VIS - WAVEFRONT SENSOR

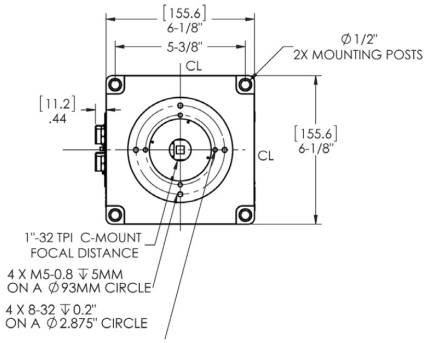
ALPAO atmospheric turbulence WFS is a Shack-Hartmann WFS dedicated to astronomy and defense applications. With the most advanced EMCCD sensor, it features a high sensitivity and a very fast frequency. The latency has been optimized to fit the most demanding application.
This sensor perfectly fits with ALPAO DM and ALPAO Real Time Computer: ACEfast.

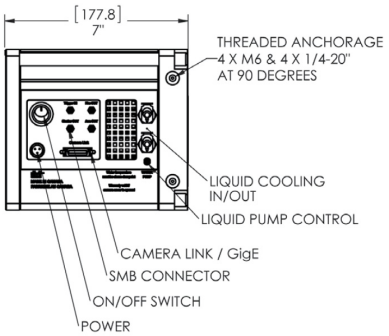
KEY FEATURES:

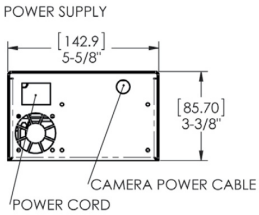
- High sensitivity in the visible range
- Fast WFS
- Low latency

TYPICAL PERFORMANCES:

	VIS WFS-69	VIS WFS-97	VIS WFS-277	VIS WFS-468
Sensor type	EMCCD			
Detection area	3.1 x 3.1 mm²			
Acquisition frequency	1838 Hz	1004 Hz		
Sensor maximum quantum efficiency	>90% at 600 nm			
Number of microlenses	8 x 8	10 x 10	16 x 16	23 x 23
Spectral range	250 - 1100 nm			
Interface	Camera Link			
Dynamic in tip-tilt / focus (PtV)	10 µm	20 µm	15 µm	10 µm
Residual WFE error on closed loop *	20 nm RMS			
Absolute precision *	λ/20 RMS			
Repeatability *	10 nm RMS			
Operating temperature	0°C to 30°C			
Recommended DM	DM69	DM97-15	DM277	DM468







PRODUCT DATASHEET
ATMOSPHERIC TURBULENCE WFS
rev. A

MIRROR
SOFTWARE
SENSOR

Note *: considering a measurement performed in good flux conditions and without wavefront perturbation