AOT-YVO-25QI

Specification includes:-

Max rep-rate:	25kHz
External triggering:	TTL, 50Ohm input, 0-25kHz
Jitter to external trigger:	+/-0.5ns, or less
Pulse duration (FWHM):	1.5ns (nominal)
Wavelength:	1064nm
Bandwidth:	1nm, or less
Polarisation:	> 100:1 plane polarised
Spatial mode:	TEMoo, better than 1.25x diffraction limited
Beam waist size (2ω):	0.20mm (nominal)
Beam divergence (2θ):	6.0mrad (nominal)
Beam ellipticity:	< 15%
Average power:	750mW (max) @ 25kHz
Pulse energy:	40uJ (max) @ < 5kHz
Operating environment:	Ambient 15-30^{0}C and above dew point Head case < 30^{0}C, on heat sink if necessary
Power stability:	5% RMS or better

Configuration and Services

The AOT-YVO-25QI laser head is ~ 75(W) x 75(H) x 225(L) mm. The optical beam is nominally 20mm off the base. The PSU/control unit is ~ 110mm (W) x 135mm (H) x 250mm (L). The laser head is connected to the PSU/control unit via an umbilical cable nominally 2m in length. The external services required are low voltage DC and a 0 – 25kHz TTL trigger pulse. Power consumption is < 50W.

Notes
1. Specifications are subject to change by AOT without notice
2. Min pulse duration varies slightly with rep-rate – typically in the range ~ 1.2ns – 1.7ns
3. Timing jitter is SD at max rep-rate (reduces to ~ 200ps at low rep-rates)
4. Beam waist and divergence change slightly with output power due to changes in the thermal load
5. Stability measurements made over +/- 2degrees dynamic temperature range with measurement
6. Specifications apply over a temperature range of 15-30oC in a non-condensing environment
7. The laser head temperature should be maintained below 30oC, by attaching to a heat sink if necessary
8. Other models and options – information on application to AOT