

Laser Lab Instruments

Optical Chopper



MC1000
Includes Controller, Chopper Head,
10 Slot Blade, & Interface Cable

Actively Stabilized Frequency
(crystal stabilized phase-locked loop)



MC1F60
60 Slot Blade

Optical Chopper Features

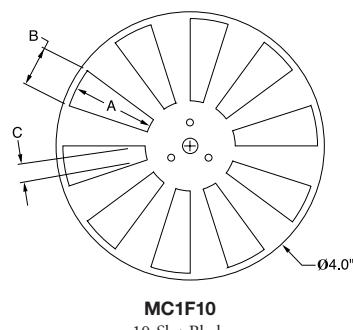
- 25Hz to 1kHz (6kHz with MC1F60 Blade) chopping with one blade
- Crystal stabilized phase-locked loop for low drift
- Low phase jitter – 0.2° RMS at 1kHz, 10 slot blade
- 2-Frequency blades available for pump-probe & other non-linear experiments
- Phase & frequency lock on external reference
- Harmonic and sub-harmonic chopping with sum & difference reference outputs
- Microprocessor controlled
- Low frequency drift <100ppm (parts per million)
- Save & recall user setups in non-volatile RAM
- RS-232 interface standard feature

The MC1000 optical chopper features microprocessor control and a crystal stabilized phase-locked loop motor control for ultimate chopping stability and drift-free performance. The standard 10-slot (36°) chopper blade is capable of chopping from 25Hz to 1kHz. Optional blades extend the chopping frequency range.

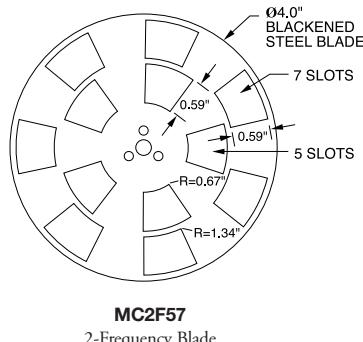
The external reference input allows the MC1000 to precisely lock in phase and frequency to an external reference signal such as lock-in amplifiers and multiple chopper configurations.

By setting the easy-to-use controls, the MC1000 can be programmed to chop at a harmonic or sub-harmonic of the reference signal. An optional 2-frequency blade with 7 outer slots and 5 inner slots allows the MC1000 to be used in pump-probe and other non-linear experiments. The sum and difference reference frequencies are provided for use with lock-in amplifiers.

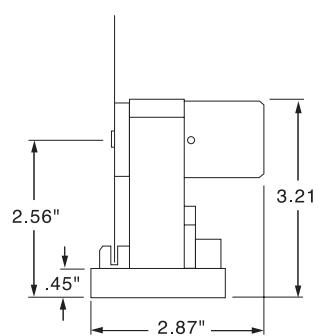
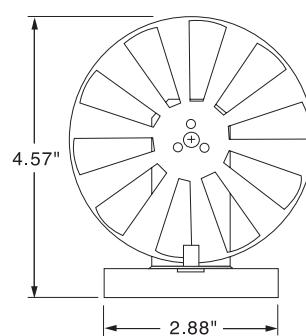
Multiple configurations can be easily saved and recalled from non-volatile RAM for quick set-ups. An RS-232 serial interface allows all of the MC1000 features to be controlled remotely.



MC1F10
10-Slot Blade



MC2F57
2-Frequency Blade



ITEM#	\$	£	€	¥	DESCRIPTION
MC1000	\$ 998.00	£ 698.60	€ 948,10	¥ 169,660	Optical Chopper System - 115VAC
MC1000-EC	\$ 998.00	£ 698.60	€ 948,10	¥ 169,660	Optical Chopper System - 230VAC
MC1F2	\$ 49.00	£ 34.30	€ 49.00	¥ 8,330	2 Slot Blade – 1Hz to 99Hz
MC1F10	\$ 35.00	£ 24.50	€ 35.00	¥ 5,950	10 Slot Blade – 25Hz to 1kHz
MC1F15	\$ 35.00	£ 24.50	€ 35.00	¥ 5,950	15 Slot Blade – 38Hz to 1.5kHz
MC1F30	\$ 35.00	£ 24.50	€ 35.00	¥ 5,950	30 Slot Blade – 75Hz to 3kHz
MC1F60	\$ 35.00	£ 24.50	€ 35.00	¥ 5,950	60 Slot Blade – 150Hz to 6kHz
MC2F57	\$ 49.00	£ 34.30	€ 49.00	¥ 8,330	2-Frequency Blade – 7 Outer, 5 Inner Slots

PART#	SLOTS	A	B	C
MC1F2	2	1.00"	2.63"	1.05"
MC1F10	10	1.25"	0.60"	0.21"
MC1F15	15	1.25"	0.40"	0.14"
MC1F30	30	1.25"	0.20"	0.07"
MC1F60	60	1.25"	0.10"	0.04"