

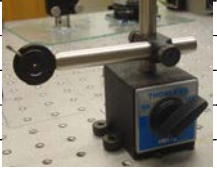






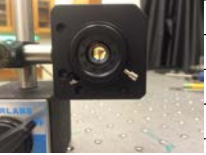


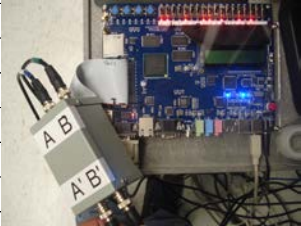


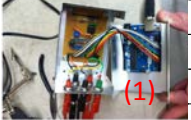

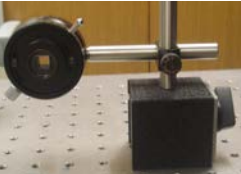


Price list for photon experiments							
Basic down-conversion							
		vendor	model	price	#	total	
	mirror for blue laser	Thorlabs	BB1-E02	75	1	75	It is important to have a mirror that does not absorb the blue laser - Al absorbs! 155
	mirror mount	Thorlabs	KM100	40	1	40	
	2" pedestal	Newport	9954	26	1	26	
	regular fork clamp	Newport	9909	14	1	14	
	Down conversion crystal	Newlight		549	1	549	
	BBO 5x5x3mm 29deg type-I	Photonics Inc.					
	Rotational/tilt mount	Thorlabs	KS1RS	232	1	232	NEW
	1.5" pedestal	Newport	9953	26	1	26	
	Helpful	Thorlabs	ID25SS	56	2	112	
	iris	Thorlabs	ID25SS	56	2	112	
	Magnetic mount	Thorlabs	MB175	48	2	96	
	3" post	Thorlabs	TR3	5	4	20	
	Post holder	Thorlabs	RA90	10	2	20	
Thumbscrews	Thorlabs	TS25H	2	4	8	256	
HeNe laser (surplus)							
	Blue laser options (NEW)	(1) GaN diode laser	Power technology	7000	1	7000	Current and temp control
	(2) GaN diode laser	Crystal lase	DL-405-50	4000	1	4000	Current and temp control, 50 mW
	(3) GaN diode laser	Power techr	GPD405-50	400	1	400	Current control, 50 mW
	(4) GaN diode laser	Axiz	AIX-405-150T	64	1	64	Rugged, but with current and temp control, 150 mW
	(5) GaN laser pointer	Laser pointer	HK-E03143	41	1	41	free running
	1.5" pedestal	Newport	9953	26	2	52	for all but (3)
	regular fork clamp	Newport	9909	14	2	28	for all but (3)
	Holder	Thorlabs	KM100V	89	1	89	for (5)
						option 3	440

	mirrors for HeNe	20mm mirror mounted	Edmund	M33-502	85	3	255		
		2.5" pedestal	Newport		9955	23	3	69	
		Thread adapter	Thorlabs	AP8E25E		1.7	3	5.1	These are to connect mirror to pedestal.
		Spacers	Thorlabs	SD1		7	3	21	
		regular fork clamp	Newport		9909	14	3	42	
		flipper mirror	Newport		9891	149	1	149	
		1.5" pedestal	Newport		9953	26	1	26	
		dielectric mirror	Thorlabs	BB1-E02		75	1	75	642.1
	Band-pass filters	1" 800nm, 40nm	Thorlabs	FB800-40	99	3	297		
		1" mount	Newport		9834	24	3	72	
		2" pedestal	Newport		9954	26	3	78	
		Pedestal shim set	Newport		9950	49	1	49	useful for other mounts
		regular fork clamp	Newport		9909	14	3	42	538
 	Fiber transport (NEW)	Collimator 11mm, FC	Thorlabs	F220FCB	145	3	435	This new mount greatly helps with the alignment.	
		Adapter	Thorlabs	AD11F	28	3	84		
		Mirror mount	Thorlabs	KM100T	64	1	64		
		Threaded iris	Thorlabs	SM1D12	56	3	168		
		Magnetic mount	Thorlabs	MB175	48	3	144	Mag mount is best for these	
		3" post	Thorlabs	TR3	6	6	36		
		Post holder	Thorlabs	RA90	10	3	30		
		Thumbscrews	Thorlabs	TS25H	2	6	12		
		FC patch fibers 1m	Thorlabs	M31L01	48	3	144	1117	
	plate 3/8" thick, 1-m radius of curvature		custom						
		table clamps	Thorlabs	CL5	4	2	8	8	

APD detectors		Excelitas/Alpha		1430	3	4290	4290
							
Electronics	(1) Coincidence unit software	Altera DE2 Labview	DE2	250	1		250
							
Optical breadboard	2'x5'x4"	Thorlabs	B3060G	1900	1	1900	1900
			<b>Total basic downconversion</b>				<b>10403.1</b>
<b>Single Photon interference setup</b>							
Mach-Zehnder	Non-polarizing beam splitters near IR 20mm	Thorlabs	BS017	190	2	380	buy together
	Beam splitter mount	Newport		9481	336	2	672
	1.5" pedestal	Newport		9953	26	3	78
	mounted mirror	Edmund	M33-502		85	3	255
	2.5" pedestal	Newport		9955	30	2	60
	Thread adapter	Thorlabs	AP8E25E		7	2	14
	short fork holder	Newport		9916	13	4	52
	piezo electric	Thorlabs	AE0505D08F		131	1	131
	linear stage	Thorlabs	MT1		286	1	286
							6.6x6.5x10mm w/o amplif 1928

	Eraser additions	Zero-order waveplates	NewLight Ph	WPA03-H-810	249	2	498	
		polarizer holder	Optosigma	114-0240	125	2	250	
		holder adapter	Optosigma	114-0420	35	2	70	
		1.5" pedestal	Newport	9953	26	2	52	
		short fork holder	Newport	9916	13	2	26	
		polarizing beam splitter	Thorlabs	PBS102	183	1	183	
		Rotary mount	Thorlabs	RSP1x15	128	1	128	
		1" adapter for PBS	custom					
		Magnetic mount	Thorlabs	MB175	48	1	48	
		3" post	Thorlabs	TR3	6	2	12	
	Post holder	Thorlabs	RA90	10	1	10		
	Thumbscrews	Thorlabs	TS25H	2	2	4	1281	
	Additional electronics	(1) D/A interface	Arduino	custom	50	1	50	
		(2) Voltage amplifier	Emco	Q02-24	81	1	81	131
				<b>Additional interference</b>				<b>3209</b>
<b>Entanglement/Bell setup</b>								
		Half-wave plate 405nm	NewLight Ph	WPA03-H-405	249	1	249	
		Rotational mount	Thorlabs	RSP1x15	128	1	128	
		Compensating crystal	Newlight	QAR25550-A-AR405	429	1	429	
		Crystal pair	Newlight	PABBO5050-405(I)-HA3	1000	1	1000	
		Rotational/tilt mount	Thorlabs	KS1RS	232	1	232	NEW
		1.5" pedestal	Newport	9953	20	1	20	
		Glan-Thompson prism	Thorlabs	GTH10M	555	2	1110	
		prism rotary holder	Optosigma	114-0240	125	2	250	
		holder adapter	Optosigma	114-0420	35	2	70	
		1.5" pedestal	Newport	9953	20	2	40	
		regular fork clamp	Newport	9909	14	2	28	
				<b>Additional Entanglement</b>				<b>3556</b>
				<b>All</b>				<b>17168.1</b>