



OPTICAL FIBER CABLE TEMPERATURE CYCLING CHAMBER

APPLICATIONS

The Optical Fiber Cable Temperature Cycling Chamber TT-TCC is designed to apply temperature cycling on optical fiber cables in order to determine the stability behavior of the attenuation of cables submitted to temperature changes. It features large test chamber, precise temperature control as well as low-temperature fluctuations.

Changes in the attenuation of optical fiber cables which may occur with changing temperatures are generally the result of buckling or tensioning of the fibers resulting from differences between their thermal expansion coefficient and the coefficients of the cable strength and jacketing members. Test conditions for temperature-dependent measurements shall simulate the worst conditions.

This test can be used either for monitoring cable behavior in the temperature range which may occur during storage, transportation and usage or to check, in a selected temperature range (usually wider than that required for the above-mentioned case), the stability behavior of the attenuation connected to a substantially micro bend-free situation of the fiber within the cable structure.

FEATURES

- Large glass window design, viewing angle in all directions, hollow electric plating film and anti-condensation design, built-in lights to facilitate the test sample state of real-time observation in the course of testing.
- Heat preservation material used glass fiber cotton of high-intensity PU foam and high density, which can avoid unnecessary energy loss.
- Large-size LCD display screen, simple operation, easy to edit programs. PID with automatic calculation function, show failure message.
- Material quality of inner box is SUS304 # mirror-face stainless steel, and outer box is steel plate and the paint. Box body is processed shape using CNC machine tool.
- RS-232 communication interface, matching recorder.

- With timing contact, and able to cope with dynamic testing and measure test.
- The system-wide multi-security protection and power-cut memory.
- Compressor and environmental-friendly refrigerant (R134a, R404a, R23).
- Frozen system uses units or low-temperature dual-loop system design.
- Uses more powerful wing-blower air supply cycle, to avoid any dead end, temperature and humidity are evenly distributed in the test region.
- Wind-road cycle used the design of blowing side wind and return wind. Wind pressure and wind speed are in accordance with test standards
- Heating, cooling, humidification and de-humidification system is totally unaided to improve efficiency, reduces testing cost, increases life expectancy and lower failure rate.

TECHNICAL SPECIFICATIONS

Model	TT-OFTCC Series			
	OFTCC-40100	OFTCC-70100	OFTCC-40150	OFTCC-70150
Temp. range	-40℃ ~ 100℃	-70℃ ~ 100℃	-40℃ ~ 150℃	-70℃ ~ 150℃
Temperature control accuracy	± 0.5℃		± 0.1℃	
Temperature measuring accuracy	± 0.5℃			
Temperature fluctuation	± 0.5℃		± 2℃	
Temperature uniformity	≤2.0 ℃			
Heating up speed (empty)	≥3.0 ℃/min			

Cooling down speed (empty)	≥0.7-1°C/min			
Interior dimension(W×D×H)	2000 × 2500 × 2000 mm		1000 × 1000 ×1000 mm	
Exterior dimension(W×D×H)	2300 x 4500 x 2600 mm		1600 x1600 x 1600 mm	
Open door (WxDxH) one of a pair	1000 mm x 2000mm		1000 mm x 1000 mm	
Chamber weight	Approx. 2000 kg		Approx. 1000 kg	
Interior material	Stainless steel plate(SUS304)			
Exterior material	Stainless steel plate(SUS304)			
Insulation	Rigid foam			
Refrigeration system	Hermetic compressor, single stage refrigeration system.			
Display	LCD			
Safety devices	No fuse breaker refrigerator over load relay, Refrigeration High pressure Switch, Over Temp, Protector, Protection relay, Protection fuse, Water Lever protector, Overheat protector, Alarm No fuse breaker refrigerator over load relay, Refrigeration High pressure Switch, Over Temp, Protector, Protection relay, Protection fuse, Water Lever protector, Overheat protector, Alarm			
Accessories	Viewing window, Shelves (freely adjustable 2 pcs.), Cable port (Ø20mm)) Chamber lamp.			
Power	AC380V±10 percent 50/60Hz			
Operational space (WxDxH)	5000 x 3500 x 2300			
Dimension/Weight				
	Machine		Shipping Package	

Dimensions (LxWxH) mm	Net Weight Kg	Dimensions (LxWxH) mm	Net Weight Kg	
3100 x 2500 x 2300	2000			
		2800 x 1500 x 2000	800	
		2800 x 1500 x 2000	800	
		2800 x 1500 x 1700	600	



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