



# 300C 350C OEM Optical Chopper

## FEATURES

### 300C OEM

- 5Hz – 20kHz standard chopping frequency range (0.015Hz to 5Hz options are available)
- Photochemically etched brass blades
- Variable aperture option (0% to 50% transmission)
- Dual frequency blades option for double beam experiments
- Compact chopper head
- Low noise and vibration
- Many blade combinations

### 350C OEM

- 5Hz – 600Hz standard chopping frequency range (6kHz option is available)
- Photochemically etched brass blades
- Low noise and vibration
- Very compact chopper head

## DESCRIPTION

The **Model 300C OEM** and **Model 350C OEM** Optical Choppers are low-cost solutions for use in user-customized systems. The difference between the 300C OEM and the 350C OEM is in the size of the chopper head: the 350C OEM includes a miniature motor, boss, and disc. The performance of the OEM variants of the 300C or 350C is identical to that of the complete system. There are two versions of the PCB that come with the model 300C OEM or model 350C OEM. Please specify the version you require with your order.

Includes	Does Not Include
Mains powered printed circuit board (PCB) complete with connectors	Case
High quality motor	Optical stalk mounting metal work for the motor
Single photochemically etched brass blade (please specify with order)	Any cables
Brass boss for mounting the blades onto the motor	
Opto-switch for generating the reference	

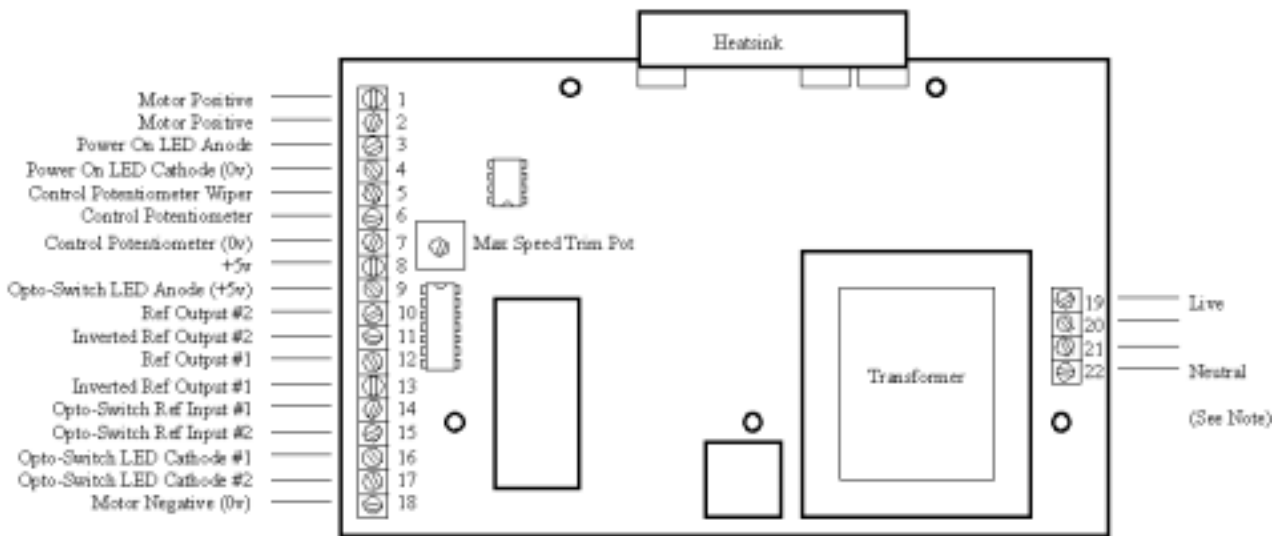
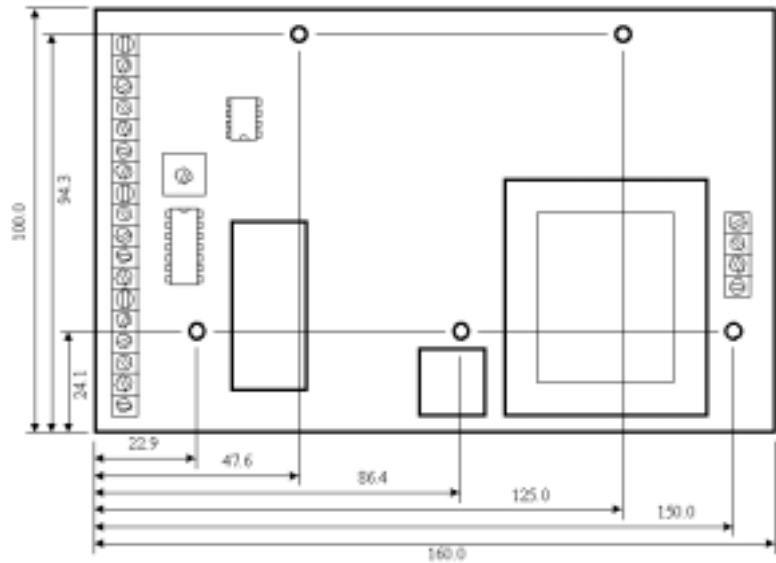
Additional blades and other accessories are available as options.



## Version A PCB

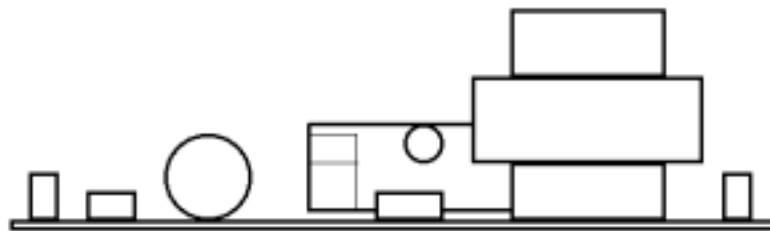
The Version A PCB is ideal for use where it is to be permanently wired into an installation where connectors and switches are not required or are supplied elsewhere.

- 100mm x 160mm
- All connections are made by screw terminals
- Does not include voltage selection circuitry
- Does not include switches, power on LED, or connectors used on Version B



Note:  
For 115v Operation Connect 115v Live to Terminal 19, 115v Neutral to Terminal 22 and Link Terminal 19 to 21 and Terminal 20 to 22

For 230v Operation Connect 230v Live to Terminal 19, 230v Neutral to Terminal 22 and Link Terminal 20 to 21



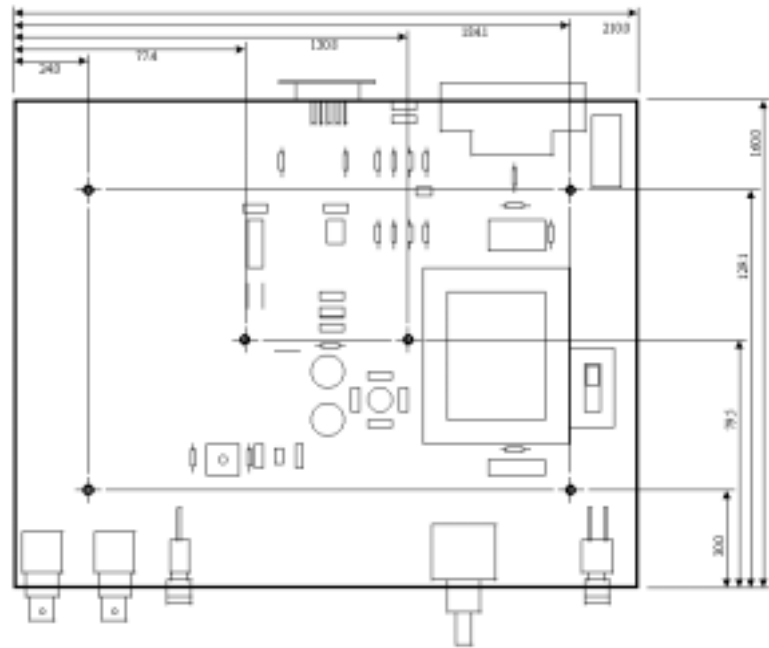
300C OEM Version A board layout



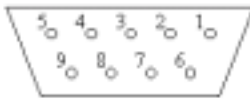
## Version B PCB

The Version B PCB is ideal for use where easy removal of the board is required and/or where a standard chopper is required with all connections and switches but where it is to be fitted into a user's case.

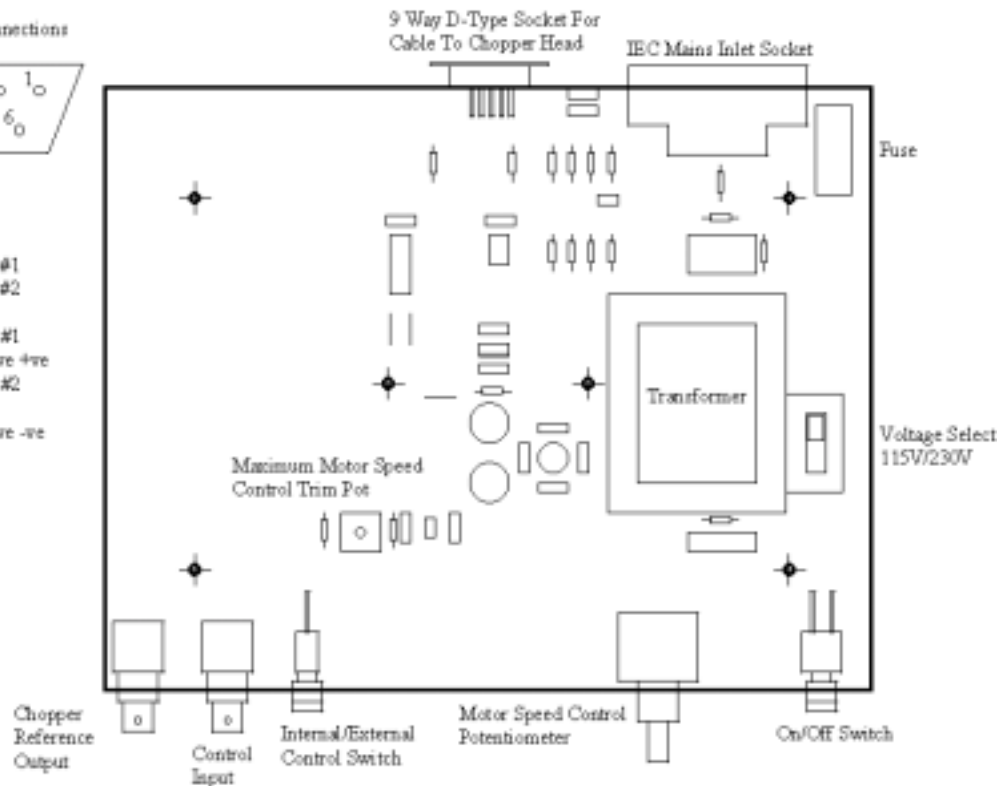
- 160mm x 210mm
- BNC socket for reference output and control input
- All connections are made by BNC socket, 9 pin D-type, or IEC power socket
- Includes 115V/230V voltage selection circuitry
- Power switch
- Internal/external control selection switch
- 9 pin D-type connector for connection to motor/reference opto-switch
- IEC power socket



9 Way D-Type Connections



PIN	Description
1	Unused
2	Reference #1
3	Reference #2
4	+5v
5	Led Drive #1
6	Motor Drive +ve
7	Led Drive #2
8	0v
9	Motor Drive -ve



300C OEM Version B board layout

