

Consumables and critical spare parts available for LASER3

#	Description	Part number	In Stock	Unit price \$	Unit price Euros *	Mean Lifetime (hr)	Missing parts LS2	Cost LS2 Euros	Missing parts LS3	Cost LS3 Euros
1	YLF Crystal Rod Assembly	1001-00955	2*	6000	9850	8000	1	9850	3	29550
2	YLF Krypton Arc Lamp	2601-00124	21	265	395	1000	5	1975	24	9480
3	YLF Lamp Jack Assembly 118	0201-03717	22	202.5	260	1000	5	1300	24	6240
4	YLF DI Cartridge filter	72835	13	66.6	135	2000	0	0	13	1755
5	Ti:S Pockel Cell (QS-3)	Quantum tec.	4*	2717	N/A	8000	0	0	1	2100
6	Ti:S HV Pulser (HVP-525-PS)	Quantum tec.	4*	1837	N/A	8000	0	0	1	1500
7	Ti:S-3 Crystal, SCRY-00361	<i>custom made</i>	1	3361		should be reliable				
8	Ti:S-3 Pump Focus Lens, 1105-05438	<i>custom made</i>	1	118		should be reliable				
9	Ti:S-3 Short wave pass filter intra-cavity filter 700nm	<i>custom made</i>	1	3750		should be reliable				
10	Ti:S-3 Pump and output coupling mirror	<i>custom made</i>	0			should be reliable				
11	Ti:S-3 fold mirror	<i>custom made</i>	0			should be reliable				
12	Ti:S-3 cavity end mirrors, x2	<i>custom made</i>	0			should be reliable				
ESTIMATE:								13125		50625

*: Including used parts in dismantled Quantronix blue lasers 1 and 2

*: Price in Euros valid up to April 2013

Estimation of the possible working time for IR laser:

Statistics of YLF rods:

laser1: new crystal after 11000hrs, after 7000hrs, after 6000hrs, 9700hrs, last ~8000hrs

5 crystals from 2004 to 2013

with laser2 working time to time instead of laser1

If laser is running all the time, average is 8000hrs or 1 year.

Housing and gold reflector:

from 2007-2008, housing and or gold reflector has been replaced twice on each lasers.

2 housing / 6 years or :

laser2 spare laser and laser3 partially used: 3 crystals in 13years/laser2, 2 crystals for laser3.

Laser3:

Existing crystal mount with mileage of 1,620 hrs.

Could operate additional 5,000 hrs ->

Crystal from laser2 from June2012 and not used a lot:

Crystal from laser1 new Jan2013

total for crystal life time :

0.7 year

1 year

1 year

2.7 years

Based on :

LS2: 3 years

LS3: 3 years

Define: 8000 hrs = 1 year (333 days)

Statistics of other consumables:

Lamp: 1 lamp = 1000hrs thus:

1.25 years

Lamp jacket Assy

2 years

DI Cartridge : 1 / 3 months

3 years

HV pulser:

laser1: Feb 2008, April 2010, june 2011, oct 2011

the worst case, laser1. 5 years from 2008 to 2012 , x4 HV pulser.

Q-switch:

laser1: Oct 2011, Jun 2011, april 2010, Fev 2008

Laser2: june 2011, march 2012