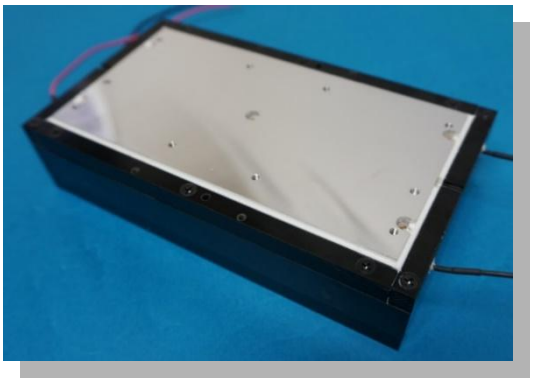
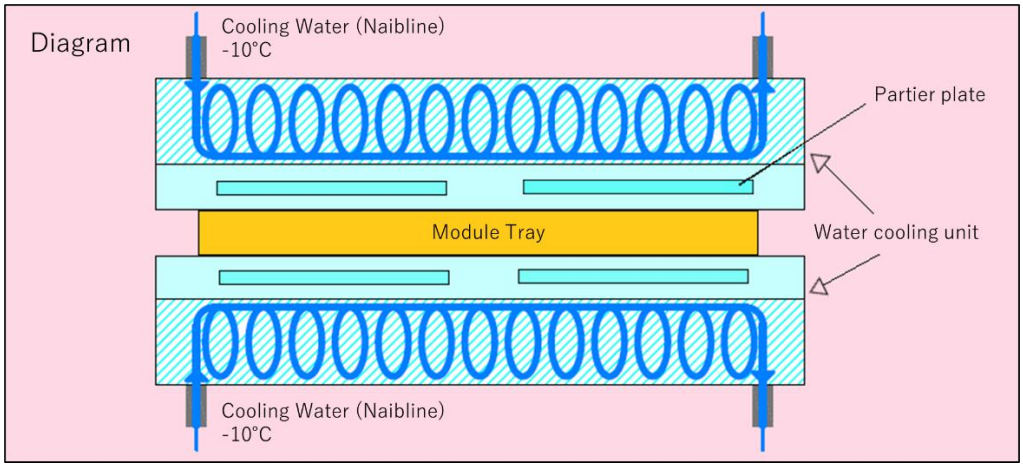
SCNT

for in-vehicle modules
Inline temperature test system

CHP-772LC

Temperature Environment Test System with Peltier Cooling Plate
-50℃ to +130℃ reliable temperature test with Peltier plate





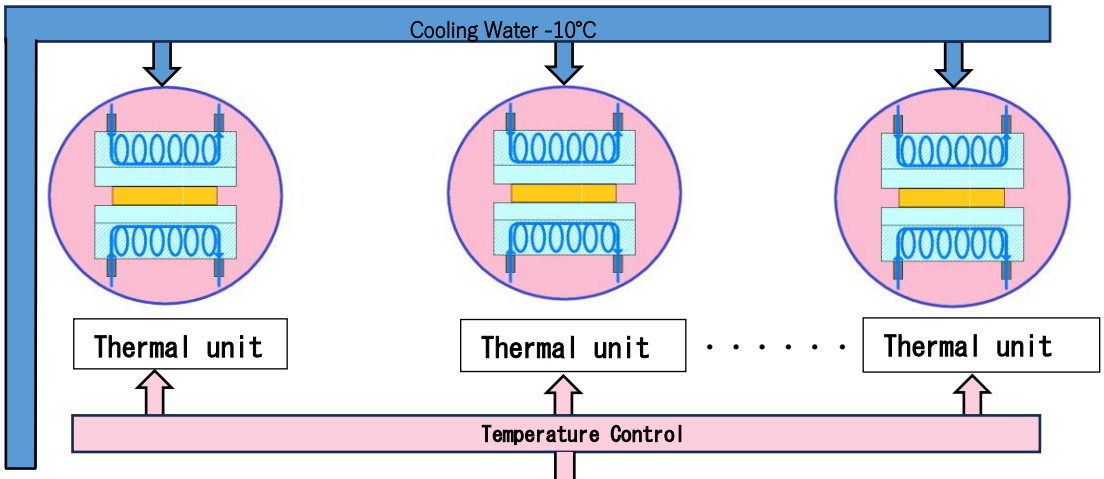
Feature

"-50℃ to +125℃" temperature environment test system for reliability improvement against AEC-Q100 standard "-40℃ to +85℃"
Temperature cycling tests can be performed with Peltier thermoelectric plates.
High-precision temperature control of device surface temperatures (±0.1℃)
Plate size is 80x160mm to fit device trays.
Fast temperature application speed. '-50℃ in 10 minutes and +125℃ in 10 minutes'
Non-Freon, carbon neutral, addressing global warming, and compliant with SDGs.

Specification

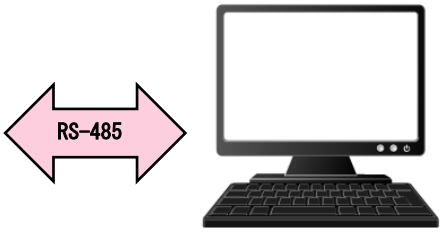
Type	Inline temperature test system
Temperature Range(℃)	−50 ～ ＋130
Temperature Controller	FC-3540 (4CHTemperature Controller)
Temperature Sensor	Pt100 platinum resistance thermometer
Heat release	Water-cooled (with cooling chiller)
Peltier Module	UT-7070x2
Driving Voltage (V) / Current (A)	24/ 6.5
Thermal Plate size (mm)	80 x 160x 50(H)
Cooling Chiller	Discussion required

System Overview



Cooling Chiller

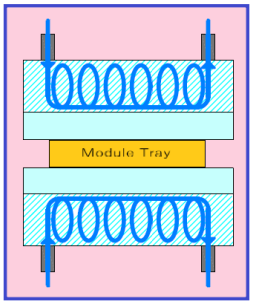
Temperature Controller



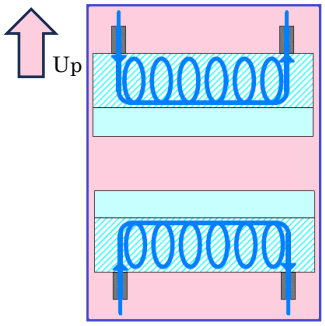
PC or PLC

Features

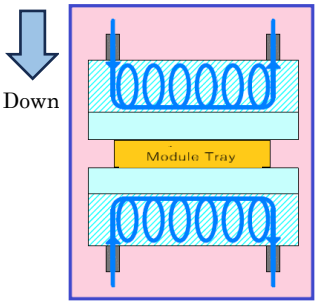
This system is a next-generation temperature environment testing system that uses high-efficiency Peltier elements with cooling and heating functions. Temperature cycle testing is possible by PC control through RS-485, the temperature range is from -60℃ to +150℃.
The temperature sensor uses a Pt100 platinum resistance thermometer for quick and highly accurate temperature control of the device tray. Temperature environment testing systems, which were previously difficult to implement inline due to high costs, can now be introduced at a low cost.



Module Thermal Test



Upper unit going-up
Change Module Tray



Module Thermal Test