



## Medium-size Lead-free N<sub>2</sub> Reflow Soldering Machine RF-810

The model RF-810 is a medium Reflow Soldering Machine corresponding to lead-free soldering and using IR and hot air convection, and nitrogen (N<sub>2</sub>) for the basic heating. While this is a medium table-top reflow machine, it a method with 8 zones, and the precise and stable temperature profile required for lead-free reflow soldering can be obtained. By use of IR and hot air and nitrogen (N<sub>2</sub>), the various requirements for lead-free soldering can be met sufficiently.

### Features

- This is a table-top reflow soldering machine with correspondence to nitrogen (N<sub>2</sub>). Circuit boards up to 300×300mm can be processed.
- Rapid heating is performed with a 8-zone quartz heater using IR and hot air and nitrogen (N<sub>2</sub>), and the desired temperature profile can be obtained.
- Precise temperature control (±0.3%) up to max. 350°C and stable temperature profiles can be obtained with a high-precision PID temperature controller.

### Specifications

- Heating section : 8 zones, W300mm×L2080mm×H30mm (at the inlet).  
Heater : Quartz tube heater, IR (wavelength: 2 to 10 μm).  
Upper part : 1,2,6,7,8zone: 1.4kW / 3,4,5zone: 1.0kW  
Lower part : 1,2,6,7,8zone: 1.0kW (3,4,5zone: none)  
Heating method : IR + Hot air convection system  
Temperature control : Max. 350°C ±0.3%, P.I.D. temperature controller.  
Temperature control for the atmosphere in the upper part of the furnace for each zone.
- Conveyor : W 300 mm, SUS mesh belt. 90 to 1400 mm/min  
Conveyor direction: R → L or L → R (at user's request)  
Digital speed controller
- Cooling : Forced cooling by a fan on the outlet side
- Power supply: Single phase 220V 17.9kW, 50/60 Hz
- N<sub>2</sub> supply quantity : About 20 to 100l/min  
(Oxygen density: about 10,000 ppm).
- Safety devices : Leak/Over-current circuit breaker,  
Emergency stop switch, Alarm output  
(over/under temperature / heater disconnection)
- External dimensions: (W)2730×(D)630×(H)820mm,
- Weight : about 380kg.

### Applicable circuit boards

- Dimensions : 15mm×15mm to 300mm×300mm
- Board thickness : 0.125mm to 2mm
- Height : Max. 30mm

### Applications

- Reflow soldering of SMT circuit boards.
- Lead-free reflow soldering.
- Drying of thermosetting adhesives and other heating work.

★ Specifications subject to change without notice.