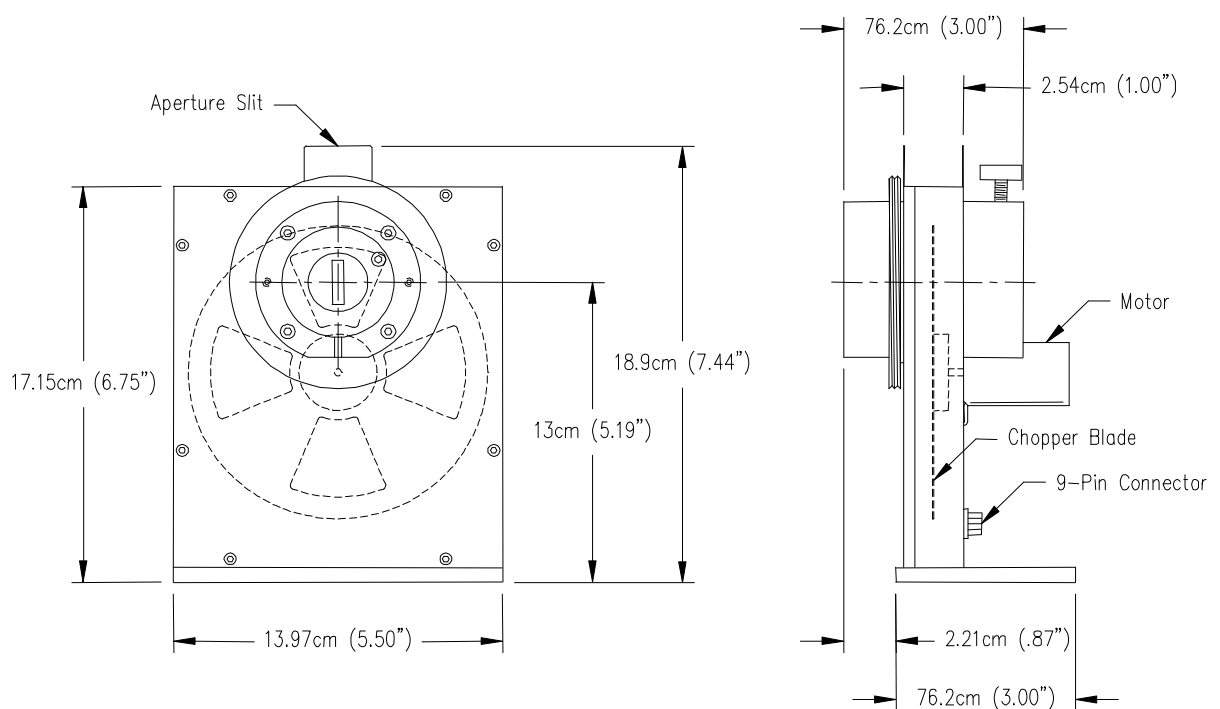


# OL 730D-CH Computer-Controlled Variable Speed Chopper

## INTRODUCTION

The OL 730D-CH Computer-Controlled Variable Speed Chopper is a stand alone external chopper assembly designed to be used with the OL 730D Programmable DSP Radiometer. The precision DC motor assembly with an integrated optical encoder is mounted into a machined, metal enclosure that can be mounted to an optical table. The standard 4-slot blade provides chopper frequencies from 10 to 350 Hz. An optional 18-slot blade extends the frequency range from 100 to 1200 Hz.

Figure 1 - OL 730D-CH Computer-Controlled Variable Speed Chopper (shown with standard 4-slot blade)



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The chopper assembly has an entrance port and an exit port which are used to attach various optical components. Both ports have a 1-inch diameter through hole allowing access to the internal chopper blade.

The entrance port, mounted to the front cover plate, has a counterbore diameter of 1.875 inches and an outer diameter of 2.750 inches. Three 10-23 setscrews can be used to hold objects in the machined counterbore. Additionally, the entrance port has a mounting ring (3.625 inches in diameter) used for Optronic Laboratories' standard component securing rings. A machined slot in the cover plate is used for the insertion of various aperture slits.

The exit port, mounted to the housing on the motor side, has a counterbore diameter of 1.875 inches and is supplied with a securing thumbscrew. An adapter sleeve is provided to reduce the diameter to 1.50 inches for holding smaller optical components, such as detectors. A machined slot in the housing assembly is used for the insertion of various aperture slits.