

# **Ωx** series

SHOTMASTER® 500Ωx-SS

SHOTMASTER® 400Ωx-SS

SHOTMASTER® 300Ωx-SS

SHOTmini® 200Ωx-SS

*The fusion of dispensing “Core” technologies  
MUSASHI’s desktop robot*

# 精剛力

Newly  
Developed

Unrivalled  
“Precision” and  
“Rigidity”



**Precision** High levels of dispensing quality for enhanced yield

**Rigidity** High-speed, stable operations of heavy-duty tools and work pieces



## ◆ Equipped with SynchroSpeed™ PAT.P **NEW**

Achieve a constant drawing width, regardless of robot speed. Reduce takt time to a minimum for ultimate production efficiency

### Aiming for higher dispensing quality

#### Improved linkage with the dispenser

- Reconfigurable dispense conditions from robots **NEW**
- Simple test shot for improved dispensing quality **NEW**
- 3D/Spline interpolation
- Nozzle adjuster **NEW**  
Simple, automatic correction of the nozzle position after syringe replacement

### Improved usability

#### New teaching pendant

- Interactive navigation **NEW**
- Easy-to-view, large backlight screen  
Dual screen for easier programming  

- Inter-robot program copy **NEW**
- Embedded Stopwatch **NEW**
- Japanese, English and Chinese support **NEW**

### Multi-skill support

#### Enhanced hardware configuration

- No misalignment and no loss in synchronization **NEW**
- Built-in Brake  
To prevent robot head from falling during emergency stops
- External input/output: 26 ports **NEW**
- High-speed USB communication **NEW**

**Image Recognition**  
350PC Smart mountable



## Specifications

Product Name		SHOTMINI 200 OMEGAX	SHOTMASTER 300 OMEGAX	SHOTMASTER 400 OMEGAX	SHOTMASTER 500 OMEGAX
Model		SM200OMEGAX-3A-SS	SM300OMEGAX-3A-SS	SM400OMEGAX-3A-SS	SM500OMEGAX-3A-SS
Number of controlled axes		3 axes			
Control method <sup>(*)</sup>		PTP control, interpolation control			
Travel range	X axis, Y axis	200mm	300mm	400mm	500mm
	Z axis	80mm			
PTP operation speed setting range <sup>(*)</sup>	X axis, Y axis	1~500mm/s			
	Z axis	1~400mm/s			
Interpolation operation speed setting range <sup>(*)</sup>	X axis, Y axis	0.1~500mm/s			
	Z axis	0.1~400mm/s			
Interpolation		3D line, 3D circular arc / circular, 3D elliptical arc / ellipse, spline			
Repetitive positioning accuracy <sup>(*)</sup>	X axis, Y axis	±0.005mm			
	Z axis	±0.005mm			
Transportable weight <sup>(*)</sup>	Y axis	20kg			
	Z axis	15kg			
Number of I/O signal points	General input	26 points			
	-purpose output	26 points			
Program entry method		Teaching pendant and PC			
Display language		Japanese, English, Chinese			
Program capacity <sup>(*)</sup>		40,000 steps (999 channels)			
Program storage system	Internal	Internal memory			
	External	Backup on PC with dispensing pattern editing software			
Program editing software		MuCAD V (option)			
Rated power supply and frequency		100 to 240VAC 50/60Hz			
Power consumption		130W		180W	
Adaptive fuse		250V T5.0A (φ5×20 mm) time-lag fuse			
External dimensions <sup>(*)</sup>		W380×D460×H590mm	W510×D570×H590mm	W610×D670×H590mm	W710×D770×H590mm
Weight		30kg	40kg	55kg	66kg
Other functions		Test shot, eject condition CH switching, SynchroSpeed™, data transfer with teaching pendant			
Other options		Leakage protection box, teaching pendant set, external operation box (horizontal / vertical), work bases, suction box for work bases, holder units, nozzle adjuster, nozzle cleaner, protection cover (door type / optical axis type)			
Compatible standards		CE marking (soon-to-be-released), EU RoHS			

\*1 PTP control: Each of the specified axes moves to the end coordinate at a set speed.

Interpolation control: Each of the specified axes moves to the end coordinate at an interpolated composite speed.

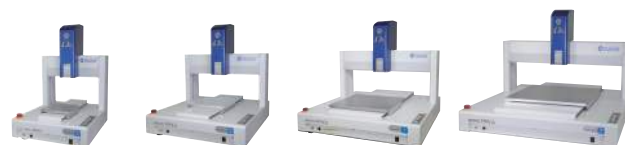
\*2 Varies according to factors such as the weight of the object mounted, the object's center of gravity, and the operation performed.

\*3 This value is measured using Musashi's prescribed method (measurement method consistent with JIS).

\*4 When options are not mounted. Varies according to the set speed, set acceleration / deceleration time, and operation mode.

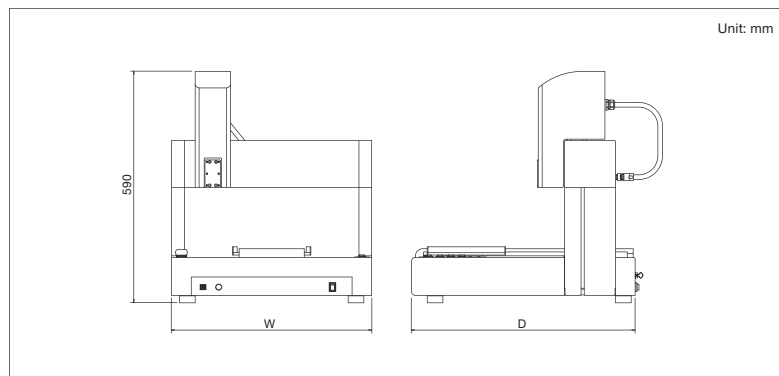
\*5 Main routine: 1 to 99CH, Sub routine: 100 to 999CH.

\*6 W and D are the dimensions of the lower section of the case.



SHOTmini200QX SHOTMASTER300QX SHOTMASTER400QX SHOTMASTER500QX

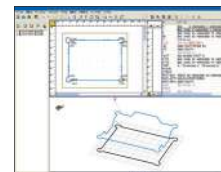
## External dimensions



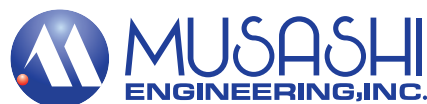
Dispensing pattern editing software **MuCAD V**

# Fusion of unrivaled dispensing know-how!

- Intuitive program drawing
- Easy editing for beginners
- Support for transferring programs from previous models (Ω / DS series, etc.)



MUSASHI ENGINEERING, INC. (headquarters) is certified and registered according to the ISO 9001 Quality Management System and the ISO 14001 Environmental Management System.



<http://www.musashi-engineering.co.jp/english/>

**World Leading Dispenser**  
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