NRTL Ready 1100°C Compact Muffle Furnace (4x4x4",1.0L) with Programmable Controller -- KSL-1100X-S-UL-LD

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KSL-1100X-S-UL-LD is a CE certified & NRTL Ready compact muffle furnace that offers 4"x4"x4" high purity fibrous alumina chamber, gas inlet and outlet ports and a 30-segment, programmable temperature controller, and the furnace is with UL / MET / CSA Certified electric components. It is the ideal muffle furnace for preparing small-sized sample using temperatures up to 1100°C in material research and dental labs with maximum energy saving (500 - 700W only). In addition, the compact furnace can be placed into a glove box to sinter samples in a vacuumed or controlled atmosphere.

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## **SPECIFICATIONS:**

Furnace Construction	High purity fibrous alumina insulation for maximum energy saving - 30% less power consumption than other brands (click pic below left to order spare) Door drops down for easy and safe sample loading and unloading (with automatic power off when the door is opened). (Optional) Two 8 mm diameter hose barb connectors (gas inlet and outlet) (see pic below) in the furnace back panel are available at extra cost (\$99 for both connectors). Check the option box. Note: Self-Installation is required.
Dimension	Chamber ize: 4"x4"x4" or 100x100x100 mm Capacity: 65 cubic-inch or 1 liter 230mm x 200mm x 360mm (LxDxH) 440mm with door opened.
Power	110V version: 950 W (15A Fuse) ( power cord is included )     220V version: 1.2KW(10A Fuse)
Voltage	AC 110V or AC 220V 50/60 Hz please select the voltage in the option bar
Operating Temperature	1000°C max continuously     1100°C max for an hour     1200°C max for 30 minutes
Max. Heating Rate Temperature Controller	30 °C /min  PID automatic control and auto-tune function.  30 programmable segments for precise control.  Built in protection for the over-heating and broken thermocouple.  Large digital control panel (48 x 96 mm) for easy operation.
Temperature Accuracy	+/- 1 °C
Heating Elements	Fe-Cr-Al Alloy doped by Mo
Thermocouple	Ktype
Net Weight	~ 8Kg
Shipping Dimensions	17"(L) x14"(W) x 18"(H)
Shipping Weight	40 lbs
Warranty	
Williamy .	One-year limited warranty with lifetime support  ATTENTION: Any damages caused by the use of corrosive and acidic gasses are not covered by the Warranty.  You may order a heating module below to replace it by yourselves
Compliance	CE Certified All electric components (>24V) are UL / MET / CSA certified The furnace is ready to pass TUV(UL61010) or CSA certification at extra cost. ( please click marks below to learn details )
Application Notes	With the small footprint, low weight and low power requirement, it can be easily accommodated in a glove box and heat treats samples under protective gas. Please click pic.1∼5 to see details.     For material synthesis under vacuum or the specific gas, MTI can help you integrate a 50mm 0.D tube with the sealing flange on this small box furnace, please click pic.3 to understand the concept. Note: customization fee will apply.  Please click to order Replacement Furnace Heating Chamber Module.    Please click to order Replacement Furnace Heating Chamber Module.
Warnings	Pic.1 Pic.2 Pic.3 Pic.4 Pic.5      Toxic or explosive gasses are not recommended for use with this furnace without necessary safety controls and supervision. Please put furnace into fume hood for better safety (Click Pic.1)      Small cracks may appear on the surface of the refractory ceramics over extended use. This is a normal occurrence and the cracks may be repaired with alumina coating.      You shall place the sample in to a crucible as below. Never place sample on the chamber bottom directly.
Laptop, software & WiFi Control(Optional)	Brand new laptop with Microsoft Window 10 and Microsoft Office 2013 (30 days free trial) for immediate use.  Labview Based Temperature Control System (EQ-MTS01) enables user to edit temperature profile, manage heattreatment recipe, record and plot data for MTI furnaces.  A wireless remote control provides up to 300 meters operating range.  Above features are available upon request at an extra cost (up to \$1,000). Please contact us for more information.  Note:  The software is only compatible with MTI's Yudian Temperature Controller

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