-60uxBAS/PRO a2A3840-45uxBAS/PRO	
		mono	**color**	**mono**	**color**	**mono**	**color**
Physical Interface and I/O Control							
Configurable Input/Output Lines							
Inputs		1	1	1	1	1	1
General Purpose I/O		2	2	2	2	2	2
Minimum Output Pulse Width		●	●	●	●	●	●
Line Source Signals							
Acquisition Trigger Wait / Frame Burst Trigger Wait		●	●	●	●	●	●
Exposure Active		●	●	●	●	●	●
Frame Trigger Wait		●	●	●	●	●	●
Input Filter		●	●	●	●	●	●
Serial Communication (UART)		● Pro	● Pro	● Pro	● Pro	● Pro	● Pro
Timer Active		●	●	●	●	●	●
User Output		●	●	●	●	●	●
Image Acquisition Control							
Acquisition Abort		●	●	●	●	●	●
Acquisition Single Frame		●	●	●	●	●	●
Acquisition Start		●	●	●	●	●	●
Acquisition Status		●	●	●	●	●	●
Acquisition Stop		●	●	●	●	●	●
Frame Burst Start Trigger		●	●	●	●	●	●
Frame Start Trigger		●	●	●	●	●	●
High Speed Burst Mode		●	●	●	●	●	●
Trigger Delay		●	●	●	●	●	●
Triggered by Hardware		●	●	●	●	●	●
Triggered by Software		●	●	●	●	●	●
Standard Features							
Auto Function Profile		●	●			●	●
Binning Horizontal	●	●		●		●	
Binning Vertical	●	●		●		●	
Black Level		●	●	●	●	●	●
Digital Shift		●	●	●	●	●	●
Exposure Auto		●	●	●	●	●	●
Exposure Mode: Timed (Control via API)		●	●	●	●	●	●
Exposure Mode: Trigger Width (Control via external trigger)		●	●	●	●	●	●
Exposure Time		●	●	●	●	●	●
Gain		●	●	●	●	●	●
Gain Auto		●	●	●	●	●	●
Gamma Correction		●	●	●	●	●	●
Lookup Table (LUT) 12Bit		●	●	●	●	●	●
Multiple ROI		●	●	●	●		
Region of Interest (ROI)		●	●	●	●	●	●
Reverse X (Horizontal Mirroring)		●	●	●	●	●	●
Reverse Y (Vertical Mirroring)		●	●	●	●	●	●
Sequencer		● Pro	● Pro	● Pro	● Pro	● Pro	● Pro
Test Images		●	●	●	●	●	●
Ultra Short Exposure Time Mode		●[1]	●[1]	●[1]	●[1]		
Light Control Features							
SLP Feature		●[2]	●[2]	●[2]	●[2]	●[2]	●[2]

[1] Not all models support this feature.
Pro = available in ace 2 Pro models only.
[2] Coming soon.

SENSOR FAMILY — ACE 2 CAMERA MODELS	SONY PREGIUS a2A1920-160uxBAS/PRO	SONY PREGIUS S a2A5320-23uxBAS/PRO, a2A4504-18uxBAS/PRO, a2A5328-15uxBAS/PRO, a2A2448-75uxBAS/PRO, a2A2840-48uxBAS/PRO, a2A4096-30uxBAS/PRO		GPIXEL a2A2600-64uxBAS/PRO, a2A4200-40uxBAS/PRO, a2A4508-20uxBAS/PRO		SONY STARVIS a2A2590-60uxBAS/PRO, a2A3840-45uxBAS/PRO	
		mono	color	mono	color	mono	color
Beyond Features							
Compression Beyond		● Pro		● Pro		● Pro	
Pixel Beyond		● Pro		● Pro		● Pro	
Miscellaneous							
Device Information Parameters		●		●		●	
Device Temperature		●		●		●	
Static Defect Pixel Correction		●		●		●	
User Defined Values		●		●		●	
User Sets (Configuration Sets)		●		●		●	
Color Creation and Enhancement							
Balance White (Manual White Balance)			●		●		●
Balance White Auto (Automatic White Balance)			●		●		●
Brightness			●		●		●
Color Adjustment (6 axis Hue/Saturation)			●		●		●
Color Transformation (RGB to RGB)			●		●		●
Contrast Enhancement			●		●		●
Hue/Saturation			●		●		●
Light Source Presets			●		●		●
sRGB Gamma Correction			●		●		●
PGI		● Pro		● Pro		● Pro	
Unilinear Demosaicing Mode		● [1]		● [1]		● [1]	
Chunks							
Auto Brightness Status		●		●		●	
CRC Checksum		●		●		●	
Counter Value		●		●		●	
Exposure Time		●		●		●	
Frame ID		●		●		●	
Gain		●		●		●	
Line Status All		●		●		●	
Timestamp		●		●		●	
Event Reporting							
Action Late		●		●		●	
Exposure End		●		●		●	
Frame Buffer Overrun		●		●		●	
Frame Start		●		●		●	
Frame Trigger Missed		●		●		●	
Overrun		●		●		●	
Temperature Status Changed		●		●		●	
Test		●		●		●	
Pixel Formats							
Mono 8		●		●		●	
Mono 10		●		●		●	
Mono 10p (Mono 10 Packed)		●		●		●	
Mono 12		●		●		●	
Mono 12 Packed (Mono 12 Packed)		●		●		●	
YCbCr422_8 (YUV422_8)			●		●		●
Bayer 8			●		●		●
Bayer 10			●		●		●
Bayer 10p (Bayer 10 Packed)			●		●		●
Bayer 12			●		●		●
Bayer 12p (Bayer 12 Packed)			●		●		●
RGB 8			●		●		●

Pro = available in ace 2 Pro models only.
[1] Coming soon.

SENSORS FAMILY / ACE USB 3.0 CAMERA MODELS

Sensor family	Models
SONY CCD	acA1600-20uc
AMS	acA2000-165ux, acA2040-90ux
ONSEMI MT9P	acA1920-25ux, acA2500-14ux
ONSEMI MT9J	acA3800-14ux
ONSEMI PYTHON	acA640-750ux, acA800-510ux, acA1300-200ux, acA1920-150ux, acA2500-60ux
SONY PREGIUS	acA720-520ux, acA1440-220ux, acA1920-155ux, acA1920-40ux, acA2040-120ux, acA2040-55ux, acA2440-35ux, acA2440-75ux, acA4096-30ux, acA4096-40ux, acA4112-20ux, acA4112-30ux
SONY STARVIS	acA3088-57ux, acA4024-29ux
SONY EXMOR R	acA5472-17ux

Legend: **C** = color, **M** = mono

Feature	CCD C	CCD M	AMS C	AMS M	MT9P C	MT9P M	MT9J C	MT9J M	PYTHON C	PYTHON M	PREGIUS C	PREGIUS M	STARVIS C
Physical Interface and I/O Control													
Configurable Input/Output Lines													
Inputs	1	1	1	1	1	1	1	1	1	1	1	1	1
Outputs	1	1	1	1	1	1	1	1	1	1	1	1	1
General Purpose I/O	2	2	2	2	2	2	2	2	2	2	2	2	2
Debouncer	●	●	●	●	●	●	●	●	●	●	●	●	●
Minimum Output Pulse Width	●	●	●	●	●	●	●	●	●	●	●	●	●
I/O Signals													
Frame Burst Start Wait	●	●	●	●	●	●	●	●	●	●	●	●	●
Frame Start Wait	●	●	●	●	●	●	●	●	●	●	●	●	●
Exposure Active Signal	●	●	●	●	●	●			●	●	●	●	●
Flash Window Signal					●		●						
User Output	●	●	●	●	●	●	●	●	●	●	●	●	●
Timer 1 Active	●	●	●	●	●	●	●	●	●	●	●	●	●
Image Acquisition Control													
Frame Burst Start Trigger	●	●	●	●	●	●	●	●	●	●	●	●	●
Frame Start Trigger	●	●	●	●	●	●	●	●	●	●	●	●	●
Triggered by Software	●	●	●	●	●	●	●	●	●	●	●	●	●
Triggered by Hardware	●	●	●	●	●	●	●	●	●	●	●	●	●
Trigger Delay	●	●	●	●	●	●	●	●	●	●	●	●	●
Acquisition Status	●	●	●	●	●	●	●	●	●	●	●	●	●
Standard Features													
Gain	●	●	●	●	●	●	●	●	●	●	●	●	●
Gain Auto	●	●	●	●	●	●	●	●	●	●	●	●	●
Black Level	●	●	●	●	●	●	●	●	●	●	●	●	●
Digital Shift	●				●		●						●
Region of Interest (ROI)	●	●	●	●	●	●	●	●	●	●	●	●	●
Binning Horizontal				●		●		●		●		●	●
Binning Vertical				●		●		●		●		●	●
Decimation Horizontal								●					
Decimation Vertical				●				●					
Scaling Horizontal								●					
Scaling Vertical								●					
Reverse X (Horizontal Mirroring)	●	●	●	●	●	●	●	●	●	●	●	●	●
Reverse Y (Vertical Mirroring)		●							●	●	●	●	●
Gamma Correction	●	●	●	●	●	●	●	●	●	●	●	●	●
Exposure Mode: Timed (Control via API)	●	●	●	●	●	●	●	●	●	●	●	●	●
Exposure Mode: Trigger Width (Control via external trigger)	●	●							●	●	●	●	
Exposure Auto	●	●	●	●	●	●	●	●	●	●	●	●	●
Auto Function Profile	●	●	●	●	●	●	●	●	●	●	●	●	●
Lookup Table	●	●	●	●	●	●	●	●	●	●	●	●	●
Test Images	●	●	●	●	●	●	●	●	●	●	●	●	●
Sequencer	●	●	●	●	●	●	●	●	●	●	●	●	●
Stacked ROI										●	●[1]		
Ultra Short Exposure Time Mode											●[2]		
Light Control Features													
SLP Feature									●		●		●

[1] Not available for acA1920-40um/uc, acA2040-55um/uc, acA2440-35um/uc, acA4096-30um/uc, acA4112-20um/uc.

[2] Not available for acA1920-40ux and acA1920-155ux.

FEATURES ACE

SENSORS FAMILY ACE USB 3.0 CAMERA MODELS

Sensor family	Camera models
SONY CCD	acA1600-20uc
AMS	acA2000-165ux, acA2040-90ux
ONSEMI MT9P	acA1920-25ux, acA2500-14ux
ONSEMI MT9J	acA3800-14ux
ONSEMI PYTHON	acA640-750ux, acA800-510ux, acA1300-200ux, acA1920-150ux, acA2500-60ux
SONY PREGIUS	acA720-520ux, acA1440-220ux, acA1920-155ux, acA1920-40ux, acA2040-120ux, acA2040-55ux, acA2440-35ux, acA2440-75ux, acA4096-30ux, acA4096-40ux, acA4112-20ux, acA4112-30ux
SONY STARVIS	acA3088-57ux, acA4024-29ux
SONY EXMOR R	acA5472-17ux

Feature	CCD color	CCD mono	AMS color	AMS mono	MT9P color	MT9P mono	MT9J color	MT9J mono	PYTHON color	PYTHON mono	PREGIUS color	PREGIUS mono	STARVIS color
Miscellaneous													
Remove Parameter Limits	●	●	●	●	●	●	●	●	●	●	●	●	●
User Defined Values	●	●	●	●	●	●	●	●	●	●	●	●	●
Device Information Parameters	●	●	●	●	●	●	●	●	●	●	●	●	●
User Sets (Configuration Sets)	●	●	●	●	●	●	●	●	●	●	●	●	●
Device Temperature									●	●	●	●	●
Vignetting Correction											●[1]		●[2]
Color Creation and Enhancement													
Balance White (Manual White Balance)	●		●		●		●		●		●		●
Balance White Auto (Automatic White Balance)	●		●		●		●		●		●		●
Light Source Presets	●		●		●		●		●		●		●
Color Transformation	●		●		●		●		●		●		●
Color Adjustment (6 axis Hue/Saturation)	●				●		●		●		●		●
PGI									●		●	●[3]	●
Chunks													
Timestamp	●	●	●	●	●	●	●	●	●	●	●	●	●
Counter Value	●	●	●	●	●	●	●	●	●	●	●	●	●
Line Status All	●	●	●	●	●	●	●	●	●	●	●	●	●
CRC Checksum	●	●	●	●	●	●	●	●	●	●	●	●	●
Sequencer Set Active	●	●	●	●	●	●	●	●	●	●	●	●	●
Exposure Time	●	●	●	●	●	●	●	●	●	●	●	●	●
Gain	●	●	●	●	●	●	●	●	●	●	●	●	●
Event Reporting													
Exposure End	●	●	●	●	●	●	●	●	●	●	●	●	●
Frame Start	●	●	●	●	●	●	●	●	●	●	●	●	●
Frame Start Wait	●	●	●	●	●	●	●	●	●	●	●	●	●
Frame Start Overtrigger	●	●	●	●	●	●	●	●	●	●	●	●	●
Frame Burst Start	●	●	●	●	●	●	●	●	●	●	●	●	●
Frame Burst Start Wait	●	●	●	●	●	●	●	●	●	●	●	●	●
Frame Burst Start Overtrigger	●	●	●	●	●	●	●	●	●	●	●	●	●
Critical Temperature									●	●	●	●	
Over Temperature									●	●	●	●	
Pixel Formats													
Mono 8	●				●		●		●		●		●
Mono 10										●			
Mono 10p (Mono 10 Packed)										●			
Mono 12		●		●		●		●				●	
Mono 12p (Mono 12 Packed)		●		●		●		●				●	
YCbCr422_8 (YUV422_8)	●				●		●		●		●		●
Bayer 8	●		●		●		●		●		●		●
Bayer 10									●				
Bayer 10p (Bayer 10 Packed)									●				
Bayer 12	●		●		●		●				●		●
Bayer 12p (Bayer 12 Packed)	●		●		●		●				●		●
RGB 8	●								●				●
BGR 8	●								●				●

[1] Not available for acA720-520ux, acA1440-220ux, acA2040-55ux, acA2040-120ux, acA2440-35ux, acA2440-75ux.
[2] Only available for acA3088-57ux, acA4024-29ux.
[3] Only available for acA5472-17um.

GigE VISION

SENSORS FAMILY — ACE GIGE CAMERA MODELS

Sensor Family	Models
SONY CCD	acA1600-20gc
AMS	acA2000-50gx, acA2040-25gx
E2V	acA1280-60gx, acA1300-60gx, acA1600-60gx
ONSEMI MT9P	acA1920-25gx, acA2500-14gx
ONSEMI MT9J	acA3800-10gx
ONSEMI PYTHON	acA640-300gx, acA800-200gx, acA1300-75gx, acA1920-48gx, acA2500-20gx
SONY PREGIUS	acA640-121gm, acA720-290gx, acA1440-73gx, acA1920-40gx, acA1920-50gx, acA2040-35gx, acA2440-20gx, acA4096-11gx, acA4112-8gx
SONY STARVIS	acA3088-16gx, acA4024-8gx
SONY EXMOR R	acA5472-5gx

Feature	CCD color	AMS mono	AMS color	E2V mono	E2V color	MT9P mono	MT9P color	MT9J mono	MT9J color	PYTHON mono	PYTHON color	PREGIUS mono	PREGIUS color	STARVIS/EXMOR R mono	STARVIS/EXMOR R color
Physical Interface and I/O Control															
Configurable Input/Output Lines															
Inputs	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Outputs	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
General Purpose I/O										1	1	1	1	1	1
Debouncer	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Minimum Output Pulse Width	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Line Source Signals															
Acquisition Start Wait	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Frame Start Wait	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Exposure Active	•	•	•	•	•	•	•			•	•	•	•	•	•
Flash Window				•	•	•	•	•	•						•
User Output	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Sync User Output	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Timer Active	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Image Acquisition Control															
Acquisition Start Trigger	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Frame Start Trigger	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Triggered by Software	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Triggered by Hardware	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Trigger Delay	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Acquisition Status	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
GigE Vision 2.0										•	•	•	•	•	•
Standard Features															
Gain	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Gain Auto	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Black Level	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DigitalShift	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Region of Interest (ROI)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Binning Horizontal		•		•				•		•		•			
Binning Vertical		•		•				•		•		•		•	
Decimation Horizontal				•[1]						•					
Decimation Vertical		•		•[1]						•					
Scaling Horizontal										•					
Scaling Vertical										•					
Reverse X (Horizontal Mirroring)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Reverse Y (Vertical Mirroring)		•								•	•	•[2]	•	•	•
Stacked Zone Imaging		•													
Gamma Correction	•	•	•	•	•	•	•	•	•	•	•	•	•		
Exposure Mode: Trigger Width (Control via external trigger)	•	•	•							•	•	•	•		
Exposure Mode Timed (Control via API)															•[5]
Exposure Auto	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Auto Function Profile	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Lookup Table (LUT)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Test Images	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Sequencer	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Stacked ROI										•	•	•[3]	•		
Ultra Short Exposure Time Mode												•[4]	•		
GigE Vision 2.0															
Precision Time Protocol (IEEE 1588)										•	•	•	•	•	•
Action Commands (Synchronous Triggering)										•	•	•	•	•	•
Scheduled Action Commands										•	•	•	•	•	•

[1] Not available for acA1280-60gm/gc .
[2] Not available for acA640-121gm.
[3] Only available for acA720-290gm/gc, acA1440-73gm/gc, acA1920-50gm/gc.
[4] Not available for acA1920-40gx and acA1920-50gx.
[5] Only available for acA4024-8gx.

SENSORS FAMILY — ACE GIGE CAMERA MODELS

- **SONY CCD:** acA1600-20gc
- **AMS:** acA2000-50gx, acA2040-25gx
- **E2V:** acA1280-60gx, acA1300-60gx, acA1600-60gx
- **ONSEMI MT9P:** acA1920-25gx, acA2500-14gx
- **ONSEMI MT9J:** acA3800-10gx
- **ONSEMI PYTHON:** acA640-300gx, acA800-200gx, acA1300-75gx, acA1920-48gx, acA2500-20gx
- **SONY PREGIUS:** acA640-121gm, acA720-290gx, acA1440-73gx, acA1920-40gx, acA1920-50gx, acA2040-35gx, acA2440-20gx, acA4096-11gx, acA4112-8gx
- **SONY STARVIS:** acA3088-16gx, acA4024-8gx
- **SONY EXMOR R:** acA5472-5gx

Feature	SONY CCD color	AMS mono	AMS color	E2V mono	E2V color	MT9P mono	MT9P color	MT9J mono	MT9J color	PYTHON mono	PYTHON color	PREGIUS mono	PREGIUS color	STARVIS mono	STARVIS color
Light Control Features															
SLP Feature										●	●	●[1]	●	●	●
Miscellaneous															
Remove Parameter Limits	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
User Defined Values	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Device Information Parameters	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
User Sets (Configuration Sets)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Device Temperature										●	●	●	●	●	●
Vignetting Correction													●[2]		●[3]
Color Creation and Enhancement															
sRGB Gamma Correction	●		●		●		●		●		●		●		●
Balance White (Manual White Balance)	●		●		●		●		●		●		●		●
Balance White Auto (Automatic White Balance)	●		●		●		●		●		●		●		●
Light Source Presets	●		●		●		●		●		●		●		●
Color Transformation (RGB to RGB)	●		●		●		●		●		●		●		●
Color Adjustment (6 axis Hue/Saturation)	●		●		●		●		●		●		●		●
PGI											●	●[4]	●	●[5]	●
Chunks															
Timestamp	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Line Status All	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
CRC Checksum	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Trigger Input Counter	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Frame Counter	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Sequence Set Index	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Exposure Time	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Gain Raw										●	●	●	●	●	●
Event Reporting															
Exposure End	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Frame Start	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Frame Start Overtrigger	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Acquisition Start	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Acquisition Start Wait										●	●	●	●	●	●
Acquisition Start Overtrigger	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Critical Temperature										●	●	●	●		
Over Temperature										●	●	●	●		
Pixel Formats															
Mono 8	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Mono 10										●					
Mono 10p (Mono 10 Packed)										●					
Mono 12		●		●		●		●				●		●	
Mono 12 Packed (Mono 12 Packed)		●		●		●		●				●		●	
YCbCr422_8 (YUV422_8)	●		●		●		●		●		●		●		●
Bayer 8	●		●		●		●		●		●				
Bayer 10											●				
Bayer 10p (Bayer 10 Packed)											●				
Bayer 12	●		●		●		●		●				●		●
Bayer 12p (Bayer 12 Packed)	●		●		●		●		●				●		●

[1] Not available for acA640-121gm.

[2] Not available for acA640-121gm, acA720-290gx, acA1440-73gx, acA2040-35gx, acA2440-20gx.

[3] Only available for acA3088-16gx, acA4024-8gx.

[4] Not available for acA640-121gm.

[5] Only available for acA5472-5gm.

SENSORS FAMILY ACE CAMERA LINK CAMERA MODELS	AMS acA2000-340kx acA2040-180kx	
	mono	color
Physical Interface and I/O Control		
Configurable Input/Output Lines	●	
General Purpose I/O	1	
Debouncer	●	
I/O Signals: Exposure Active Signal	●	
Minimum Output Pulse Width	●	
Image Acquisition Control		
Trigger Delay	●	
Acquisition Status	●	
Trigger Wait / Trigger Ready Signal	●	
Selectable Camera Link Baud Rate	●	
Color Creation and Enhancement		
Balance White (Manual White Balance)		●
sRGB Gamma Correction		●
Color Transformation		●
Standard Features		
Gain	●	
Black Level	●	
Area of Interest	●	
Gain Auto	●	
Exposure Mode: Timed (Control via API)	●	
Exposure Mode: Trigger Width (Control via external trigger)	●	
Auto Function Profile	●	
Decimation Vertical	●	
Binning	●	
Reverse X (Horizontal Mirroring)	●	
Reverse Y (Vertical Mirroring)	●	
Lookup Table (LUT)	●	
Remove Parameter Limits	●	
Test Images	●	
Sequencer	●	
Device Information Parameters	●	
Chunks		
Sequence Set Index	●	
Exposure Time	●	
Pixel Formats		
Mono 8	●	
Mono 10	●	
Mono 12	●	
Bayer GB 8		●
Bayer GB 10		●
Bayer GB 12		●
Adjustable Camera Link Pixel Clock Speed	●	
Miscellaneous		
User Defined Values	●	
Remove Parameter Limits	●	
User Sets (Configuration Sets)	●	

SENSOR FAMILY BOOST CAMERA MODELS	SONY PREGIUS boA4096-93cx boA4112-68cx		ONSEMI boA4500-45cx boA6500-36cx boA8100-16cx	
	mono	**color**	**mono**	**color**
Physical Interface and I/O Control				
Configurable Input/Output Lines				
Inputs	1		1	
Outputs	1		1	
General Purpose I/O	2		2	
Minimum Output Pulse Width	●[1]		●[1]	
Line Source Signals				
Acquisition Trigger Wait / Frame Burst Trigger Wait				
Exposure Active	●		●	
Frame Trigger Wait	●		●	
Input Filter	●		●	
Serial Communication (UART)	●		●	
Timer Active	●		●	
User Output	●		●	
Image Acquisition Control				
Acquisition Abort	●		●	
Acquisition Start Trigger	●		●	
Acquisition Status	●		●	
Acquisition Single Frame	●		●	
Acquisition Stop	●		●	
Frame Burst Start Trigger	●		●	
Frame Start Trigger	●		●	
High Speed Burst Mode	●[1]		●[1]	
Trigger Delay	●		●	
Triggered by Hardware	●		●	
Triggered by Software	●		●	
Standard Features				
Auto Function Profile	●[1]		●[1]	
Binning Horizontal	●	●		
Binning Vertical	●	●		
Black Level	●		●	
Digital Shift	●		●	
Exposure Auto	●		●	
Exposure Mode: Trigger Width (Control via external trigger)	●		●	
Exposure Time	●		●	
Gain	●		●	
Gain Auto	●		●	
Gamma Correction	●		●	
Lookup Table (LUT) 12Bit	●		●	
Multiple ROI	●[1]		●[1]	
Region of Interest (ROI)	●		●	
Reverse X (Horizontal Mirroring)	●		●	
Reverse Y (Vertical Mirroring)	●		●	
Sequencer	●		●	
Test Patterns	●		●	
Miscellaneous				
Device Information Parameters	●		●	
Device Temperature	●		●	
Static Defect Pixel Correction	●		●	
User Defined Values	●		●	
User Sets (Configuration Sets)	●		●	
Vignetting Correction	●[1]		●[1]	

[1] For latest information on availability of features, please visit *baslwerweb.com/boost*.

SENSOR FAMILY BOOST CAMERA MODELS	SONY PREGIUS boA4096-93cx boA4112-68cx		ONSEMI boA4500-45cx boA6500-36cx boA8100-16cx	
	mono	**color**	**mono**	**color**
Color Creation and Enhancement				
Balance White (Manual White Balance)		●		●
Balance White Auto (Automatic White Balance)		●[1]		●[1]
Brightness		●		●
Color Adjustment (6 axis Hue/Saturation)		●		●
Contrast Enhancement		●		●
Hue/Saturation		●		●
Light Source Presets		●		●
Unilinear Demosaicing Mode		●[2]		●[2]
Pixel Formats				
Mono 8	●		●	
Mono 10	●[1]		●[1]	
Mono 12	●		●	
YCbCr422_8 (YUV422_8)		●		●
Bayer 8		●		●
Bayer 10		●[1]		●[1]
Bayer 12		●		●
RGB 8		●		●

[1] For latest information on availability of features, please visit *baslwerweb.com/boost*.
[2] Coming soon.

SENSOR FAMILY — DART CAMERA MODELS

DART

ONSEMI	SONY STARVIS	SONY PREGIUS
daA1280-54ux	daA3840-45ux	daA1440-220ux
daA1920-30ux	daA1920-160ux	daA720-520ux
daA2500-14ux		daA1920-160ux
daA1920-15um		daA2448-70ux
E2V		
daA1600-60ux		

	ONSEMI mono	ONSEMI color	SONY STARVIS mono	SONY STARVIS color	SONY PREGIUS mono	SONY PREGIUS color
Interface Features						
USB 3.0 Superspeed	●		●		●	
USB 2.0 Backward Compatible	●					
Physical Interface and I/O Control						
Debouncer	●					
Minimum Output Pulse Width	●					
Input Filter Time			●		●	
Input Hold Off Time			●		●	
I/O Signals						
Exposure Active Signal	●		●		●	
Flash Window Signal	●[1]		●[2]		●[2]	
User Output	●		●		●	
Line Source Signals: User Output	●		●		●	
Serial Communication (TWI)			●		●	
Image Acquisition Control						
Frame Start Trigger	●		●		●	
Triggered by Hardware	●		●		●	
Triggered by Software	●		●		●	
Trigger Delay			●		●	
Acquisition Status	●		●		●	
Standard Features						
Gain	●		●		●	
Gain Auto	●		●		●	
Black Level	●		●		●	
Region of Interest (ROI)	●		●		●	
Binning Horizontal	●		●		●	
Binning Vertical	●		●		●	
Reverse X (Horizontal Mirroring)	●		●		●	
Reverse Y (Vertical Mirroring)	●		●		●	
Gamma Correction	●		●		●	
Exposure Mode: Timed (Control via API)	●		●		●	
Exposure Mode: Trigger Width (Control via external trigger)	●[1]		●		●	
Exposure Auto	●		●		●	
Auto Function Profile	●		●		●	
Test Patterns	●		●		●	
Miscellaneous						
User Defined Values	●		●		●	
Device Information Parameters	●		●		●	
User Sets (Configuration Sets)	●		●		●	
Device Temperature			●		●	

[1] Only for models featuring onsemi MT9P031 sensor.
[2] Only for models featuring Sony IMX334 sensor.

SENSOR FAMILY DART CAMERA MODELS	DART					
	ONSEMI daA1280-54ux daA1920-30ux daA2500-14ux daA1920-15um E2V daA1600-60ux		**SONY STARVIS** daA3840-45ux daA1920-160ux		**SONY PREGIUS** daA1440-220ux daA720-520ux daA1920-160ux daA2448-70ux	
	mono	color	mono	color	mono	color
Color Creation and Enhancement						
Balance White Auto (Automatic White Balance)		●		●		●
Hue/Saturation		●		●		●
PGI	●		●		●	
Light Source Presets		●		●		
Backlight Compensation	●					
Anti-Flicker	●					
Contrast Enhancement	●		●		●	
Brightness			●		●	
Balance White (Manual White Balance)		●		●		
S-Curve Contrast Mode		●		●		
sRGB Gamma Correction		●		●		
Unilinear Demosaicing Mode	●[1]		●[1]		●[1]	
Pixel Formats						
Mono8	●		●		●	
Mono12	●		●		●	
Mono12p			●		●	
YCbCr422_8		●		●		●
Bayer8		●		●		●
Bayer12		●		●		●
Bayer12p				●		●
RGB8		●		●		●
BGR8				●		●

[1] Coming soon. Only for models featuring IMX sensor.

BASLER CAMERAS	PULSE	
	mono	**color**
Interface Features		
USB 3.0 Superspeed	●	
USB 2.0 Backward Compatible	●	
Image Acquisition Control		
Frame Start Trigger	●	
Triggered by Software	●	
Acquisition Status	●	
Standard Features		
Gain	●	
Gain Auto	●	
Black Level	●	
Region of Interest	●	
Binning Horizontal	●	
Binning Vertical	●	
Reverse X (Horizontal Mirroring)	●	
Reverse Y (Vertical Mirroring)	●	
Gamma Correction (User)	●	
Exposure Control via API	●	
Automatic Exposure Control	●	
Auto Function Profile	●	
Test Images	●	
Miscellaneous		
User Defined Values	●	
Device Information Parameters	●	
Configuration Sets	●	
Color Creation and Enhancement		
Balance White Auto (Automatic White Balance)		●
Color Adjustment (6 axis Hue/Saturation)		●
PGI		●
Light Source Presets		●
Backlight Compensation	●	
Anti-Flicker	●	
Contrast Enhancement	●	
Balance White (Manual White Balance)		●
S-Curve Contrast Mode		●
sRGB Gamma Correction		●
Pixel Formats		
Mono8	●	
Mono12	●	
YCbCr422_8		●
Bayer8		●
Bayer12		●
RGB8		●
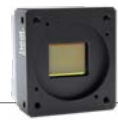
BASLER CAMERAS	BASLER BEAT	
	mono	color
Standard Features		
Configurable Input/Output Lines	●	
Adjustable Camera Link Pixel Clock Speed	●	
Selectable Camera Link Baud Rate	●	
Adjustable Gain All	●	
Adjustable Black Level All	●	
Manual White Balance[1]	●	
Digital Shift[1]		
Area of Interest	●	
Automatic White Balance[1]	●	
Automatic Gain Control[1]	●	
Automatic Exposure Control[1]	●	
Auto Function Profile[1]	●	
Binning up to 4 × 4[1] (Mono)		
Stacked Zone Imaging[1]	●	
Reverse X (Horizontal Mirroring)	●	
Reverse Y (Vertical Mirroring)	●	
Lookup Table	●	
Gamma Correction (User)	●	
sRGB Gamma Correction[1]	●	
Enhanced Color[1]	●	
User Defined Values	●	
Remove Parameter Limits		
Debouncer	●	
Minimum Output Pulse Width[1]	●	
Trigger Delay	●	
Acquisition Status	●	
Event Reporting		
Test Images	●	
Device Information Parameters	●	
Configuration Sets	●	
Temperature Readout		
Trigger Wait / Trigger Ready Signal[1]	●	
Exposure Active Signal	●	
Sequencer		

[1] This feature may not be available on all camera versions.

BASLER CAMERAS	BASLER BEAT	
	mono	color
Software		
Software Triggering	●	
Pixel Data Formats		
Mono 8	●	
Mono 10[1]	●	
Mono 12	●	
Mono 16[1]		
Mono 12 Packed[1]		
YUV 4:2:2 Packed (Ylber 422)		
YUV 4:2:2 (YUYV) Packed		
RGB 8 Packed*		
Bayer GB 8[1]		●
Bayer RG 8[1]		
Bayer BG 8[1]		
Bayer GB 10*		●
Raw 16		●
Bayer BG 16[1]		
Bayer BG 12 Packed[1]		
Hardware		
90° Head Housing		
Inputs	4	
Outputs	1	
Camera Link Tab Geometries		
1X2-1Y		●
1X3-1Y		●
1X8-1Y		●
1X10-1Y		●

[1] This feature may not be available on all camera versions

BASLER CAMERAS	RACER (Camera Link)	RACER (GigE Vision)
Standard Features		
Configurable Input/Output Lines	●	●
Selectable Camera Link Pixel Clock Speed		●
Selectable Camera Link Baud Rate		●
Adjustable Gain	●	●
Analog Gain	●	●
Digital Gain	●	●
Adjustable Black Level All (Offset)	●	●
AOI (Area of Interest)	●	●
Offset Shading (DSNU Shading Correction)	●	●
Gain Shading (PRNU Shading Correction)	●	●
Automatic Gain Control[1]	●	●
Automatic Exposure Control[1]	●	●
Automatic Function Profile[1]	●	●
Binning	●	●
Lookup Table	●	●
Gamma Correction	●	●
User Defined Values	●	●
Remove Parameter Limits	●	●
Rotary Encoder Module	●	
Frequency Converter	●	●
Debouncer[1]	●	●
Trigger Delay	●	
Acquisition Status	●	
Event Reporting	●	
Test Images	●	●
Device Information	●	●
Configuration Sets	●	●
Temperature Readout	●	●
Trigger Wait/Trigger Ready Signal[1]	●	●
Exposure Active Signal	●	●
Stamp Features[1]	●	
Error Condition Detection	●	●
Exposure Time Control	●	●
Dark Noise Cancellation	●	●
Chunk Features		
Frame Counter	●	
Timestamp	●	
Input Status @ Line Trigger	●	
CRC Checksum	●	
Trigger Counters	●	
Encoder Counter	●	

[1] This feature may not be available on all camera versions.

BASLER CAMERAS	RACER (Camera Link)	RACER (GigE Vision)
Software		
Software Triggering	●	●
Pixel Data Formats		
Mono 8	●	
Mono 12	●	
Mono12 Packed	●	
YUV 4:2:2 Packed	●	
YUV 4:2:2 (YUYV) Packed	●	
8 Bit Output		●
10 Bit Output		●
12 Bit Output		●
Hardware		
Inputs	3	4[2]
Outputs	2	1[3]
Camera Link Tap Geometries		
1X		●
1X2		●
1X3[1]		●
1X4[1]		●
1X6[1]		●
1X8		●
1X10		●
1X16[1]		●
4X2[1]		●

Note: The terminology used here to describe the features on GigE cameras complies
with the GigE Vision standard.
Accordingly, the terminology used to describe DCAM compliant cameras may differ.
Specifications are subject to change without prior notice.

[1] This feature may not be available on all camera versions.
[2] CC1 to CCF4.
[3] Via Camera Link spare bit.

Basler's Components Enhance Your Vision

An image processing system needs more than just a camera. Only a lens, light source, reliable data transfer and additional components such as frame grabbers, trigger cables, PC cards and power supplies turn a vision system into a functioning unit. High standards must be met in terms of quality, reliability and long-term availability with a good price/benefit ratio.

Basler offers a large selection of vision components that match each other perfectly. Carefully selecting compatible and reliable components for our portfolio is our top priority, as we strive to provide the right needs-oriented setup for complex, efficient systems as well as for cost-effective solutions.

As a leader in technology, Basler is substantially involved in the development of new standards and offers all of the necessary, perfectly matched vision components from one source. As a result, our customers benefit from the superior reliability of their entire vision system.

Need Help Selecting the Right Vision Components for Your Application?

Select compatible components for your vision system with the help of our Vision System Configurator: *baslerweb.com/vision-system-configurator*

Step by step you can pick cameras, lenses, power and data cables as well as other accessories. We ensure that the selected components fit together.
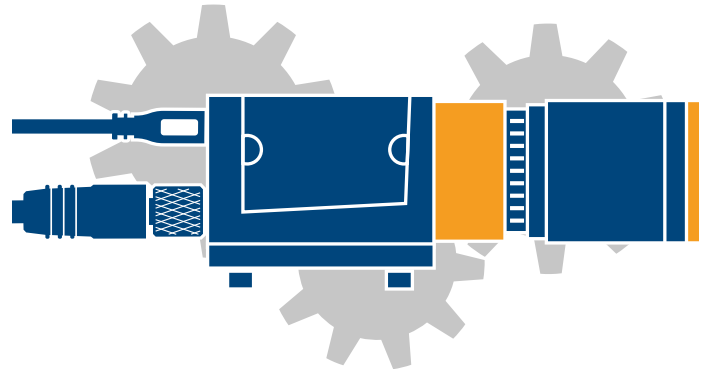
Basler's Vision Components – Benefits at a Glance

Cost savings

- In-house developments or developments in cooperation with other companies
- Needs-oriented products
- Complexity reduction thanks to perfectly harmonized components
- One-stop shopping
- Single point of contact (spoc)
- Long-term availability

High reliability

- Matching, certified and tested vision components
- Regular function and interoperability tests
- Provision of all required certifications

Good delivery times & long-term availability

- In-house logistics
- Same deliverability for camera and compatible accessories
- Spare parts supply throughout the entire lifecycle

Easy system setup & simple integration

- Broad and harmonized product portfolio
- Time-saving tools to configure and select components
- Professional consulting before and after the buying decision

For more information, please visit *baslerweb.com/vision-components*

Typical set-up of a camera system

| Lighting | Lens | Camera | Cables | Frame Grabbers PC Cards | PC | Peripheral & Network Devices | Additional Hardware |
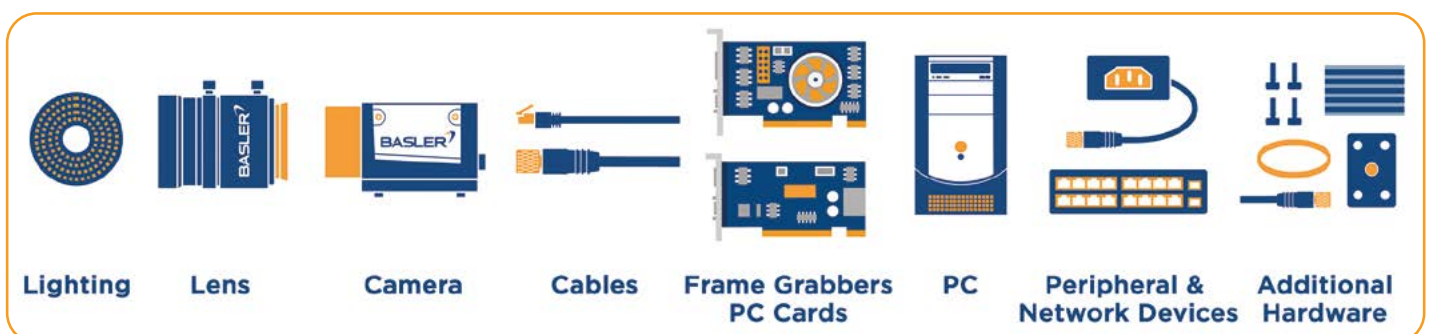
Basler Lenses Give Vision Applications the Required Sharpness

Lenses depict the captured light on a camera's sensor. Combined with a camera and lighting, they are instrumental in determining the image quality. In the worst case, choosing the wrong lens can result in an irretrievable loss in image quality.

When choosing the right lens, the balance between the required imaging performance, i.e. high resolution with optical image quality, and price is of real interest. A very good imaging performance saves processing time in the further image analysis software and in many cases makes the analysis of even finest structures possible in the first place. If a basic imaging performance and average optical errors are acceptable or if these errors can actually be corrected through image processing, cost-efficient lenses are a better choice.

Whether there are high standards in terms of image quality or a focus on lower costs due to competitive pressure, Basler offers two product lines for both scenarios. The Standard product line stands for the best price/performance ratio and offers good basic performance. The Premium product line offers optimal imaging quality with much higher optical resolution but without neglecting the cost factor.

Both product lines support popular image circles of sensors available in Basler cameras, from 1/2.5″ to 1.1″, as well as all common focal lengths. The lenses are equipped with a C-mount and can also be conveniently used with CS-mount cameras with the help of an adapter.

For more information, please visit
baslerweb.com/basler-lenses

Highlights of the Basler Standard Lenses

- Excellent price/performance ratio
- Solid basic performance
- Suitable for simple vision applications and price-sensitive systems
- Ideal for fast cameras with a low resolution

Highlights of the Basler Premium Lenses

- Designed and tested for the most demanding applications
- Best quality: very high resolution, low distortion, low vignetting
- Optimal for cameras with very high resolutions for the analysis of the smallest structures
- Still cost-optimized

Need Help Selecting the Right Lens for Your Application?

Find the right lens for your Basler camera! Several suitable lenses for your application are suggested to you based on data such as focal length, angle of view, working distance or object size.
Test our convenient Lens Selector: *baslerweb.com/lens-selector*

pylon Camera Software Suite

Easy and stable connection of your vision applications with Basler cameras requires the right software in place. The Basler pylon Camera Software Suite consists of reliable, certified drivers for all kinds of camera interfaces, a powerful and easy programming interface, and a comprehensive set of tools for camera set-up. Thanks to the pylon vTools, you can develop complete machine vision, medical and other applications with just a few lines of code.

Highlights

- Easy connecting of Basler cameras via GenTL standard
- Productivity and fast results with pylon SDKs
- Stable, certified drivers for Windows, Linux, macOS and Android
- Rich choice of supported interfaces

- Powerful tools for camera set-up

For more information,
please visit *baslerweb.com/pylon*
See the pylon highlights in our video:

CONNECT
Easy link to Basler cameras

Many ways to connect – With pylon you can connect your application in a standardized way via a pylon GenTL producer, or by writing your own code using one of the pylon APIs. With the pylon APIs, developers can either use convenient universal functions that encapsulate the GenICam standard, or use functions for access directly via GenICam.

GenICam and GenTL – Complex details of these standards are encapsulated by the pylon APIs.

Rich choice of supported interfaces – pylon allows connecting your cameras via USB3, GigE Vision, CoaxPress, Camera Link and others. If your application connects via one of the pylon APIs, switching from one interface to another becomes possible with minimal code changes.
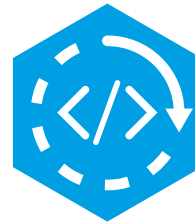
DEVELOP
High productivity and fast results

80% time savings – Studies show that developers using a pylon API finished tasks in only 20% or less of the time that they needed to complete the same tasks with other comparable APIs.

Easy to learn – With the easy-to-learn pylon APIs and context-related developer documentation, even new employees can become productive right away.

Faster results – The simple structure of the pylon APIs leads to fast development results, leaving the developers more time for other things.

Simple deployment - pylon's copy deployment concept allows installing all necessary pylon components used for your application just by simple file copies.

CONFIGURE
Powerful tools for camera set-up

Get the best possible image – pylon provides you with a rich set of powerful tools for getting the best image out of your Basler camera, such as Vignetting Correction, Sharpness Indicator, Bandwidth Manager and many more.

Fast access to product documentation – The pylon Viewer allows easiest centralized access to comprehensive camera feature documentation, including code samples.

Use the tools in your language – pylon tools can be used in English, Chinese, Japanese and Korean language.

Integrated camera emulator – pylon comes with a camera emulation that allows testing multi-camera connectivity without having to connect any camera.

RUN
Stable operation on all platforms

Certified drivers, reliable performance – Tried and used thousands of times, certified, and the performance speak for the stability of the pylon drivers, which have been optimized continuously for many years.

Real-time performance – In comparison studies, pylon demonstrated an outstanding performance with regard to latency and jitter, making pylon suitable for stable image aquisition even in real-time applications.

Platform-independent – With the pylon APIs, the target platform of the developed application doesn't play any role. It's very easy to switch from a Windows environment to a Linux ARM environment without major code changes. This makes pylon perfectly suitable for the development of embedded systems.

How Does Basler Measure and Define Image Quality?

Basler is leading the effort to standardize image quality and sensitivity measurement for cameras and sensors. We are giving the EMVA 1288 standard our strongest support because it describes a unified method to measure, compute, and present the specification parameters for cameras and image sensors. Our cameras are characterized and measured in 100% compliance with the EMVA 1288 standard. Measurement reports can be downloaded from our website.

How Does Basler Ensure Superior Quality and Reliable High Performance?

Our approach to quality assurance is rigorous: we continually audit all facets of our business to ensure powerful performance, increase efficiency and reduce costs for our customers. We are compliant with all major quality standards including ISO 9001, CE, RoHS, and more. To ensure consistently high product quality, we employ several quality inspection procedures during manufacturing.

Every Basler camera is subjected to exhaustive optical and mechanical tests before leaving the factory. We have developed a unique combination of optics, hardware, and software tools that can quickly and efficiently calibrate a camera and measure its performance against a set of standard performance criteria. Regardless of what technology or camera model you choose you can be assured of consistent performance.

About Basler

Basler AG is an international leader and experienced expert in computer vision. The company offers a broad coordinated portfolio of vision hardware and software. In addition, it enables customers to solve their vision application issues by developing customer-specific products or solutions. Founded in 1988, the Basler Group employs more than 1,000 people at its headquarters in Ahrensburg, Germany, as well as other sales and development locations throughout Europe, Asia, and North America.

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ACCELERATE YOUR VISION

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