Artisan Technology Group is your source for quality new and certified-used/pre-owned equipment

- FAST SHIPPING AND DELIVERY
- TENS OF THOUSANDS OF IN-STOCK ITEMS
- EQUIPMENT DEMOS
- HUNDREDS OF MANUFACTURERS SUPPORTED
- LEASING/MONTHLY RENTALS
- ITAR CERTIFIED SECURE ASSET SOLUTIONS

SERVICE CENTER REPAIRS
Experienced engineers and technicians on staff at our full-service, in-house repair center

WE BUY USED EQUIPMENT
Sell your excess, underutilized, and idle used equipment
We also offer credit for buy-backs and trade-ins
www.artisantg.com/WeBuyEquipment

IntraView™ REMOTE INSPECTION
Remotely inspect equipment before purchasing with our interactive website at www.Instraview.com

LOOKING FOR MORE INFORMATION?
Visit us on the web at www.artisantg.com for more information on price quotations, drivers, technical specifications, manuals, and documentation

Contact us: (888) 88-SOURCE | sales@artisantg.com | www.artisantg.com
We provide TOTAL SOLUTIONS for micro-soldering and localized heating applications.
Non-contact heating method provides high quality and consistent soldering.

Features

- Application of proper solder amount is critical for quality microsoldering. Our wire feed controls the solder amount within 5%.
- Simple procedures reduce maintenance time. It is possible to operate for 24 hours a day and 365 days a year continuously.

Comparison of the correction ratios of the Soft Beam and soldering irons

- Company A: 3 - 4%
- Company B: 5%
- Company C: 1.6%

Example comparing variation in solder volume

- Average soldering height: 0.38 mm
- Soft Beam: 0.24 mm

Soft Beam Systems are utilized in a wide range of applications.

Communications

- Sound generator (for voice and music)
- Ceramic capacitor (for audio and video)

Automotive electronics

- Push-button control pressure sensor
- Airbag sensor (for safety)

Audio-Video equipment & Various

- Oscillation motor (for robotics)
- Crystal resonator (for clocks)

Recommendation by our engineers

In order to provide quick and accurate response to your requests, please supply the following information.

- Test time
- Quality requirements (please submit quality samples if possible)
- Specific type of solder and flux to be applied (if any)
- Availability of preheat process
Non-contact localized heating method by Soft Beam assures high quality micro-soldering.

**SOFT BEAM**

**YB-02AC5**

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Feature</th>
<th>YB-02AC5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>YB-02AC5</td>
</tr>
<tr>
<td>Rated input voltage</td>
<td>100VAC</td>
</tr>
<tr>
<td>Phase</td>
<td>Single</td>
</tr>
<tr>
<td>Input voltage variation range</td>
<td>±10%</td>
</tr>
<tr>
<td>Frequency</td>
<td>50/60Hz</td>
</tr>
<tr>
<td>Rated input</td>
<td>3.28kVA</td>
</tr>
<tr>
<td>Lamp current range</td>
<td>39-34VAC</td>
</tr>
<tr>
<td>Output adjustment range</td>
<td>0.32mm dia. fiber 8-50W</td>
</tr>
<tr>
<td></td>
<td>0.5mm dia. fiber 16-40W</td>
</tr>
<tr>
<td></td>
<td>0.65mm dia. fiber 24-60W</td>
</tr>
<tr>
<td>Rated operating efficiency</td>
<td>100%</td>
</tr>
<tr>
<td>Weight</td>
<td>Lamp house 49g</td>
</tr>
<tr>
<td>Weight</td>
<td>Power supply 18kg</td>
</tr>
</tbody>
</table>

**Precise Control of Energy**

Soft Beam incorporates accurate control of both light beam energy and irradiation time. The output energy and shutter time can be controlled to suit individual workpieces.

**Automatic focusing feature**

A photosensor detects the light distribution at the incident end of the optical fiber and uses this information to adjust lamp position so that irradiation output is most effective.

**Power Feedback Control**

As lamp intensity decreases due to deterioration, a closed-loop feedback circuit automatically recognizes and adjusts the lamp output so that irradiation energy is consistent.

**Change of Light Energy Power**

<table>
<thead>
<tr>
<th>Operation Time (s)</th>
<th>Power Feedback Provided</th>
<th>No Power Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>600</td>
<td>30</td>
<td>0</td>
</tr>
</tbody>
</table>

**Wire Solder Feeder Control**

The power supply provides an integrated controller for use with Wire Solder Feeder YB-30 A83.

**Refueling is possible (partial reflow)**

Even heating 30 to 30 mm away from the beam facilitates soldering multiple chips and parts that have a low tolerance for heat at one time 10 to 20 pieces.

**Partial Reflow**

![Diagram of Convergence Lens with Light beam and Wire solder]

**Upward soldering**

By utilizing our fiber optic cable, it is possible to solder from under the workpiece, thus the need to secure the components and flip the workplace is not necessary.

**Lead solder can be used.**

- Makes possible a smooth change from eutectic soldering to lead-free soldering.
- Decreased solder drops compared with soldering irons.
- Localized heating compared to other methods.

**YB-02AC5G**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Diameter of Fiber</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>YB-02AC5G</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Non-contact, selective heating realizes high quality micro-soldering.

- Fine soldering of micro components with a beam of min. 0.035mm.
- High speed soldering with high power density of LD.
- Applicable to lead-free soldering
- Easy integration

Wire solder feeder

- Designed for quality micro-soldering, high reliability, and ease of operation.
- Solder out and solder jam sensors
- Newly added wire speed adjusting function
- Easy adjustment of solder wire feed position
- Compact and lightweight (radius of gyration:110mm)
- Programmable solder wire feed rate (0.1–30mm/sec)
- Quick replacement of solder wire roll

Power meter

- A power meter is required for calibration of Soft Beam unit. Soft Beam SLIM series offers the option of auto calibration.

Specifications:

<table>
<thead>
<tr>
<th>Item</th>
<th>60W LD</th>
<th>80W LD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>100W</td>
<td>200W</td>
</tr>
<tr>
<td>Frequency</td>
<td>10KHz</td>
<td>10KHz</td>
</tr>
<tr>
<td>Solder wire size</td>
<td>0.1-0.3mm</td>
<td>0.1-0.3mm</td>
</tr>
<tr>
<td>Wire speed</td>
<td>0.1-30mm/sec</td>
<td>0.1-30mm/sec</td>
</tr>
</tbody>
</table>

Specifications of water tank (for 60W LD):

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water level</td>
<td>5L</td>
<td>Fixed</td>
</tr>
<tr>
<td>Water temperature</td>
<td>20–80°C</td>
<td>Adjustable within a range of 20–80°C</td>
</tr>
<tr>
<td>Water pressure</td>
<td>0.1–0.6MPa</td>
<td>Adjustable within a range of 0.1–0.6MPa</td>
</tr>
<tr>
<td>Water flow</td>
<td>1–10L/min</td>
<td>Adjustable</td>
</tr>
<tr>
<td>Water temperature</td>
<td>20–80°C</td>
<td>Fixed</td>
</tr>
</tbody>
</table>

Specifications of water tank (for 80W LD):

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water level</td>
<td>5L</td>
<td>Fixed</td>
</tr>
<tr>
<td>Water temperature</td>
<td>20–80°C</td>
<td>Adjustable within a range of 20–80°C</td>
</tr>
<tr>
<td>Water pressure</td>
<td>0.1–0.6MPa</td>
<td>Adjustable within a range of 0.1–0.6MPa</td>
</tr>
<tr>
<td>Water flow</td>
<td>1–10L/min</td>
<td>Adjustable</td>
</tr>
<tr>
<td>Water temperature</td>
<td>20–80°C</td>
<td>Fixed</td>
</tr>
</tbody>
</table>
Equipment systems responding to manufacturing requirements.

**Panasonic Soft Beam SLIM SERIES**

- **Easy to Operate**
  - Program and display screens run on Windows operating system

- **Easy to Solder**
  - Soldering technique is programmable.

- **Automatic calibration**
  - Easily maintained using the automatic power calibration function
  - A dedicated power meter is required.

- **Option**
  - Conveyor
  - Shuttle unit
  - Preheat unit
  - Memory card
  - Exhaust duct
  - Solder paste dispensing unit

- **Variable beam unit**
  - Programmable beam diameter for multiple soldering applications (adjustment range: 1.0 → 4.7mm)
  - At 5.0 fiber with 0.2 tons
  - Solder wire feed position is automatically adjusted for each beam diameter

---

**Technical Specifications**

- **YB-04F1H**
  - Applicable PCB
    - Minimum: 50mm (Width) X 50mm (Depth)
    - Maximum: 350mm (Width) X 250mm (Depth)
  - Main body size
    - 650mm (W) X 1250mm (D) X 1943mm (H)
  - 4 axes cartesian robot stroke
    - X:300mm, Y:400mm, Z:210mm, W:50°+318°
    - Repeatability: X, Y, Z: 0.05mm
  - Soft Beam
    - YB-02AC5G
  - Wire solder feeder
    - YB-20FD for YB-02DA
  - Controller type
    - Remote teaching, MDI
  - Powder supply
    - Single phase, 3AC100V/1.3KVA, 3AC200V/0.4KVA

---

**Application**

- Combined Upward and downward soldering system
  - A system designed to solder loaded components on a PCB from underneath the board (upward system) and then solder the remaining mounted components from the top (downward system).
Artisan Technology Group is your source for quality new and certified-used/pre-owned equipment

- FAST SHIPPING AND DELIVERY
- TENS OF THOUSANDS OF IN-STOCK ITEMS
- EQUIPMENT DEMOS
- HUNDREDS OF MANUFACTURERS SUPPORTED
- LEASING/MONTHLY RENTALS
- ITAR CERTIFIED SECURE ASSET SOLUTIONS

SERVICE CENTER REPAIRS
Experienced engineers and technicians on staff at our full-service, in-house repair center

IntraView™ REMOTE INSPECTION
Remotely inspect equipment before purchasing with our interactive website at www.Instraview.com

WE BUY USED EQUIPMENT
Sell your excess, underutilized, and idle used equipment
We also offer credit for buy-backs and trade-ins
www.artisantg.com/WeBuyEquipment

LOOKING FOR MORE INFORMATION?
Visit us on the web at www.artisantg.com for more information on price quotations, drivers, technical specifications, manuals, and documentation

Contact us: (888) 88-SOURCE | sales@artisantg.com | www.artisantg.com