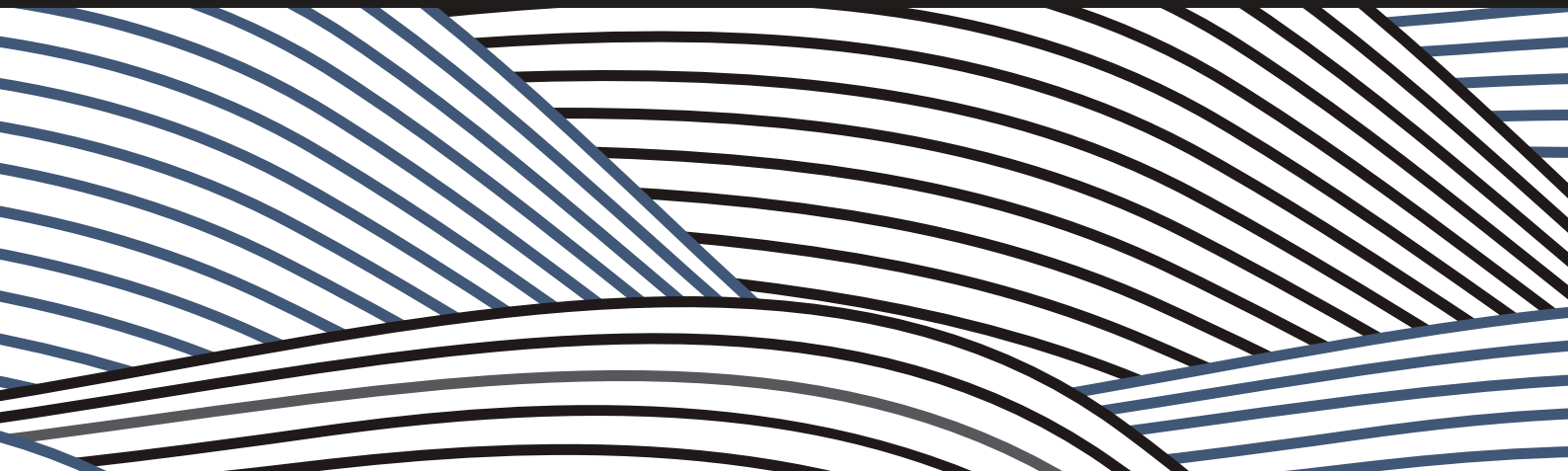




PRODUCT CATALOG

2019/20



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	•								•	
	NEW RMSL2K53GE			•							•
	NEW RMSL2K125CL ¹				•	•	•	•	•		
2k (7)	XCM2085DLMT2				•	•					
	NEW RMSL4K25GE		•							•	
4k (7)	XCM4040DLMT4			•		•	•				
	XCM4085DLMT4				•	•	•				
	RMSL4K76CL				•	•	•				
	RMSL4K76CP				•						•
	XCM40170DLMT2CXP				•						•
	RMSL4K100CL				•	•	•	•			
	NEW RMSL4K100CP ¹				•						•
	NEW RMSL6K17GE	•									•
	RMSL6K52CL			•		•	•				
	RMSL6K76CP				•						•
7k (4.7)	SUI7440	•				•					
	SUI7450T2	•				•					
8k (3.5)	NEW RMSL8K39CL		•			•	•				
8k (3.5)	NEW RMSL8K12GE	•									•
	RMSL8K76CL				•	•	•	•			
	RMSL8K76CP				•						•
	XCM8085DLMT8				•	•	•	•			
16k (3.5)	XCM16K80SAT8		•						•		
	NEW RMSL16K90CP ¹				•						•

COLOR

Resolution (Pixel size)	Model	Line Rate (kHz)			Interface					
		~19	20~39	40~69	Base	Med.	Full	GigE	CXP	
1k (7)	XCM1040DLCT3		•		•					
2k (7)	XCM2085DLCT3		•		•					
4k (7)	NEW RCDL4K8GE ¹	•							•	
	XCM3C4080T3	•			•	•				
4k (10)	NUCLi4KA	•			•	•				
	XCM4085TLCT6			•	•	•	•			
7k (10)	NUCLi7370AT6	•			•	•	•			

WHAT'S NEW

NEW RYUGAN CAMERAS!

- » Five GigE models ranging from 2-8k, including one color model.
- » High speed 2k, 125kHz Camera Link model.
- » High speed 4k, 100kHz CoaXPress model.
- » New 16k, 90kHz CoaXPress model.

Model	Resolution	Pixel size	Line Rate (kHz)	Data Rate (MHz) Output (clock x tap)								Interface
				80	120	160	170	160	240	320	340	
RMSL2K125CL ¹	2048	14	125.00	80 40x2	120 80x2	160 40x4	170 80x4	160 40x8	240 40x8	320 80x8	340 80x8	
RMSL4K76CL	4096	7	76.92	80 40x2	120 60x2	160 85x2	170 40x4	160 40x4	240 60x4	320 60x4	340 85x4	
RMSL4K100CL			100.00	80 40x2	120 80x2	160 40x4	170 40x4	160 80x4	240 40x8	320 80x8	340 80x8	
RMSL6K52CL	6144	3.5	52.63	80 40x2	120 60x2	160 85x2	170 40x4	160 40x4	240 60x4	320 80x4	340 85x4	
RMSL8K39CL	8192		39.06	80 40x2	120 60x2	160 80x2	170 85x2	160 40x4	240 60x4	320 80x4	340 85x4	
RMSL8K76CL		7	76.92	80 40x2	120 60x2	160 85x2	170 40x4	240 60x4	340 85x4	320 40x8	480 60x8	

Model	Resolution	Pixel size	Line Rate (kHz)	Mono / Color	Functions	Interface
RMSL2K53GE	2048	14	53.10	Mono	Shading correction Gain/offset/video output control Programmable exposure control Two-phase trigger	
RCDL4K8GE ¹	4096 x 2	7	8.00	Color		
RMSL4K25GE	4096	7	25.50	Mono		
RMSL6K17GE	6144	7	17.80			
RMSL8K12GE	8192	7	12.80			

Model	Resolution	Pixel size	Line Rate (kHz)	Output	Lanes	Interface
RMSL4K76CP	4096	7	76.92	CXP-3x1 CXP-3x2 CXP-5x1	1 2	
RMSL4K100CP ¹	4096		100.00	CXP-3x1 CXP-3x2 CXP-6x1 CXP-6x2		
RMSL6K76CP	6144		76.92	CXP-3x1 CXP-3x2 CXP-5x1 CXP-5x2		
RMSL8K76CP	8192					
RMSL16K90CP ¹	16384	3.5	90.90	CXP-3x1 3x2 3x4 6x1 6x2 6x4	1 2 4	

MODEL NAMING CONVENTION

Ryugan series	R	M	SL	8K	76	CL
[RMSL8K76CL]	Ryugan	M=Mono C=Color	SL=Single line DL=Dual line	Pixels (x1024)	Line rate (KHz)	CL=Camera Link CP=CoaXPress GE=GigE Vision

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)	Bit Depth	Interface	Power Over	Dimensions (mm)	Weight (g)
CAMERA Link	SU (CCD)	SU2020 (CCD)	2048	14	Mono	F-mount	20	20	1	-	9.10	90	8 10 12	Base	-	64x70x92	410
		SU2025 (CCD)	2048	14	Mono	F-mount	25	25	1	-	11.40	90	8 10 12	Base	-	64x70x92	410
		SUi7440 (CCD)	7400	4.7	Mono	F-mount	40	40	1	-	5.20	120	8 10 12	Base	-	64x70x90	380
		SUi7450T2 (CCD)	7400	4.7	Mono	F-mount	100	50	2	-	12.50	67	8 10 12	Base	-	64x70x90	380
	CLISBee-A	XCM16K80SAT8	16384	3.5	Mono	M72 x 0.75	640	80	8	-	36.33	45.2	8	Full	-	80x130x67	680
	CLISBee-A (Dual line)	XCM2085DLMT2	2048 x 2	7	Mono	C F-mount	80 170	40 85	1 2	-	75.69	100	8 10	Base	-	60x60x49	170
		XCM4040DLMT4	4096 x 2	7	Mono	F-mount	80 160	40	2 4	-	35.94	125	8 10	B M	-	60x100x76	400
		XCM4085DLMT4	4096 x 2	7	Mono	F-mount	170 340	85	2 4	-	76.50	125	8 10	B M	-	60x100x76	400
		XCM8085DLMT8	8192 x 2	7	Mono	M72 x 0.75	170 340 680	40 85	2 4 8	-	77.55	125	8 10	B M F	-	80x110x62	630
	Ryugan	NEW RMSL2K125CL ¹	2048	14	Mono	C F-mount	320	40 80	2 4 8	-	125.00	90	8 10	B M F D	-	60x100x74	450
		RMSL4K76CL	4096	7	Mono	F-mount	340	40 60 85	2 4	-	76.92	100	8 10	B M	-	60x100x70	380
		RMSL4K100CL	4096	7	Mono	F-mount	640	40 80	2 4 8	-	100.00	75	8 10	B M F D	-	60x100x74	450
		RMSL6K52CL	6144	7	Mono	F-mount	340	40 60 85	2 4	-	52.63	100	8 10	B M	-	60x100x70	380
		NEW RMSL8K39CL	8192	3.5	Mono	F-mount	340	40 60 80 85	2 4	-	39.06	50	8 10	B M	-	60x100x70	380
		RMSL8K76CL	8192	7	Mono	M72 x 0.75	680	40 60 85	2 4 8	-	76.92	100	8 10	B M F D	-	80x120x65	600
	Rainbow (Dual line)	XCM1040DLCT3	1024 x 2	14	Color	C F-mount	85 x 3	40	RGB	-	35.84	60	24 bit RGB	Base	-	60x60x49	170
XCM2085DLCT3		2048 x 2	7	Color	C F-mount	85 x 3	40 85	RGB	-	39.55	60	24 bit RGB	Base	-	60x60x49	170	
Rainbow (Trilinear)	NUCLi4KA (CCD)	4096 x 3	10	Color	F-mount	80 x 3	80	RGB	-	17.70	130	24 30 bit RGB	B M	-	150x100x70	900	
	XCM4085TLCT6	4096 x 3	10	Color	F-mount	170 x 3	85	RGB x 1 2	-	40.00	100	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	-	17.50	130	24 30 bit RGB	B M F	-	108x150x60	800	
Prism	XCM3C4080T3	4096 x 3	7	Color	F-mount	80 x 3	80	RGB	-	18.65	40	24 30 bit RGB	B M	-	100x100x123	1100	
(Dual line)	XCM40170DLMT2CXP	4096 x 2	7	Mono	F-mount	340	-	-	1 2	77.56	100	8 10	CXP-2	-	60x100x87	450	
CoaxPress	Ryugan	RMSL4K76CP	4096	7	Mono	F-mount	340	-	-	1 2	76.92	100	8 10	CXP-3 5	Pwr over CXP	80x120x86	600
		NEW RMSL4K100CP ¹	4096	7	Mono	F-mount	409	-	-	1 2	100.00	75	8 10	CXP-3 6	-	60x100x84	450
		RMSL6K76CP	6144	7	Mono	F-mount	510	-	-	1 2	76.92	100	8 10	CXP-3 5	Pwr over CXP	80x120x86	600
		RMSL8K76CP	8192	7	Mono	M72 x 0.75	680	-	-	1 2	76.92	100	8 10	CXP-3 5	Pwr over CXP	80x120x72	610
		NEW RMSL16K90CP ¹	16384	3.5	Mono	M72 x 0.75	1440	-	-	1 2 4	90.90	50	8 10	CXP-3 6	Pwr over CXP	80x120x34	630
SU (CCD)	SU2025GIG (CCD)	2048	14	Mono	F-mount	25	-	-	-	11.40	50	8 10	GigE Vision	-	64x70x118	450	
GIG VISION	Ryugan	NEW RMSL2K53GE	2048	14	Mono	F-mount	125	-	-	-	53.10	100	8 10	GigE Vision	-	60x100x83	455
		NEW RMSL4K25GE	4096	7	Mono	F-mount	125	-	-	-	25.50	100	8 10	GigE Vision	-	60x100x83	455
		NEW RMSL6K17GE	6144	7	Mono	F-mount	125	-	-	-	17.80	100	8 10	GigE Vision	-	60x100x83	460
		NEW RMSL8K12GE	8192	7	Mono	M72 x 0.75	125	-	-	-	12.80	100	8 10	GigE Vision	-	80x120x69	720
Rainbow	NEW RCDL4K8GE ¹	4096 x 2	7	Color	F-mount	125	-	-	-	8.00	100	8	GigE Vision	-	60x100x83	455	

RYUGAN

Ryugan ("dragon eye" in Japanese) is a new series of high speed line scan cameras from NED. Having all the high qualities as NED's standard cameras, the Ryugan series add greater speeds for high demanding applications.

New models are constantly added to the Ryugan series and it now includes four GigE models.

Model	Resolution	Pixel Size	Line Rate (kHz)	Interface
RMSL2K125CL ¹	2048	14	125.00	CAMERA Link
RMSL4K76CL	4096	7	76.92	
RMSL4K100CL			100.00	
RMSL6K52CL	6144	52.63		
RMSL8K39CL	8192	3.5	39.06	CoaXPress
RMSL8K76CL		7	76.92	
RMSL4K76CP	4096	7	76.92	
RMSL4K100CP ¹			100.00	
RMSL6K76CP	6144	76.92	76.92	
RMSL8K76CP	8192			
RMSL16K90CP ¹	16384	3.5	90.90	GigE
RMSL2K53GE	2048	14	53.10	
RMSL4K25GE	4096	7	25.50	
RMSL6K17GE	6144		17.80	
RMSL8K12GE	8192	7	12.80	

RAINBOW

Add color to your solution with NED's Rainbow series. Dual line and trilinear sensor models offer great value for money. Prism-based XCM3C series incorporating NED's highly-regarded proprietary CLISBee CMOS sensor is the right choice where high precision color is a must.

Model	Resolution	Pixel Size	Line Rate (kHz)	Interface
XCM1040DLCT3	1024 x 2	7	35.84	CAMERA Link
XCM2085DLCT3	2048 x 2		39.55	
NUCLI4KA (CCD)	4096 x 3	10	17.70	
XCM3C4080T3		7	18.65	
XCM4085TLCT6	7300 x 3	10	40.00	
NUCLI7370AT6 (CCD)		7	17.50	
RCDL4K8GE ¹	4096 x 2	7	8.00	GigE

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	9.10	CAMERA Link
SU2025 (CCD)			11.40	
SUi7440 (CCD)	7400	4.7	5.20	
SUi7450T2 (CCD)			12.50	
SU2025GIG (CCD)	2048	14	11.40	GigE

CLISBee-A

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

Model	Resolution	Pixel Size	Line Rate (kHz)	Interface
XCM2085DLMT2	2048 x 2	7	75.69	CAMERA Link
XCM4040DLMT4	4096 x 2		35.94	
XCM4085DLMT4			76.50	
XCM8085DLMT8	8192 x 2		77.55	
XCM16K80SAT8	16384	3.5	36.33	CoaXPress
XCM40170DLMT2CXP	4096 x 2	77.56		

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
- 2019 Release of Ryugan GigE models





DISTRIBUTORS

ASIA PACIFIC

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