



Highly Accurate Temperature Control in Chambers

to the Semiconductor Market

Application Notes

In order to form stable and uniform finer patterns, precision temperature control is required in the chamber of a precise optical system.

Some of the requirements for temperature control are:

- Control stability (Repetitive control accuracy)
- Control within $\pm 0.01^{\circ}\text{C}$
- Communication capabilities with host systems
- Multiple loop controls
- Efficient use of space

Applications

Steppers

Features and Benefits

Control stability (Repetitive control accuracy)

- Stability is ensured by the incorporation of an effective control algorithm (ΣF) to safeguard against a long time external disturbance control loop.

Ethernet communication supported

- Communication to host systems can be made by using the provided Ethernet connections

High resolution

- Has a resolution of 1/10,000 at a temperature range of 16.000 to 37.000. The RTD 4-wiring method is also supported.

Multiple loops

- In order to economize space, a 4-loop control has been developed and the digital input/output can be used for the interlock and alarm outputs.

Yamatake Products

High function module type controller: DMC50CS400 / ME200

Thyristor: PGU310

Programmable display: EST240Z

