



ULTRALUX™ Automatic Wire Bonder

ULTRALUX™ is the latest generation ball bonder utilizing the latest technologies and materials that will save LED manufacturers up to 10% capital cost.



Higher UPH

- Advanced Close-Loop Servo with Lower Mass Higher Stiffness XYZ enhanced design
- Robust compact Optics design with Smaller Crosshair Offset maximizes Look Ahead PRS Alignment Scheme

Higher Net Productivity with Highest Yield

- Enhanced Automatic Error recovery to SHTL, NSOP and NSOL
- Superior Looping Control and Shape for high-reliability

Fastest Qualification Time

- Quick LED Suite processes with Quick Bond, Quick Stitch and Quick Loop deliver the optimized process ensuring quickest time to market

** Microscope Assembly is an optional configuration*

ULTRALUX™

Automatic Wire Bonder

WIRE BONDING CAPABILITY

Bonding Area

X Axis: 56 mm
Y Axis: 80 mm

Total Bond Placement Accuracy

3.0 µm @ 3 sigma

Speed

25 wires per second
(2 mm wire length)

Pattern Recognition/Optics/Vision

Progressive Scan Vision Engine
CCD Video Camera
3.5x Magnification Optics

LOOPING CAPABILITY (with 25.4 µm wire diameter)

Maximum Wire Length

5 mm

Minimum Loop Height

65 µm Quick Loop-LED supports for flexible loop shapes
for improved reliability

Wire Sway

Wire length < 2.54 mm: 25 µm @ 3 sigma
Wire length > 2.54 mm: ± 1 % wire length @ 3 sigma

CONVERSION TIMES

Same Leadframe Type: < 5 min
(Heat block insert & clamp changes, program load from disk)

Different Leadframe Type: < 20 min
(Leadframe width & length changes, magazine size change,
heat block insert & clamp change, program load from disk)

MATERIAL HANDLING CAPABILITY

Package/Leadframe Dimensions

Length: 100 to 300 mm
Width: 35 to 90 mm
Thickness: 0.10 to 0.9 mm
Die Pad Downset: Up to 2.3 mm

Magazine Dimensions

Width: 35 to 98 mm
Length: 127 to 310 mm
Height: 54 to 194 mm
Slot Pitch: 2.5 to 25 mm
Max. Weight: 4.0 kg

KNET PLUS ASSEMBLY EQUIPMENT NETWORK

KNet PLUS improves efficiency and productivity, by monitoring equipment status in real-time. It collects data and controls process programs locally or from anywhere on a customer's network. Contact your K&S Sales Representative to learn more.

MAN-MACHINE INTERFACE

Monitor

19" color LCD display

Durable Control Panel

Function keys and dedicated buttons, and user-friendly mouse

Industry-Recognized User Interface

Simple pull-down menus. Color-overlays of wire groups for easy programming and teach

FACILITY REQUIREMENTS

Minimum Air Pressure

3.52 kg/sq cm (50 psi)

Nominal Air Consumption (flow rate)

150 liters/min @ 4.6 kg/sq cm (6.5 CFM @ 65 psi)

Input Voltage

Standard

200 - 240 VAC; -15 % to + 10%
Single Phase 50/60 Hz (± 3 Hz)

Optional

100 - 115 VAC; -15 % to + 10%
Single Phase 50/60 Hz (± 3 Hz)

Power Consumption

1.3 KVA (nominal), 2.0 KVA (max.)

Footprint

Base machine with MHS
889 mm wide x 990 mm deep (35" x 39")

Weight (estimated)

Machine 556 kg (1226 lbs)
Machine & Crate 670 kg (1477 lbs)