

SYNAPS XM in a nutshell:

SYNAPS XM is a white opaque high grade polyester based synthetic print media with a matt finish. Water and tear resistant, SYNAPS XM offers a most cost efficient alternative to laminating paper print with foil. Its antistatic properties and dimensional stability make SYNAPS XM ideally qualified for drop-in production of high quality print on standard toner-based Multi-Functional Printers/Copiers - from one single copy to long run print series. The growing range of applications includes print materials with particularly demanding user environment, such as outdoor and indoor POS signage, menu cards, labels and tags, just to name a few.

Technical Data SYNAPS XM Xerography matt

version 1.9 - 2021-04-26

Property	Test method	Unit	XM110	XM135	XM170	XM230	XM300	XM375	XM450
Thickness Average	ASTM D-6988	μm	100 ± 5	120 ± 7	150 ± 8	200 ± 10	250 ± 15	300 ± 18	350 ± 21
Weight		g/m ²	110	135	170	230	300	375	450
Shrinkage	Internal Agfa test at 120°C/248°F	%	≤0,2	≤0,2	≤0,2	≤0,2	≤0,2	≤0,2	≤0,2
Resistance to dry ice	Internal Agfa test	°C (°F)	Tested for 5 days at -79 (-110)	Tested for 5 days at -79 (-110)	Tested for 5 days at -79 (-110)	Tested for 5 days at -79 (-110)	Tested for 5 days at -79 (-110)	Tested for 5 days at -79 (-110)	Tested for 5 days at -79 (-110)
Initial tear strength	ASTM D1004	N	38	≥45	≥58	≥8	≥100	11	≥125
Stiffness	ISO 2493	mN	2	≥5	≥10	≥25	≥40	8	≥110
Conductivity	DIN IEC 93	Ω/□	>1 x 10 ⁹	>1 x 10 ⁹	>1 x 10 ⁹	>1 x 10 ⁹	>1 x 10 ⁹	>1 x 10 ⁹	>1 x 10 ⁹
BEKK smoothness	ISO 5627	Se	125 – 215	125 – 215	125 – 215	125 – 215	125 – 215	125 – 215	125 – 215
Opacity	ISO 2471	%	87	≥87	90	≥93	≥94	95	≥96
Brightness	ISO 2470C		95	≥95	≥95	≥95	≥95	≥9	≥94
Whiteness Cie	ISO 11475		100	≥100	≥100	≥100	≥98	≥98	≥97
Gloss 85°	ISO 2813		3 – 10	3 – 10	3 – 10	3 – 10	3 – 10	3 – 10	3 – 10
Mass density	ISO 534	g/cm ³	1,22 ± 0,05	1,17 ± 0,05	1,18 ± 0,05	1,19 ± 0,05	1,25 ± 0,05	1,26 ± 0,05	1,28 ± 0,05
Shelf life		At least 24 months							
Fire Class		Information upon request							

SYNAPS XM Printer Compatibility



Prints like paper.

Version 2021-06-11

Brand	Type	Printer segment	XM110	XM135	XM170	XM230	XM300	XM375	XM450
Canon	ImagePress C600i/C650/700/C750/C800/C85i	Mid-Range Color Press	OK*(11)	OK*(63)	OK*(90)	OK*(64)	OK*(65)	OK*** (91)	
Canon	ImagePress C6000VP	Mid-Range Color Press				OK*(2)			
Canon	ImagePress C6010VP	Production Color Press		OK*(1)		OK*(2)	OK*(3)		OK*** (53)
Canon	ImagePress C7000VP	Production Color Press		OK*(1)		OK*(2)	OK*(3)		
Canon	ImagePress C7010VP	Production Color Press		OK*(1)		OK*(52)	OK*(3)		OK*** (53)
Canon	ImagePress C/8000VP/C10000VP	Production Color Press	OK*(12)	OK*(81)	OK*(92)	OK*(2)	OK*(82)		
Heidelberg	Linoprint/Versafire CP	Production Color Press		OK*(73)	OK*(74)	OK*(74)	OK*(70)	OK*(75)	OK*** (75)
Heidelberg	Linoprint/Versafire CV	Production Color Press		OK*(69)	OK*(74)	OK*(70)	OK*(71)	OK*** (47)	*** (72)
Heidelberg	Versafire EP	Production Color Press		OK*(110)	OK*(69)	OK*(74)	OK*(109)	OK*(71)	OK*(75)
Heidelberg	Versafire EV	Production Color Press		OK*(69)	OK*(74)	OK*(70)	OK*(109)	OK*** (71)	OK*** (71)
Kodak	NexPress 2100plus, 2500, S2100, S2500, S3000, SE2500, SE3000, SE3600, SX2700, SX3300, SX3900, ZX3300 and ZX3900	Production Color Press		OK** (4)	OK** (4)	OK** (5)	NOK* (18)	NOK* (18)	NOK* (18)
Kodak	NexPress S2100, S2500, S3000, SE2500, SE3000, SE3600, SX2700, SX3300, SX3900, ZX3300 and ZX3900 equipped with the Kodak NexPress Substrate Expansion kit (System Software 17 required)	Production Color Press		OK** (4)	OK** (4)	OK** (4)	OK** (5)	OK** (5)	OK** (5)
Kodak	NEXFINITY	Production Color Press		OK** (4)	OK** (4)	OK** (4)	OK** (5)	OK** (5)	OK** (5)
KonicaMinolta	AccurioPress C2060	Production Color Press		OK*(6)	OK*(86)	OK*(61)	OK*(8)	OK*** (62)	*** (62)
KonicaMinolta	AccurioPress C3070/C308/C4080/C83hc	Production Color Press	OK*(13)	OK*(111)	OK*(112)	OK*(61)	OK*(8)	OK*** (62)	OK*** (62)
KonicaMinolta	AccurioPress C6100	Production Color Press	OK*(13)	OK*(6)	OK*(86)	OK*(61)	OK*(8)	OK*(98)	OK*** (98)
KonicaMinolta	AccurioPress C12000/C14000	Production Color Press	OK*(6)	OK*(6)	OK*(86)	OK*(61)	OK*(8)	OK*(98)	OK*** (119)
KonicaMinolta	Bizhub PRESS C1060/C1070	Production Color Press		OK*(6)		OK*(61)	OK*(8)		*** (62)
KonicaMinolta	Bizhub PRESS C1085/C1100	Production Color Press		OK*(6)	OK*(86)	OK*(61)	OK*(8)	OK*** (62)	OK*** (62)
KonicaMinolta	Bizhub PRO C65hc	Mid-Range Color Press		OK*(6)		OK*(9)	OK*(8)		
KonicaMinolta	Bizhub PRO C6000	Mid-Range Color Press		OK*(6)	OK*(113)	OK*(9)	OK*(8)		
KonicaMinolta	Bizhub PRO C6501	Mid-Range Color Press				OK*(38)			
KonicaMinolta	Bizhub PRO C8000	Production Color Press		OK*(6)		OK*(7)	OK*(8)		
MGI	Meteor DP60	Mid-Range Color Press		OK*(14)		OK*(15)	OK*(16)		*(60)
MGI	Meteor DP8700 XL	Production Color Press		OK*(44)		OK*(45)	OK*(46)		*(48)
MGI	Meteor DP8700 XL +	Production Color Press		OK*(76)	OK*(87)	OK*(77)	OK*(78)	OK*(88)	OK*(79)
Oki	C844dn	Mid-Range Color Press		*(10)	*(10)	NOK* (18)	NOK* (18)		
Oki	ES3640a3	Mid-Range Color Press		*(17)		NOK* (18)	NOK* (18)		
Oki	C911dn, PRO9431dn, PRO9541dn, PRO9542c	Mid-Range Color Press		*(83)		NOK* (18)	NOK* (18)		
Ricoh	Pro C651EX	Mid-Range Color Press		OK*(23)		OK*(59)	OK*(59)		
Ricoh	Pro C720S	Mid-Range Color Press				*(19)			
Ricoh	Pro C900S	Mid-Range Color Press		OK*(20)		*(21)	*(22)		
Ricoh	Pro C901	Mid-Range Color Press		OK*(23)		OK*(24)	OK*(24)		
Ricoh	Pro C5100s	Mid-Range Color Press		OK*(66)	OK*(66)	OK*(67)	OK*(67)	*** (68)	*** (68)
Ricoh	Pro C5200s/C5210s	Mid-Range Color Press	OK*(26)	OK*(69)	OK*(74)	OK*(109)	OK*(71)	OK*** (75)	OK*** (75)
Ricoh	Pro C5300c/C5310s	Mid-Range Color Press	OK*(55)	OK*(114)	OK*(115)	OK*(116)	OK*(117)	OK*** (118)	OK*** (118)
Ricoh	Pro C7100s	Production Color Press		OK*(69)	OK*(74)	OK*(70)	OK*(71)	OK*** (47)	*** (72)
Ricoh	Pro C7200s/C7210s	Production Color Press	OK*(40)	OK*(69)	OK*(74)	OK*(70)	OK*(109)	OK*** (71)	OK*** (71)
Ricoh	Pro C9100/C9110	Production Color Press		OK*(73)	OK*(74)	OK*(74)	OK*(70)	OK*(75)	OK*** (75)
Ricoh	Pro C9200s/C9210s	Production Color Press	OK*(43)	OK*(110)	OK*(69)	OK*(74)	OK*(109)	OK*(71)	OK*(75)
Xerox	Color C60/C70	Mid-Range Color Press		OK*(80)	OK*(89)	OK*(84)	OK*(85)	NOK* (18)	
Xerox	Color 1000	Production Color Press		OK*(27)		OK*(28)	OK*(29)		
Xerox	Docucolor 5000	Mid-Range Color Press		OK*(35)		*(36)	*(37)		
Xerox	Docucolor 8002	Mid-Range Color Press				OK*(39)			
Xerox	iGen3/iGen4/iGen5/iGen150	Production Color Press		OK*(30)		OK*(31)	OK*(32)		OK*(49)
Xerox	Iridesse	Production Color Press	OK*(54)	OK*(104)	OK*(105)	OK*(106)	OK*(107)	OK*(108)	
Xerox	700	Mid-Range Color Press		OK*(33)		*(34)			
Xerox	700i	Mid-Range Color Press		OK*(50)		*(51)			
Xerox	770	Mid-Range Color Press		OK*(50)		OK*(51)			
Xerox	C75/J75	Mid-Range Color Press		OK*(56)		OK*(57)	OK*(58)		
Xerox	Nuvera 288 EA	Production B&W		OK*(41)		OK*(42)			
Xerox	Versant 80	Mid-Range Color Press		OK*(93)	OK*(94)	OK*(95)	OK*(96)	OK*** (97)	
Xerox	Versant 180	Mid-Range Color Press		OK*(99)	OK*(100)	OK*(101)	OK*(102)	OK*** (103)	
Xerox	Versant 2100	Production Color Press		OK*(30)		OK*(31)	OK*(32)		
Xeikon	8000 Series QA-P	Production Color Press							https://printmedia.xeikon.com/

LEGEND

	duplex printing (double sided one pass) = OK		duplex printing (double sided one pass) = not OK simplex printing (single sided) = OK		simplex printing (single sided) = not OK		not tested
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* See settings/comments next page. / ** In order to avoid contamination (by fuser oil) inside NexPress(es), Kodak strongly recommends to print all synthetic substrates in simplex mode. Duplex printing is always possible by printing in two passes. / *** Print result ok but out of range for this press concerning gauge/weight.

SYNAPS XM Printer Compatibility



Printer Settings

Depending on climatic conditions, toner transfer setting adjustments can be necessary. For best printing result on desktop/office printers, SYNAPS XM135 is recommended. Experience learns that good print results can also be achieved on some desktop/office printers with SYNAPS XM230. See our FAQ for more detailed information.

The results and recommended settings represent our own findings of good printing quality. They are not results from evaluations through the concerning suppliers, nor do they hold any guarantee for the performance on any specific device

1	2-sided coated / coated 3	41	plain 135gr two-side high gloss	83	ultra heavy 2: 189-216gr
2	2-sided coated / coated 6 / transfer +5 on both sides	42	plain 230gr two-side high gloss	84	coated 2B / image transfer R/V: 200%
3	2-sided coated / coated 7 / transfer +8 on both sides	43	synthetic paper / 105-163gr / fusing T° 140	85	coated 3B / image transfer: 150%
4	plastic / matt coated / color white / set gr. weight	44	Fusing +50% / Transfer +40%	86	coated mat / 136-176gr
5	plastic / matt coated / color white / set gr. weight / transfer current of consecutive image units + fuser discharge level may require adjustment to achieve optimum print quality	45	Fusing +60% / Transfer +40%	87	fusing: 20% / back-up: auto / THV: 0%
6	coated mat / 106-135gr	46	Fusing +80% / Transfer +40%	88	fusing: 50% / back-up: auto / THV: 0%
7	coated mat / 221-256gr	47	synthetic / paper weight 8 / transfer current adjustment may be required to achieve optimum print result	89	coated 2A / toner transfer: 150% R+V
8	coated mat / 257-300gr	48	Fusing +85% / Transfer +70%	90	2-sided coated 3 / transfer +15 on both sides
9	coated mat / 210-256gr	49	Nevertear 350µ	91	2-sided coated 6 / transfer +20 on both sides
10	ultra heavy 1: 129-188gr	50	coated / 129-150gr	92	2-sided coated 4 / transfer +5 on both sides
11	2-sided coated 125gr/transfer +7 on both sides	51	coated / 221-265gr	93	coated / 103-135gr / image transfer R/V: 150%
12	2-sided coated 90gr	52	2-sided coated / coated 6 / transfer +8 on both sides	94	coated / 158-176gr / image transfer R/V: 150
13	coated mat / 81-91gr	53	2-sided coated / coated 9 / transfer +8 on both sides	95	coated / 221-256gr / image transfer R/V: 210
14	fusing front: 25% / fusing back: 15% / transfer: 50% / IR off / speed: high	54	plain mat coated 110gr/image transfer setting recto 160% and verso 150%	96	coated / 257-300gr / image transfer R/V: 210
15	fusing front: 35% / fusing back: 25% / transfer: 50% / IR off / speed: high	55	synthetic / 101-127,4gr	97	coated / 301-350gr / image transfer: 210
16	fusing front: 45% / fusing back: 35% / transfer: 50% / IR off / speed: high	56	coated / 129-150gr / image transfer R/V: 150	98	coated mat / 351-400gr
17	automatic media check	57	coated / 221-256gr / image transfer R/V: 150	99	film / 103-135gr
18	poor colour rendering	58	coated / 257-300gr / image transfer R/V: 250	100	film / 158/176gr
19	media type: special 5 / paper setting: thick 3	59	coated matt / type 6 / 220,1-256gr	101	film / 221-256gr
20	media type: special 5 / paper setting: thick 1 note: oildrops can locally disturb transfer when du plex printing	60	fusing: 55% / backup: 45% / transfer: 50%	102	film / 257-300gr
21	media type: special 5 / paper setting: thick 2	61	coated mat / 217-256gr	103	film / 300-350gr
22	media type: xerox coated / paper setting: thick 3	62	coated mat / 301-350gr	104	plain matt coated / 135gr / image transfer setting recto 160% and verso 150%
23	paper 4 / media type coated mat	63	plain 2 / 91-105gr / transfer R/V +10	105	plain matt coated / 170gr / image transfer setting recto 160% and verso 150%
24	to be confirmed by Ricoh	64	heavy 4 / 181-220gr / transfer R/V +15	106	plain matt coated / 230gr / image transfer setting recto 180% and verso 160%
26	synthetic paper / 151-265gr / fusing T° 131	65	2-sided coated / 257-300gr / transfer R/V +20	107	plain matt coated / 300gr / image transfer setting recto 220% and verso 180%
27	High gloss / 170gr	66	coated mat / paper weight 6	108	plain matt coated / 400gr / image transfer setting recto 240% and verso 200%
28	High gloss / 230gr	67	coated mat / paper weight 7	109	synthetic / paper weight 7
29	High gloss / 350gr	68	coated mat / paper weight 8 / to be confirmed by Ricoh	110	synthetic / paper weight 1
30	Nevertear 120	69	synthetic / paper weight 4	111	coated mat / 106-135gr / T° upper fusing roller -20°C / T° lower fusing roller -15°C
31	Nevertear 195	70	synthetic / paper weight 6	112	coated mat / 136-176gr / T° upper fusing roller -20°C / T° lower fusing roller -15°C
32	Nevertear 270	71	synthetic / paper weight 8	113	coated mat / 163-209gr
33	coated paper / 129-150gr	72	synthetic / paper weight 8 / to be confirmed by Ricoh	114	synthetic / 127,5-150gr
34	coated paper / 221-265gr	73	synthetic / paper weight 3	115	synthetic / 150,1-216gr
35	coated / 136-186gr	74	synthetic / paper weight 5	116	synthetic / 216,1-256gr
36	coated / 187-220gr + optimized transfer	75	synthetic / paper weight 9	117	synthetic / 256,1-300gr
37	coated / 221-300gr + optimized transfer	76	fusing: 15% / back-up: auto / THV: 0%	118	synthetic / 300,1-360gr
38	coated gloss / 230gr	77	fusing: 25% / back-up: auto / THV: 0%	119	coated mat / 401-450gr / cloudy image setting 4 / 2nd transfer output front -25
39	plain coated / 221-300gr	78	fusing: 45% / back-up: auto / THV: 0%		
40	synthetic paper / 105-163gr / fusing T° 137	79	fusing: 55% / back-up: auto / THV: 0%		
		80	coated 1B / toner transfer: 150% R+V		
		81	2-sided coated 2 / transfer 0 on both sides		
		82	2-sided coated 7 / transfer +5 on both sides		