

E1900237-v2

In vacuum active elements for frequency-dependent squeezing (per site)

Additional elements/electronics that need to be built

On VIP in HAM7:

- 4x Picomotors for co-aligning the filter cavity 532nm beam (FC532)
- 1x lens translation stage
Either get same model as before, or replace both with Slawek's type. - Peter
- 1x DC PD for FC532 polarization monitoring

HAM7

- SQZ_TT1 4 x BOSEM + AWC → HDS
- SQZ_TT2 4 x BOSEM + AWC → HDS
- FC_TT1 4 x BOSEM → HDS without AWC, but it could re-use existing tip-tilt ZM1
- FC_TT2 4 x BOSEM +AWC → HDS
- FC_TT3 4 x BOSEM → HDS without AWC, but it could re-use existing tip-tilt ZM2

HAM5

- SQZ_TT3 4 x BOSEM → HDS without AWC, but it could re-use existing tip-tilt if one of the OMs is replaced by HDS
- 2x Filter cavity HSTS

HAM8:

- 4x picomotors for DC-QPD centering
- 2x 1064 DC-QPDs (high-transimp)
- 2x 532 DC-QPDs

Existing elements/electronics that will be re-used

On VIP

2 x DCPD for fiber monitoring

1 x Lens translation stage, PZT driven

OPO cavity

1 x Oven translation stage, PZT driven

1 x Peltier heater

3 x Thermistor, possibly more

2 x Cavity PZT, avoid crosstalk with oven

HAM7 (moved from HAM6):

2 1064 DC-QPDs (w/ 100kHz BW) – these are the OMC QPDs

1 Beam Diverter (currently in HAM6 between OPO and OFI)

Suspensions

VOPO 6 x aOSEM