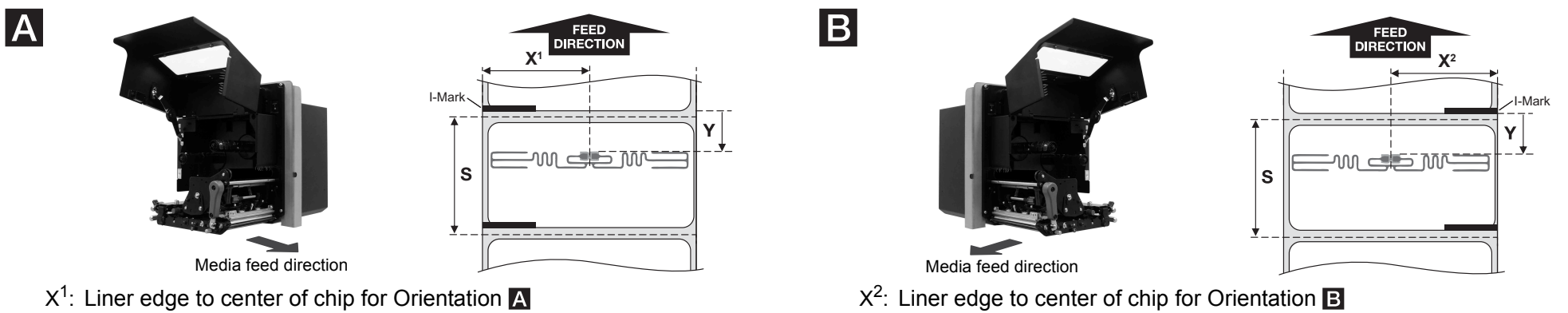


UHF Inlay Configuration Guide

Printer Orientation and Label Measurements

In order to successfully configure your S84-ex UHF printer, you will need the following information about your label.



Y: Optimum Encoding Position*
S: Minimum Inlay Separation

*Y: Measured from tail edge of I-mark to lead edge of inlay when I-mark sensor is used.
Measured from lead edge of label to lead edge of inlay when gap sensor is used.

How to check the Configuration Table

E Placement and Configurations valid for European (ETSI) frequency range, 865-868MHz
F Valid for Frequencies that fall within the FCC range, 902-928MHz

Feed direction affects results, and is signified by the images in the following table.

Feed Direction
The arrow in the header of table indicates the direction in which labels are output from the printer.

Printer orientation will affect viable settings.

NO.	Manufacturer	Inlay [IC Chip]	Feed Direction	Region	Antenna Pitch	A Americas: Standard/Right Hand Europe/Asia: Left Hand					B Americas: Opposite/Left Hand Europe/Asia: Right Hand					
						Position(mm)			Power (dBm)		Position(mm)			Power (dBm)		
						X	Y	S	Write	Read	X	Y	S	Write	Read	
1	Alien Technology	ALN-9640 "Squiggle" [Alien Higgs3]		E	Short Pitch	50.7-55.4	1-5	19	22	9	—	—	—	—	—	
					Standard	55.4-70.4	2-16	54	22	13	50.4-60.4	17-24	30	20	7	
					F	Short Pitch	50.4-55.4	2-6	19	22	9	60.4-65.4	1-7	19	24	12
						Standard	55.4-75.4	1-10	59	24	16	50.4-65.4	16-23	37	22	9
2	Alien Technology	ALN-9762 "Short" [Alien Higgs4]		E	Short Pitch	—	—	—	—	—	51-54	1-3	38	24	18	
					Standard	—	—	—	—	—	—	—	—	—	—	—
					F	Short Pitch	52-54	0-3	23	24	17	36-39	1-3	20	24	12
						Standard	—	—	—	—	—	—	—	—	—	—
3	Alien Technology	ALN-9662 "Short" [Alien Higgs3]		E	Short Pitch	36-39	0-4	16	23	14	57-63	1-4	43	24	23	
					Standard	38-62	0-3	60	24	18	48-58	15-24	60	24	17	
					F	Short Pitch	38-48	0-4	40	24	16	58-63	1-4	20	24	13
						Standard	38-58	0-4	60	24	18	43-58	19-23	60	24	17

Select the related Antenna Pitch according to your label's "Y" value.


S84-ex UHF Inlay Placement & Configuration Table

















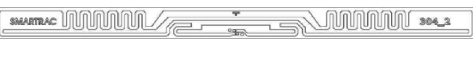
This recommendation has been tested successfully at SATO. Results may vary in the actual customer installation due to overall system tolerances. Validation of functionality in the actual system is therefore recommended.

In no event shall SATO be liable for any faults arising out of use of or inability to use the product.

E Placement and Configurations valid for European (ETSI) frequency range, 865-868MHz

F Valid for Frequencies that fall within the FCC range, 902-928MHz

Feed Direction
 The arrow in the header of table indicates the direction in which labels are output from the printer.

		A Americas: Standard/Right Hand Europe/Asia: Left Hand					B Americas: Opposite/Left Hand Europe/Asia: Right Hand									
		Position(mm)			Power (dBm)		Position(mm)			Power (dBm)						
NO.	Manufacturer	Inlay [IC Chip]	Feed Direction	Region	Antenna Pitch	X	Y	S	Write	Read	X	Y	S	Write	Read	
1	Alien Technology	ALN-9640 "Squiggle" [Alien Higgs3]		E	Short Pitch	50.7-55.4	1-5	19	22	9	—	—	—	—	—	—
					Standard	55.4-70.4	2-16	54	22	13	50.4-60.4	17-24	30	20	7	
					F	Short Pitch	50.4-55.4	2-6	19	22	9	60.4-65.4	1-7	19	24	12
						Standard	55.4-75.4	1-10	59	24	16	50.4-65.4	16-23	37	22	9
2	Alien Technology	ALN-9762 "Short" [Alien Higgs4]		E	Short Pitch	—	—	—	—	—	—	51-54	1-3	38	24	18
					Standard	—	—	—	—	—	—	—	—	—	—	—
					F	Short Pitch	52-54	0-3	23	24	17	36-39	1-3	20	24	12
						Standard	—	—	—	—	—	—	—	—	—	—
3	Alien Technology	ALN-9662 "Short" [Alien Higgs3]		E	Short Pitch	36-39	0-4	16	23	14	57-63	1-4	43	24	23	
					Standard	38-62	0-3	60	24	18	48-58	15-24	60	24	17	
					F	Short Pitch	38-48	0-4	40	24	16	58-63	1-4	20	24	13
						Standard	38-58	0-4	60	24	18	43-58	19-23	60	24	17
4	Alien Technology	ALN-9730 "Squiglette" [Alien Higgs 4]		E	Short Pitch	—	—	—	—	—	—	51-54	1-4	36	24	19
					Standard	—	—	—	—	—	—	—	—	—	—	
					F	Short Pitch	—	—	—	—	—	41-59	2-4	20	24	12
						Standard	—	—	—	—	—	—	—	—	—	—
5	Alien Technology	ALN-9630 "Squiglette" [Alien Higgs 3]		E	Short Pitch	48-53	2-4	19	24	17	41-44	0-1	19	24	10	
					Standard	43-53	13-16	54	24	16	43-63	15-25	55	24	15	
					F	Short Pitch	47-53	0-7	21	24	18	41-44	0-1	20	24	14
						Standard	42-48	1-5	57	24	18	43-63	15-23	56	24	14
6	Avery Dennison	AD-226iL [NXP UCODE G2iL]		E	Short Pitch	48.5-51.5	3-7	19	23	14	50.5-60.5	0-3	38	24	19	
					Standard	48.5-65.5	13-17	50	24	15	50.5-65.5	20-30	60	22	14	
					F	Short Pitch	55.5-65.5	4-6	20	23	11	50.5-55.5	0-4	38	23	17
						Standard	55.5-70.5	13-17	55	23	18	50.5-65.5	20-25	57	24	14
7	Avery Dennison	AD-233m5 [Impinj Monza5]		E	Short Pitch	47-49	2-3	19	24	15	38-48	4-6	38	24	17	
					Standard	37-48	15-22	60	23	16	43-63	15-26	64	22	18	
					F	Short Pitch	42-44	2-3	19	24	12	38-48	4-6	38	24	16
						Standard	37-53	0-26	60	23	21	38-58	15-25	60	21	17
8	Avery Dennison	AD-227m5 [Impinj Monza5]		E	Short Pitch	65.5-75.5	0-4	18	23	12	50.5-75.5	1-7	37	24	20	
					Standard	50.5-60.5	12-19	59	20	15	50.5-70.5	20-29	58	18	12	
					F	Short Pitch	55.5-70.5	1-3	23	24	13	55.5-70.5	0-3	19	24	10
						Standard	50.5-60.5	13-19	52	20	14	50.5-55.5	20-25	20	15	8
9	Avery Dennison	AD-232iL [NXP UCODE G2iL]		E	Short Pitch	38-57	1-4	37	24	16	41-44	0-6	38	23	14	
					Standard	43-62	2-5	60	24	15	43-53	17-24	65	24	18	
					F	Short Pitch	46-49	1-2	40	24	18	43-58	1-6	20	23	11
						Standard	38-57	1-5	60	24	19	—	—	—	—	—
10	Avery Dennison	AD-318m5 [Impinj Monza5]		E	Short Pitch	—	—	—	—	—	—	—	—	—	—	
					Standard	35-50	16-25	62	24	21	40-55	14-25	42	24	16	
					F	Short Pitch	—	—	—	—	—	—	—	—	—	—
						Standard	40-50	12-16	54	24	19	33-53	10-21	58	24	18
11	SMARTRAC	Belt M5 [Impinj Monza5]		E	Short Pitch	—	—	—	—	—	—	—	—	—	—	
					Standard	40-57	13-21	56	23	19	48-63	20-25	59	23	16	
					F	Short Pitch	—	—	—	—	—	—	—	—	—	—
						Standard	38-57	13-20	59	23	18	43-63	20-24	63	23	18
12	SMARTRAC	Belt [NXP UCODE G2iL]		E	Short Pitch	—	—	—	—	—	—	—	—	—	—	
					Standard	38-52	2-6	58	23	17	—	—	—	—	—	
					F	Short Pitch	—	—	—	—	—	—	—	—	—	—
						Standard	38-52	2-6	60	24	18	—	—	—	—	—
13	SMARTRAC	Short Dipole i [NXP UCODE G2iL/iM]		E	Short Pitch	52.5-55.5	1-3	18	24	16	55.5-65.5	0-2	20	24	15	
					Standard	48.5-53.5	12-23	58	24	19	47.5-50.5	16-22	25	24	12	
					F	Short Pitch	52.5-55.5	2-4	19	24	15	47.5-55.5	0-2	20	24	14
						Standard	50.5-70.5	1-5	59	24	20	47.5-55.5	16-21	36	24	12
14	SMARTRAC	ShortDipole [Impinj Monza 5]		E	Short Pitch	47-50	1-3	20	24	16	53-58	0-2	19	24	12	
					Standard	47-70	5-14	58	20	16	48-58	18-26	60	22	17	
					F	Short Pitch	47-60	2-4	35	24	15	48-53	0-2	20	24	12
						Standard	47-70	7-18	59	20	16	48-58	16-26	61	22	16
15	SMARTRAC	DogBone i [NXP UCODE G2iL/iM]		E	Short Pitch	—	—	—	—	—	—	—	—	—	—	
					Standard	46-76	2-14	66	23	15	52-62	15-22	37	20	8	
					F	Short Pitch	—	—	—	—	—	—	—	—	—	—
						Standard	46-66	0-16	66	23	13	52-62	12-21	38	23	9
16	SMARTRAC	DogBone i [Impinj Monza4 QT]		E	Short Pitch	—	—	—	—	—	—	—	—	—	—	
					Standard	51-77	3-17	65	16	13	52-67	15-21	29	16	7	
					F	Short Pitch	—	—	—	—	—	—	—	—	—	—
						Standard	51-57	2-13	29	13	10	52-57	11-20	33	16	7
17	SMARTRAC	Viper [Impinj Monza4D]		E	Short Pitch	62-73	2-7	19	24	10	—	—	—	—	—	
					Standard	57-68	10-20	53	22	16	62-68	18-25	25	13	7	
					F	Short Pitch	57-68	0-5	23	24	18	—	—	—	—	—
						Standard	57-68	8-16	25	23	16	57-68	17-23	22	13	7

For inlays not included on this list, please contact your local SATO dealer or sales office. www.satoworldwide.com

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