



MUSASHI
ENGINEERING, INC.

FULLY DIGITAL CONTROLLED DISPENSER

Super Σ CM IIITM

The Unparalleled Leading “Global Standard”

All of Musashi's best technologies for super-stable dispensing.

NEW



PAT.



Proven high-precision dispensing of the highest quality

- Unparalleled, high-precision dispensing with full digital control. Equipped with an air pulse stabilizing circuit (PAT.) as standard.
- Settings for minimum dispensing time enhanced to 1/5 for higher definition dispensing.

Field-proven high reliability

- Outstanding continuous dispensing stability and a full range of communication functions for a proven track record as the global standard die bonder with a 80% share.
- Dispensing conditions can be changed while operating automatically. Dispensing stability after making changes has also been enhanced, to make switching product types smoother.

High takt, high throughput

- Double the responsiveness for even higher throughput production lines. Retains the same dispensing precision and stability.

Helps cut down running costs

- Low fluid detection precision enhanced drastically, to help cut down fluid loss.
- No initialization contributes to shorter downtime.
- Longer consumable operating life for a major reduction in maintenance costs.



◆ All-in-one full automatic correction functions

Σ 3 major functions

- | | | |
|---|---|--|
| 1 | Automatic correction of volume reduction function | Reduces the rejection rate with stable high-precision dispensing |
| 2 | Automatic vacuum correction function | |
| 3 | Automatic low fluid alarm function | Reduces running costs by minimizing fluid loss |

- Patented in Japan, the U.S., Germany, and South Korea

◆ Full control of dispensing conditions with automation software interface

[MuCOMTM for Super Σ CM III dispense pattern editing software]

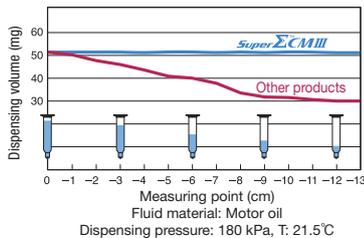
- Edit dispensing conditions on a computer.
- Automated device interface, data management, and centralized control.
- Detects low fluid levels in real time using a computer.



“Σ 3 major functions” for better precision and no more waste

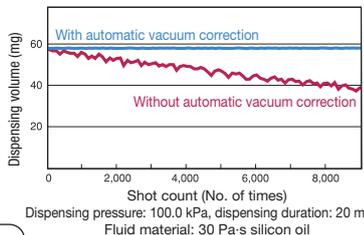
Function 1 Automatic correction of volume reduction function

Eliminates fluctuating dispensing volumes caused by head differential. Enables dispensing at high accuracy and better yields.



Function 2 Automatic vacuum correction function

Automatic vacuum control helps to prevent fluid dripping and bubbles forming, resulting in stable dispensing precision.



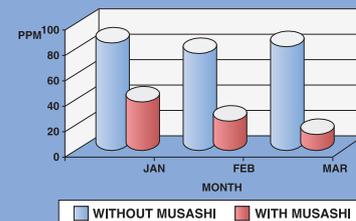
Function 3 Automatic low fluid alarm function

Detects fluid level in the syringe with extreme precision



Prevents empty shots, which helps to cut fluid costs significantly.

Rejection rate reduced by about 70% compared to other products

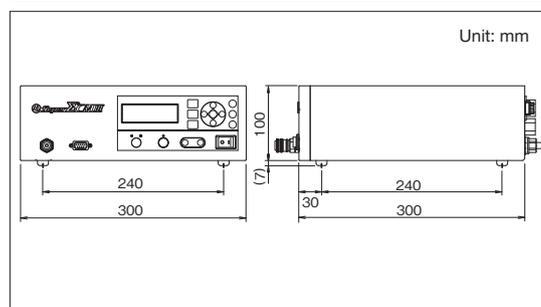


Specifications

Product name	Fully digital control dispenser	
Model	S-SIGMA-CM3-V5	S-SIGMA-CM3-V2
Dispensing system	Air pulse method	
Control system	Microprocessor-controlled electronics / pneumatics	
Dispensing modes	TIMED mode/MANUAL mode	
Dispensing pressure setting range	0.030 to 0.500 MPa	0.005 to 0.200 MPa
Dispensing time setting range	0.001 to 9999.999 s	
Vacuum pressure setting range	-0.020 to 0 MPa	
Main functions	Automatic correction of volume reduction, automatic fluid-drip prevention, automatic remaining volume alert, alpha (α) correction, delta (δ) correction, vacuum pressure correction, remaining volume display correction, dispensing shot counter, stopwatch, Japanese-English display switch, source pressure error, exhaust error, vacuum pressure error, solenoid valve error, solenoid valve alarm	
Channel number	100 channels	
RS-232C serial communication	Available	
Input signals	Dispense, channel switching, dispensing mode switching, channel preset, channel assignment, channel step	
Output signals	Ready, dispensing completion, in-dispensing, in-dispensing cycle, solenoid valve alarm, error, remaining volume alert, power on	
Rated power and frequency	AC 100-240 V	50/60 Hz
Power consumption	30 W	
Conformity standards	CE-marking (Low Voltage Directive, EMC Directive) EU RoHS	
Dimensions W×D×H	W300×D300×H100 mm	
Weight	5.8 kg	

Note: Contact MUSASHI if a syringe or cartridge exceeding 70 mL is required.

Outside drawings



Safety precaution
Make sure to read the instruction manual before you use the unit, for your safety.

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MUSASHI ENGINEERING, INC. is certified and registered according to ISO14001 ENVIRONMENTAL MANAGEMENT.



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

World Leading Dispenser
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