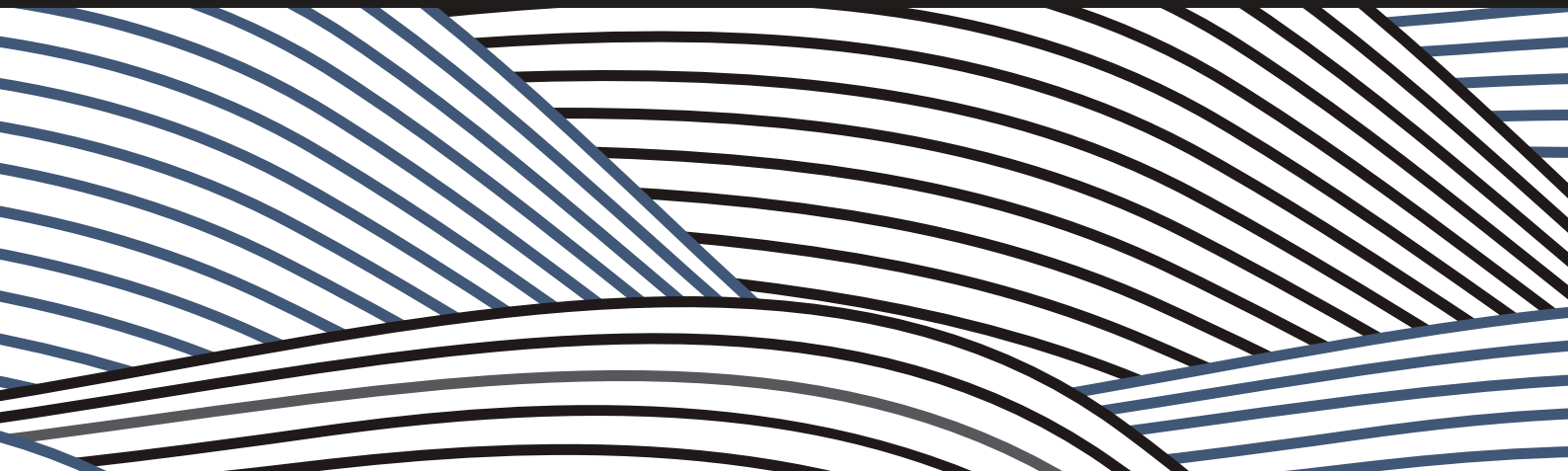




# PRODUCT CATALOG

2018/19



# MONOCHROME

Resolution (Pixel size)	Model	Line Rate (kHz)				Interface					
		~19	20~39	40~69	70~	Base	Med.	Full	Deca	GiGE	CXP
2k (14)	SU2020	•				•					
	SU2025	•				•					
	SU2025GIG	•								•	
	XCM20125GIG			•						•	
	XCM2040SAT2		•			•					
2k (7)	XCM2040SAT4			•		•	•				
	XCM2085DLMT2				•	•					
4k (7)	XCM4040SAT2	•				•					
	XCM4040SAT4		•				•				
	XCM40160CXP		•								•
	XCM4040DLMT4			•		•	•				
	XCM4085DLMT4				•	•	•				
	<b>NEW</b> RMSL4K76CL				•	•	•				
	<b>NEW</b> RMSL4K100CL				•	•	•	•	•		
<b>NEW</b> RMSL4K76CP				•						•	
6k (7)	XCM40170DLMT2CXP				•					•	
	XCM6040SAT2	•				•					
	XCM6040SAT4		•				•				
	XCM6060SAT4		•				•				
	XCM60160CXP		•								•
	<b>NEW</b> RMSL6K52CL			•		•	•				
<b>NEW</b> RMSL6K76CP				•						•	
7k (4.7)	SUi7440	•				•					
	SUi7450T2	•				•					
8k (7)	XCM8040SAT2	•				•					
	XCM8040SA	•					•				
	XCM8040SAT4	•					•				
	XCM8060SAT2	•				•					
	XCM8060SA		•				•				
	XCM8060SAT4		•				•				
	XCM8040SAT8		•					•			
	XCM80160CXP	•									•
	XCM80160T2CXP		•								•
	XCM8085DLMT8				•	•	•	•			
<b>NEW</b> RMSL8K76CL				•	•	•	•	•			
<b>NEW</b> RMSL8K76CP				•						•	
16k (3.5)	XCM16K80SAT8		•					•			
	XCM16K04GT4CXP			•							•

# COLOR CAMERAS

Resolution (Pixel size)	Model	Line Rate (kHz)			Interface					
		~19	20~39	40~69	Base	Med.	Full	GiGE	CXP	
1k (7)	XCM1040DLCT3		•		•					
2k (7)	XCM2085DLCT3		•		•					
2k (14)	SUCL2025T3	•			•	•				
	SUCL2025GIG	•						•		
4k (7)	XCM3C4080T3	•			•	•				
4k (10)	<b>NEW</b> NUCLi4KA	•			•	•				
	XCM4085TLCT6			•	•	•	•			
7k (10)	NUCLi7370AT6	•			•	•	•			
12k (5.6)	XCM12K85TLCT6	•			•	•	•			

# WHAT'S NOW

NED is presenting a whole new series of high speed line scan cameras dubbed Ryugan, meaning “dragon eye” in Japanese. Having all the high qualities as NED’s standard cameras, the Ryugan series add greater speeds for high demanding applications. This new series will be a welcome addition to NED’s already broad range of low to mid-range cameras.

The initial release of Ryugan series cameras will consist of 4 Camera Link and 3 CoaXPress cameras ranging from 4-8k pixels and scan rates up to 100 kHz. The Ryugan models combines various output data formats into one package so use of multiple models for different tasks is no longer needed.

Model	Resolution	Pixel size	Line Rate (kHz)	Data Rate (MHz) Output (clock x tap)						Interface
				80 40x2	120 60x2	170 85x2	160 40x4	240 60x4	340 85x4	
RMSL4K76CL	4096	7	76.92	80 40x2	120 60x2	170 85x2	160 40x4	240 60x4	340 85x4	
RMSL4K100CL			100.00	80 40x2	160 80x2	160 40x4	320 80x4	320 40x8	640 80x8	
RMSL6K52CL	6144		52.63	80 40x2	120 60x2	170 85x2	160 40x4	240 60x4	340 85x4	
RMSL8K76CL	8192		76.92	80 40x2	120 60x2	170 85x2	160 40x4	240 60x4	340 85x4	

Model	Resolution	Pixel size	Line Rate (kHz)	Output	Lanes	Interface
RMSL4K76CP	4096	7	76.92	CXP-3x1   CXP-3x2   CXP-5x1	1   2	
RMSL6K76CP	6144			CXP-3x1   CXP-3x2   CXP-5x1   CXP-5x2		
RMSL8K76CP	8192					

## MODEL NAMING CONVENTION

Ryugan series	R	M	SL	8K	76	CL
[ RMSL8K76CL ]	Ryugan	M=Mono C=Color	SL=Single line DL=Dual line 3L=Tri-line 4L=Quad-line	Pixels (x1024)	Line rate (KHz)	CL=Camera Link CP=CoaxPress GE=GiGE Vision

XCM series	XCM	80	40	SAT8
[ XCM8040SAT8 ]	Clisbee Series	40=4096 pixels 60=6144 pixels 80=8192 pixels	Clock (MHz)	Number of taps

Interface	Series	Model	Resolution (px)	Pixel Size (µm)	Mono or Color	Lens Mount	Data Rate (MHz)	Clock Speed	Taps	Lanes	Max. Line Rate (kHz)	Sensitivity (V/lx-s)	Output Format	Interface	Power Over	Dimensions (mm)	Weight (g)
CAMERA Link	SU (CCD)	SU2020 (CCD)	2048	14	Mono	F-mount	20	20	1	-	9.1	90	8   10   12	Base	-	64x70x91.7	410
		SU2025 (CCD)	2048	14	Mono	F-mount	25	25	1	-	11.4	90	8   10   12	Base	-	64x70x91.7	410
		SUi7440 (CCD)	7400	4.7	Mono	F-mount	40	40	1	-	5.2	120	8   10   12	Base	-	64x70x90.3	380
		SUi7450T2 (CCD)	7400	4.7	Mono	F-mount	100	50	2	-	12.5	67	8   10   12	Base	-	64x70x90.3	380
	CLISBee-A	XCM2040SAT2	2048	14	Mono	C   F-mount	80	40	2	-	34.0	50-1000	8   10	Base	-	60x100x44.5	360
		XCM2040SAT4	2048	14	Mono	C   F-mount	160	40	4	-	62.5	50-1000	8   10	B   M	-	60x100x44.5	360
		XCM2085DLMT2	2048 x 2	7	Mono	C   F-mount	80   170	40   85	1   2	-	75.69	100-970	8   10	Base	-	60x60x35	170
		XCM4040SAT2	4096	7	Mono	F-mount	80	40	2	-	18.66	70-785	8   10	Base	-	80x120x80	570
		XCM4040SAT4	4096	7	Mono	F-mount	160	40	4	-	33.58	70-785	8   10	Medium	-	80x120x80	570
		XCM4040DLMT4	4096 x 2	7	Mono	F-mount	80   160	40	2   4	-	35.94	125-2225	8   10	B   M	-	60x100x35	300
		XCM4085DLMT4	4096 x 2	7	Mono	F-mount	170   340	85	2   4	-	76.50	125-2225	8   10	B   M	-	60x100x35	300
		XCM6040SAT2	6144	7	Mono	F-mount	80	40	2	-	12.44	70-785	8   10	Base	-	80x120x80	580
		XCM6060SAT2	6144	7	Mono	F-mount	120	60	2	-	18.65	70-785	8   10	Base	-	80x120x80	580
		XCM6040SA	6144	7	Mono	F-mount	160	40	4	-	24.88	70-785	8   10	Medium	-	80x120x80	580
		XCM6040SAT4	6144	7	Mono	F-mount	160	40	4	-	24.88	70-785	8   10	Medium	-	80x120x80	580
		XCM6060SAT4	6144	7	Mono	F-mount	240	60	4	-	33.58	70-785	8   10	Medium	-	80x120x80	580
		XCM8040SAT2	8192	7	Mono	M72 x 0.75	80	40	2	-	9.33	70-785	8   10	Base	-	80x120x65	600
		XCM8060SAT2	8192	7	Mono	M72 x 0.75	120	60	2	-	13.99	70-785	8   10	Base	-	80x120x65	600
		XCM8040SA	8192	7	Mono	M72 x 0.75	160	40	4	-	18.65	70-785	8   10	Medium	-	80x120x65	600
		XCM8040SAT4	8192	7	Mono	M72 x 0.75	160	40	4	-	18.65	70-785	8   10	Medium	-	80x120x65	600
XCM8040SAT8	8192	7	Mono	M72 x 0.75	320	40	8	-	33.58	70-785	8   10	Full	-	80x120x65	600		
XCM8060SA	8192	7	Mono	M72 x 0.75	240	60	4	-	27.99	70-785	8   10	Medium	-	80x120x65	600		
XCM8060SAT4	8192	7	Mono	M72 x 0.75	240	60	4	-	27.99	70-785	8   10	Medium	-	80x120x65	600		
XCM8085DLMT8	8192 x 2	7	Mono	M72 x 0.75	170   340   680	40   85	2   4   8	-	77.55	125-2225	8   10	B   M   F	-	80x110x62	630		
XCM16K80SAT8	16384	3.5	Mono	M72 x 0.75	640	80	8	-	36.33	45.2-809	8	Full	-	80x130x67.2	680		
Ryugan	<b>NEW</b> RMSL4K76CL	4096	7	Mono	F-mount	340	40   60   85	2   4	-	76.92	100	8   10	B   M	-	60x100x70	380	
	<b>NEW</b> RMSL4K100CL	4096	7	Mono	F-mount	640	40   80	2   4   8	-	100.00	75	8   10	B   M   F   D	-	60x100x74.1	450	
	<b>NEW</b> RMSL6K52CL	6144	7	Mono	F-mount	340	40   60   85	2   4	-	52.63	100	8   10	B   M	-	60x100x70	380	
	<b>NEW</b> RMSL8K76CL	8192	7	Mono	M72 x 0.75	680	40   60   85	2   4   8	-	76.92	100	8   10	B   M   F   D	-	80x120x64.9	600	
Rainbow	XCM1040DLCT3	1024 x 2	14	Color	C   F-mount	85 x 3	40	RGB	-	35.84	60-582	24 bit RGB	Base	-	60x60x35	170	
	XCM2085DLCT3	2048 x 2	7	Color	C   F-mount	85 x 3	40   85	RGB	-	39.55	60-582	24 bit RGB	Base	-	60x60x35	170	
	SUCL2025T3 (CCD)	2098 x 3	14	Color	F-mount	25 x 3	50	RGB	-	10.82	20-240	24   30 bit RGB	B   M	-	64x70x116	470	
	<b>NEW</b> NUCLi4KA (CCD)	4096 x 3	10	Color	F-mount	80 x 3	80	RGB	-	17.7	130-325	24   30 bit RGB	B   M	-	150x100x70.1	900	
	XCM3C4080T3	4096 x 3	7	Color	F-mount	80 x 3	80	RGB	-	18.65	40-320	24   30 bit RGB	B   M	-	100x100x123	1100	
	XCM4085TLCT6	4096 x 3	10	Color	F-mount	170 x 3	85	RGB x 1 2	-	40	100-300	24   30 bit RGB	B   M   F	-	62x100x72	400	
	NUCLi7370AT6 (CCD)	7300 x 3	10	Color	M84.5	140 x 3	70	RGB x 1 2	-	17.5	130-325	24   30 bit RGB	B   M   F	-	108x150x60.1	800	
XCM12K85TLCT6	12800 x 3	5.6	Color	M84.5	170 x 3	20   40   60   85	RGB x 1 2	-	12.98	20	24   30 bit RGB	B   M   F	-	104x120x73.6	945		
CoaxPress	CLISBee-A	XCM40160CXP	4096	7	Mono	F-mount	160	-	-	1	33.58	70-785	8   10	CXP-2	-	80x120x91	730
		XCM40170DLMT2CXP	4096 x 2	7	Mono	F-mount	340	-	-	1   2	77.56	100	8   10	CXP-2	-	60x100x36	340
		XCM60160CXP	6144	7	Mono	F-mount	160	-	-	1	24.88	70-785	8   10	CXP-2	-	80x120x91	730
		XCM80160CXP	8192	7	Mono	M72 x 0.75	160	-	-	1	18.65	70-785	8   10	CXP-2	-	80x120x77	600
		XCM80160T2CXP	8192	7	Mono	M72 x 0.75	320	-	-	2	33.58	70-785	8   10	CXP-2	-	80x120x77	600
		XCM16K04GT4CXP	16384	3.5	Mono	M72 x 0.75	1280	-	-	4	68.97	45.2-809	8   10	CXP-5	-	80x130x71.1	780
Ryugan	<b>NEW</b> RMSL4K76CP	4096	7	Mono	F-mount	340	-	-	1   2	76.92	100	8   10	CXP-3 5	Pwr over CXP	80x120x86	600	
	<b>NEW</b> RMSL6K76CP	6144	7	Mono	F-mount	510	-	-	1   2	76.92	100	8   10	CXP-3 5	Pwr over CXP	80x120x86	600	
	<b>NEW</b> RMSL8K76CP	8192	7	Mono	M72 x 0.75	680	-	-	1   2	76.92	100	8   10	CXP-3 5	Pwr over CXP	80x120x72	610	
GiGE VISION	SU (CCD)	SU2025GIG (CCD)	2048	14	Mono	F-mount	25	-	-	-	11.4	50-1000	8   10	GiGE Vision	-	64x70x118	450
	CLISBee-A	XCM20125GIG	2048	14	Mono	F-mount	125	-	-	-	53.1	90-3500	8   10   12	GiGE Vision	-	60x100x81.4	450
	Rainbow	SUCL2025GIG (CCD)	2098 x 3	14	Color	F-mount	25	-	-	-	10.8	40-120	24   30 bit RGB	GiGE Vision	-	64x70x115.3	460

# RYUGAN

NED's brand new lineup of high-speed cameras from NED to meet the requirements for high demanding applications. The new Ryugan series offers 4 Camera Link and 3 CoaXPress cameras with line rates up to 100 kHz.

Model	Resolution	Pixel Size	Line Rate (kHz)	Interface
RMSL4K76CL	4096	7	76.92	CAMERA Link
RMSL4K100CL			100.00	
RMSL6K52CL			52.63	
RMSL8K76CL	8192		76.92	CoaXPress
RMSL4K76CP	4096			
RMSL6K76CP	6144			
RMSL8K76CP	8192			

# RAINBOW

Add color to your solution with NED's Rainbow series. Our lineup gives you a wide range of options. Dual line and 3-line sensor models offer great value for money. Where high precision color is a must, we have the 3CMOS (prism-based XCM3C series) camera incorporating NED's highly-regarded proprietary CLISBee CMOS sensor.

Model	Resolution	Pixel Size	Line Rate (kHz)	Interface
XCM1040DLCT3	1024 x 2	7	35.84	CAMERA Link
XCM2085DLCT3	2048 x 2		39.55	
SUCL2025T3 (CCD)	2098 x 3	14	10.82	
NUCLi4KA (CCD)	4096 x 3	10	17.7	
XCM3C4080T3		7	18.65	
XCM4085TLCT6		10	40	
NUCLi7370AT6 (CCD)	7300 x 3	5.6	17.5	GigE
XCM12K85TLCT6	12800 x 3		12.98	
SUCL2025GIG (CCD)	2098 x 3	14	10.8	

# SU SERIES

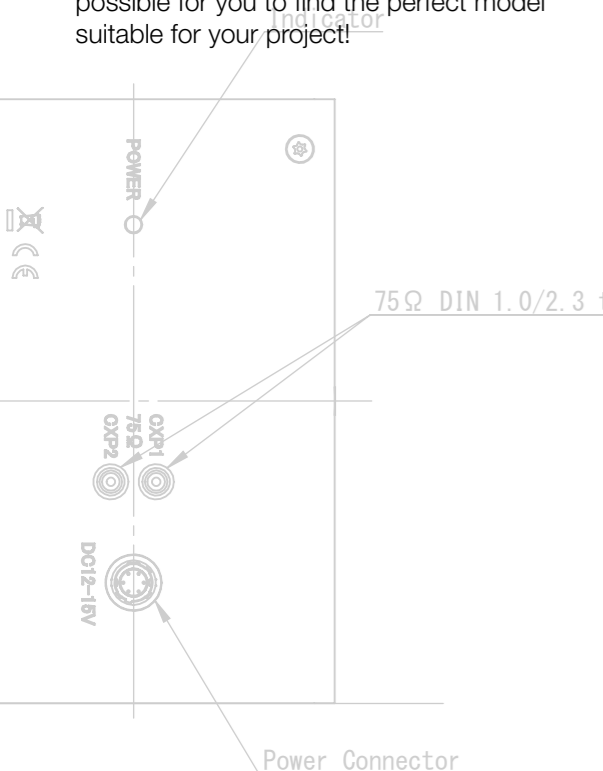
The SU series consist of NED's lowest priced cameras using CCD sensors for price sensitive applications.

Model	Resolution	Pixel Size	Line Rate (kHz)	Interface
SU2020 (CCD)	2048	14	9.1	CAMERA Link
SU2025 (CCD)			11.4	
SUj7440 (CCD)	7400	4.7	5.2	
SUj7450T2 (CCD)			12.5	
SU2025GIG (CCD)	2048	14	11.4	GigE

# CLISBee-A

NED's CLISBee-A series offers high sensitivity, high speed and low noise cameras to a reasonable cost. Having implemented new functions that utilizes the advantages of multi-line sensors makes it possible for you to find the perfect model suitable for your project!

Model	Resolution	Pixel Size	Line Rate (kHz)	Interface		
XCM2040SAT2	2048	14	34.0	CAMERA Link		
XCM2040SAT4			62.15			
XCM2085DLMT2	2048 x 2	7	75.69			
XCM4040SAT2			4096		18.65	
XCM4040SAT4	33.58					
XCM4040DLMT4	4096 x 2		35.94			
XCM4085DLMT4			76.50			
XCM6040SAT2	6144		12.44			
XCM6060SAT2			18.65			
XCM6040SA			7		24.88	
XCM6040SAT4					33.58	
XCM6060SAT4						9.33
XCM8040SAT2				13.99		
XCM8060SAT2	18.65					
XCM8040SA		8192				
XCM8040SAT4			33.58			
XCM8040SAT8					27.99	
XCM8060SA						27.99
XCM8060SAT4				77.55		
XCM8085DLMT8	8192 x 2					
XCM40160CXP		4096				
XCM40170DLMT2CXP	4096 x 2	77.56				
XCM60160CXP	6144	24.88				
XCM80160CXP	8192	18.65				
XCM80160T2CXP		33.58				
XCM16K04GT4CXP	16384	3.5	68.97			
XCM20125GIG	2048	14	53.1	GigE		



# COMPANY PROFILE

Nippon Electro-Sensory Devices Corporation  
 Founded 1975  
 ISO 9001, 14001 certified  
 6 offices in Japan

Development, design, manufacture and sales of:  
 High speed line scan cameras  
 Controllers for cameras, image processing and grabber boards  
 Systems for image processing and image processing software  
 Other products for optronics and mechatronics applications

# NED HISTORY

- 1975 NIPPON ELECS Devices Corp. formed
- 1985 First development of Line Scan Cameras [Analog RS422 CCD S Series · H Series]
- 1986 Line scan camera controller development [MEGA3]
- 1990 Color line scan camera development [CL series 0.5K · 1.7K]
- 1991 Development of 3CCD Colour Line Camera
- 1996 Development of high speed frame grabber boards and wafer inspection devices
- 2005 In-house development of high speed CLISBee CMOS line sensors begins
- 2010 Member of the CoaXPress Consortium developing the next-generation CoaXPress interface
- 2011 Release of low cost SU series
- 2013 Release of first CoaXPress line scan camera
- 2014 Release of first CCD and CMOS GigE vision camera
- 2015 Release of CLISBee-A series using multi line sensors
- 2018 Release of high speed Ryugan series







## DISTRIBUTORS

### ASIA PACIFIC

China	Daitron (Shanghai) Co.,Ltd. ( <a href="http://www.daitron.com.cn">www.daitron.com.cn</a> ) Digi-Array FA System (Shanghai) Co.,Ltd. ( <a href="http://www.digi-array.com">www.digi-array.com</a> )
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Korea	Darea Vision Co.,Ltd. ( <a href="http://www.dareavision.co.kr">www.dareavision.co.kr</a> ) Daitron (Korea) Co.,Ltd. ( <a href="http://www.daitron.co.kr">www.daitron.co.kr</a> ) Jugji Corporation ( <a href="http://www.jugicorp.com">www.jugicorp.com</a> ) Sun High Tech Co.,Ltd. ( <a href="http://www.sunhightech.co.kr">www.sunhightech.co.kr</a> )
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### EUROPE

Clearview Imaging Ltd. ( <a href="http://www.clearviewimaging.co.uk">www.clearviewimaging.co.uk</a> ) Entek Otomasyon ( <a href="http://www.entek.com.tr">www.entek.com.tr</a> ) NET Italia S.r.l. ( <a href="http://www.net-italia.it">www.net-italia.it</a> ) New Electronic Technology GmbH (NET) ( <a href="http://www.net-gmbh.com">www.net-gmbh.com</a> )
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### NORTH AMERICA

NET USA, INC. ( <a href="http://www.net-usa-inc.com">www.net-usa-inc.com</a> )
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