

*The PSV5000 is the cost effective entry point for high performance automated device programming. The PSV5000 delivers trusted performance, flexibility & reliability at an affordable price.*



**Efficient.**

**Reliable.**

**Affordable.**

*Now with  
TurboBoost for Lumen<sup>®</sup>X*

## Efficient

Designed for optimum performance & flexibility in a compact footprint

- ✓ **Fast programming with easy changeover**
  - up to 1300 parts/hour
  - Scalable 1-6 FlashCORE III programmers (4 to 24 sockets)
  - Scalable 1 to 5 LumenX programmers (1 to 40 sockets)
  - Ideal for first time automation customers
- ✓ **Flexible Options**
  - Integrated media options
  - Fiber laser marking
  - Small parts down to 2 mm x 3 mm
  - Large parts up to 42.5 mm x 42.5 mm
- ✓ **Optimized Algorithms & Universal Device Support**

## Reliable

Engineered for highest quality programming, uptime & production yield

- ✓ **Highest quality programming results**
  - HIC adapters for highest programming yield
  - Value added software
- ✓ **Intelligent system design & integration**
  - Proven pick & place head, programming engine & handling software
- ✓ **Integrated vision system for precise placement**
  - +/- 30 micron for repeatable precision placement
  - Support for small parts

## Affordable

Developed to deliver high quality automated programming for the lowest cost per programmed device

- ✓ **Lowest Total Cost**
  - Significantly reduce labor cost
  - Save >3x cost per programmed part
  - Maximum socket density in a compact system minimizes floor space and enables quick scaling as production ramps
- ✓ **Investment Protection**
  - Works with existing FlashCORE adapters & algorithms
  - Growing support for LumenX ensures your investment is protected now and in the future
- ✓ **Global Service & Support**
  - Local service, engineering & support
  - Regional spare parts

## Device Handling System

- **Throughput:** Handler rated up to 1300 devices per hour
- **Placement Accuracy:** ± .02mm
- **Pick-and-Place Method:** Single-probe stepper actuated z-motion with servo-drive theta (rotation axis)
- **Probe Stroke:** 50 mm (max)
- **Alignment:** Upward looking camera
- **Regulatory Compliance:** CE Compliant, RoHs, WEEE
- **System Software:** TaskLink for Windows, CH700, Windows 10
- **Dimensions :** 1290mm D x 870mm W x 1520mm H (not including media I/O & monitor)
- **Shipping Dimensions:** 1310mm D x 930mm W x 1760mm H (not including media I/O & monitor)
- **Net Weight:** 450kg (992 lbs)
- **Shipping Weight:** 550kg (1212lbs)

## Media I/O and Additional Options

Any combination of input/output media I/O

- **Tape Input:** 12 mm - 56 mm
- **Tape Output:** 8 mm - 44 mm (adjustable)
- **Tray feeder Input/Output:** Supports up to 20 JEDEC Trays
- **Manual Tray:** Available without any special tooling
- **Tube Input and Output**
- **Reject bin**
- **Integrated Ionizers:** Up to three

## Device Marking Option

- **Laser Marker:** Fiber laser marking
- **Power:** 0 - 10 Watts

## Value Added Software

- **Serial Number Server**
- **Automotive Performance PAK**
- **NAND Flash Bad Block Management**
- **Data Management Software Suite (LumenX only)**
- **ConneX™ Smart Programming Software**

## Support Options & Service Spares

- **PSV5000 Basic Spares Kit**
- **PSV5000 Supplemental Spares Kit**
- **PS- FlashCORE III Spares Kit**
- **Operator training**
- **Extended Service Contracts:** The first year of support is included in the system purchase price and can be extended via extended service support renewal. Data I/O offers a suite of options to covers both hardware and system software (consumables are not included).

## Programming Engine, Adapters & Device Support

Programmer

- FlashCORE III
- Lumen®X with TurboBoost

Socketing Technology

- **Standard burn-in sockets** (typically 5,000 - 10,000 insertions per socket)
- **High Insertion Count Sockets (HIC)** for BGA, TSOP, QFP (typically 250,000 insertions per socket)

Universal Device Support

**FlashCORE III:** Flash Memory (NOR, NAND, MCP, MMC, eMMC, SD, MoviNAND, OneNAND, iNAND, Serial Flash, EEPROM, EPROM and more), Microcontrollers and Logic devices (CPLD, FPGA's, PLD's) and more

**LumenX:** eMMC, SD and SPI NOR with support for additional device technologies in process

Package Support

- PLCC, SOIC, SON, WSON, SSOP, CSP, BGA, uBGA and FPGA, QFP, TQFP, TSOP, PoP, DIP and more

Device Programming & Testing

Program, continuity, checksum, blank check, mis-insertion, test, verify, backwards device, two pass verify, ID check, Illegal bit-check

## Requirements

Electrical/Power

- **Input voltage:** 208 - 240 VAC, 50/60 Hz, 1 PHz
- 10 Amps Max

Compressed Air Usage

- **Air pressure:** 80psi (5.5 bar)
- **Air flow:** 6 SCFM (max)

Operating Temperature

- 55°F to 86°F (+13°C to +30°C)

Humidity

- 35% to 90% RH Non-Condensing

### Americas

Data I/O Corporation  
Redmond, Washington, USA  
Website: [www.dataio.com](http://www.dataio.com)  
Email: [sales@dataio.com](mailto:sales@dataio.com)

### Europe

Data I/O GmbH  
Gräfelfing, Germany  
Website: [www.dataio.de](http://www.dataio.de)  
Email: [salesgmbh@data-io.de](mailto:salesgmbh@data-io.de)

### Asia

Data I/O Electronics (Shanghai) Co. Ltd  
Shanghai, China, PRC  
Website: [www.dataio.cn](http://www.dataio.cn)  
Email: [ChinaSales@dataio.cn](mailto:ChinaSales@dataio.cn)