

Beamline	BL44XU	BL41XU		BL38B1	BL32XU
		normal mode	high-energy mode		
Available wavelength (Å)	0.7-1.9	0.7 - 1.9	0.35 - 0.65	0.85-1.94	0.8 - 1.4
Available beam size (w×h, μm)	20 x 20 - 70 x 70	4 × 10 - 22 × 40(4 × 5 - 22 × 45 available on request)	30 × 30 - 300 × 300	20 x 20 - 300 x 300	1 × 1 - 10 × 15
Photon flux (photons/sec)	6.5×10 ¹² (@0.9Å: 50 μm pinhole)	2.2×10 ¹² - 1.1×10 ¹³ (@1Å)	1.7×10 ¹⁰ - 2.3×10 ¹² (@0.4133Å)	1.7×10 ¹¹ (@1Å :300 μm pinhole)	9.0×10 ¹⁰ /μm ² @1 Å (constant flux density)
Detector type	MX300HE CCD	PILATUS3 6M PAD	Hamamatsu C10158DK-11(X) CMOS	PILATUS3 6M PAD	EIGER X 9M PAD
active area (wxh, mm ²)	300 x 300	423.6 x 434.6	117.6 × 117.6	423.6 x 434.6	233.2 × 245.2
pixel size (μm ²)	73.2 x 73.2	172 × 172	50 × 50	172 × 172	75 × 75
pixel number (wxh)	4096 x 4096	2463 x 2527	2352 × 2352	2463 x 2527	3110 × 3269
readout time	1.9 s	0.95 ms	14 μs/line	0.95 ms	3 μs
max frame rate (Hz)	-	100	3	100	238
Detector distance (mm)	80 - 1200	210 - 800(150 - 210 if beam size is limited to 22 × 40 & 14 × 40)	55 - 400	150 - 800	115 - 500
Detector offset	Vertical: +150 mm	Horizontal: ±50 mm Vertical: 0 - 200 mm	Horizontal: ±40 mm Vertical: ±50 mm	-	n/a
Maximum resolution (Å)	0.87@λ=0.9Å, w/o offset 0.68@λ=0.7Å, w/o offset	1.28@λ=1Å, dist=210 0.75@λ=0.7Å, dist=150	0.44@λ=0.35Å, dist=55	1.09@λ=1Å 0.92@λ=0.85Å	1.23@λ=1Å
Sample changer	SPACE	SPACE	n/a	SPACE	SPACE
Max. no. of unipucks	8	8	n/a	2	8
Cryostream	N2: 90 - 100 K He: 20 - 100 K	N2: 90 - 100 K He: 20 - 100 K	N2: 90 - 100 K He: 20 - 100 K	N2: 100 - 270 K	N2: 100 K
Available software for experiment	BSS	BSS, KUMA, SHIKA	BSS	BSS	BSS, KUMA, SHIKA
Automatic data collection		n/a	n/a		ZOO system
Remarks					~10 ¹² photons/μm ² /s available on request
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Last update	2016-09-26	2016-09-23	2016-09-23	2018-04-19	2018-04-13

Beamline	BL26B1			BL26B2	BL12B2	BL45XU (SAXS)
	PAD	CCD (PAD / CCD mode)	IP (PAD / IP mode)			
Available wavelength (Å)	0.71 - 1.9			0.7 - 1.9	0.6 - 1.9	0.9 - 1.8
Available beam size (w×h, μm)	50 x 50 - 300 x 300			60 x 60 - 120 x 120	200 x 200	250 x 150
Photon flux (photons/sec)	1.2×10 ¹⁰ - 9.5×10 ¹⁰ (@1Å)			2×10 ¹⁰ - 6×10 ¹⁰ (@1Å)	5×10 ¹⁰ (@1Å)	2×10 ¹² (@1Å)
Detector type	EIGER X 4M (standard mode) PAD	MX225HE (standard mode) CCD	RAXIS V (available for a limited time) IP	MX225HS CCD	MX225HE CCD	PILATUS3X 2M PAD
active area (w×h, mm ²)	155.2 x 162.5	225 x 225	400 x 400	225 x 225	225 x 225	253.7 x 288.8
pixel size (μm ²)	75 x 75	73.2 x 73.2	100 x 100	78.1 x 78.1	73.2 x 73.2	172 x 172
pixel number (w×h)	2070 x 2167	3072 x 3072	4000 x 4000	2880 x 2880	3072 x 3072	1475 x 1679
readout time	3 μs	1.9 s	60 s	10 ms	1.9 s	0.95 ms
max frame rate (Hz)	750	-	-	10	-	250
Detector distance (mm)	70 - 265	70 - 800	152 - 800	70 - 800	85 - 800	450 - 3500
Detector offset	-	-	-	-	Horizontal: ±50 mm Vertical: -10 - +95 mm	-
Maximum resolution (Å)	1.20@λ=1Å	1.03@λ=1Å	1.10@λ=1Å	1.06@λ=1Å	1.12@λ=1Å, w/o offset	q range: 0.005 - 2.6 Å ⁻¹ (@λ=1Å)
Sample changer	SPACE			SPACE	SPACE	GILSON 223 sample changer
Max. no. of unipucks	8			8	2	-
Cryostream	N2: 100 - 270 K			N2: 100 - 270 K	N2: 90-270 K	-
Available software for experiment	BSS			BSS	BSS	Data Collector
Automatic data collection						
Remarks						
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