

MC600 Series Controllers



MC600 series products are high-performance controllers designed and manufactured by Zolix. They employ 32-bit DSPs to realize 3-axis linear interpolation and 2-axis circle interpolation with closed-cycle feedback with each axis. They can be operated with a built-in SD cards which means that host computer is not a necessary part in the controlling systems. MC600 series products can be used for the controlling of motorized linear stages, rotation stages and goniometers. Drivers of stepping motors and servomotors can be installed inside of MC600 controllers to provide higher operation reliability. They also ensure customer friendly HMI, full function of parameter setting and flexible IOs.

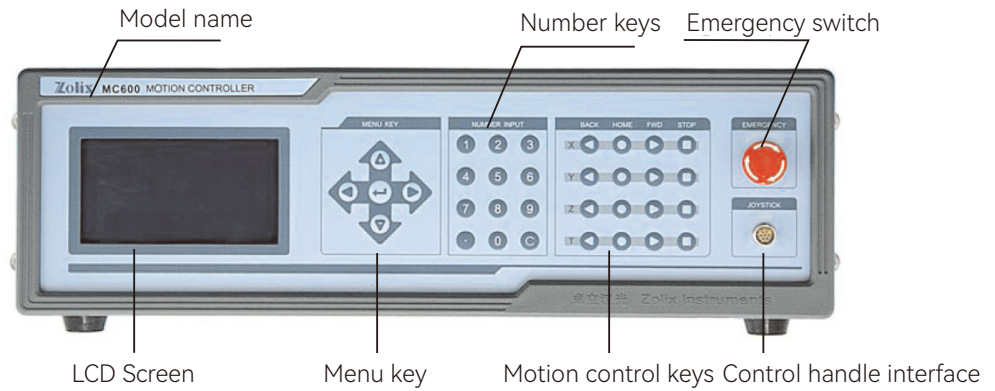
There are two models in this series:

- MC600-2B/4B, for two-phase stepping motors
- MC6003P-2B/4B, for three-phase stepping motors

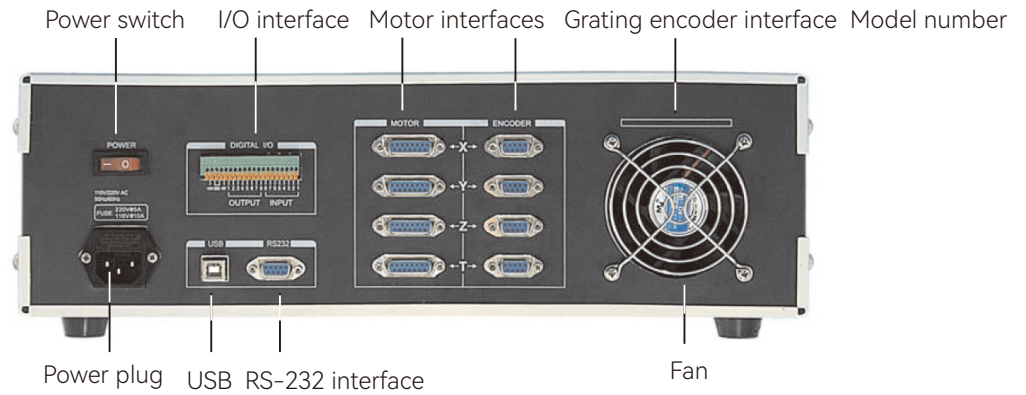
Main characteristics:

- 32-bit DSPs employed
- Absolute- and relative-position control functions
- Combination controlling of multi-stages
- Offer four kinds of controlling units: pulse number, angle, mm and μm
- Offer close-cycle controlling function by using external grating rulers
- Provide controlling of initial speed, constant speed and acceleration speed separately
- Can setup an arbitrary position as customer-defined origin point
- Real-time readout of status parameters such as logic position, true position, driving speed and acceleration speed
- 16-channel IOs provides enough host- and slave-controlling functions
- 240*180 liquid-crystal display pane
- Controlling parameters can be saved before turn down, easy for next operation
- Controlling function of optional handles Zolix MC600 control software provided

Front panel:



Rear panel:



Selection chart:

Model	MC600-4B	MC600-2B	MC6003P-4B	MC6003P-2B
Description	4-axis two-phase stepper motor	2-axis two-phase stepper motor	4-axis three-phase stepper motor	2-axis three-phase stepper motor
Electrical specifications	two-phase stepper motor(24V, 3.5Amax)		three-phase stepper motor(24V, 5.8Amax)	
	Open loop or closed loop			
	400kHz pulse frequency			
Motion control specifications	Maximum 256 subdivisions		Maximum 51200 pulses per revolution	
	32 bit, 150MHz DSP processor			
	Digital PID servo control			
	Trapezoidal speed control			
	Point to point, synchronous/asynchronous motion			
	Point mode, incremental mode			
Sensor	3-axis linear interpolation and 2-axis circular interpolation			
Optional accessories	Orion point sensor, negative limit switch and positive limit switch			
Software kit	Joystick			
	ZolixMC600 control software MC600 control software			
Communication interface	RS-232, USB2.0			
I/O interface	16 bit I/O(8 TTL inputs, 8 open collector outputs)			
Memory	512KB Flash Non-Volatile Firmware			
Screen	LCD, 240×128 matrix, 105mm×56mm			
Power supply and power	115/220v, 60/50Hz, 400W(max)			
Dimensions	440×395×145mm			
Weight	7.5Kg max			