

# 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

Unrivaled  
“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**

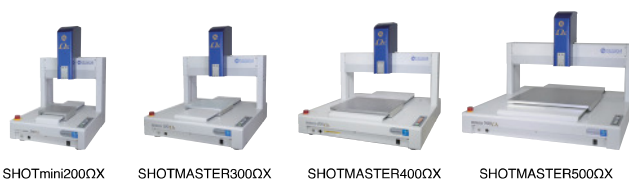
**Image Recognition**  
350PC Smart mountable



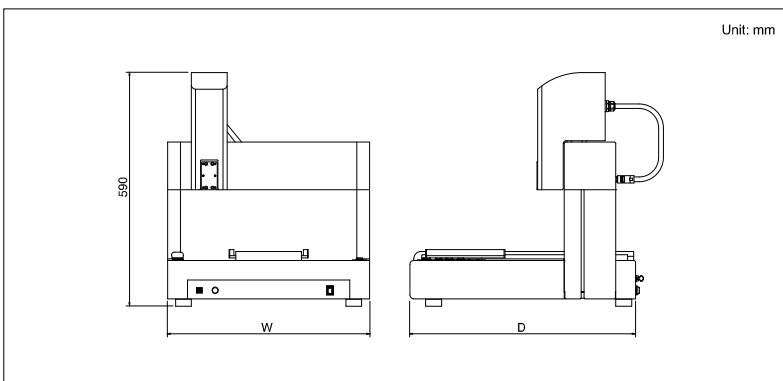
# Specifications

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>(1)</sup>	PTP control, interpolation control								
Travel range	X axis, Y axis	200mm	300mm	400mm	500mm				
	Z axis	80mm							
PTP operation speed setting range <sup>(2)</sup>	X axis, Y axis	1 ~ 500mm/s							
	Z axis	1 ~ 400mm/s							
Interpolation operation speed setting range <sup>(2)</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>(3)</sup>	X axis, Y axis	±0.005mm							
	Z axis	±0.005mm							
Transportable weight <sup>(4)</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>(5)</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>(6)</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.



## 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.**

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

World Leading Dispenser  
**MUSASHI ENGINEERING, INC.**

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