



EFFICIENT.



RELIABLE.



AFFORDABLE.

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: 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 (1to 40 sockets)
- Ideal for first time automation

FLEXIBLE OPTIONS

- Integrated media options
- Fiber laser marking
- Small parts down to 2mm x 3mm
- Large parts up to 42.5 mm x 42.5 mm

OPTIMIZED ALGORITHMS & UNIVERSAL DEVICE SUPPORT

- Universal device support on FlashCORE III
- Ultra-fast programming for eMMC and UFS with TurboBoost for LumenX
- 4.5x faster read speeds for UFS devices with VerifyBoost for LumenX programmers

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 minimizes floor space and enables quick scaling as production ramps

INVESTMENT PROTECTION

- Works with existing FlashCORE & LumenX adapters & algorithms
- Growing support for LumenX ensures your investment is protected now and in the fututre

GLOBAL SERVICE & SUPPORT

- Local service, engineering & support
- Regional spare parts

DATA I/O CORPORATION

- Redmond, WA
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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: 50mm (max)

Alignment: Upward looking camera
 Regulatory Compliance: CE Compliant, RoHs, WEE

• System Software:: TaskLink for Windows, CH700, Windows 10

• Frame Dimensions: 1290mm D x 870mm W x 1520mm H

(not including media I/O)

• **Shipping Dimensions:** 1310mm D x 930mm W x 1760mm H

(not including media I/O

Net Weight: 450kg (992 lbs)
 Shipping Weight: 550kg (1212 lbs)

I/O MEDIA OPTIONS

Any combination of input/output media I/O

• Tape Input: 8mm - 56mm

Tape Output: 8mm - 44mm (adjustable)
 Tray Feeder Supports up to 20 JEDEC Trays

Input/Output:

• Manual Tray: Available without any special tooling

• Tube Input/Output

· Reject Bin

VALUE ADDED SOFTWARE

· Serial Number Server

Automotive Performance PAK

NAND Flash Bad Block Management

Command Line Interface (LumenX)

ConneX® Smart Programming Software

• LumenX Software with:

TurboBoost standard with v2.0 and higher

VerifyBoost license available

DEVICE MARKING OPTION

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

• Ink Dot Marking Marks parts as small as 4mm x 4mm

ADDITIONAL OPTIONS

Vision: 2D tape-out inspectionlonizers: Integrate up to 3 ionizers

Barcode Scanner

PROGRAMMING ENGINE, ADAPTERS & DEVICE SUPPORT

Programmer:

- FlashCORE III
- LumenX with TurboBoost speed standard and VerifyBoost license 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)

Package Support:

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

Universal Device Support:

- FlashCORE III Flash Memory (NOR, NAND, MCP, MMC, e.MMC, SD, MoviNAND, OneNAND, iNAND, Serial Flash, EEPROM, EPROM and more), Microcontrollers and Logic devices (CPLD, FPGA's, PLD's) and more
- LumenX with TurboBoost eMMC, UFS, SD, SPI NOR, Secure Elements, Secure Microcontrollers with support for additional device technologies in process

Device Programming & Testing:

Program, continuity, checksum, blank check, mis-insertion, test, verify,

SUPPORT OPTIONS & SERVICE

- PSV5000 Basic Spares Kit
- PSV5000 Supplemental Spares Kit
- 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 cover both hardware and system software (consumables are not included).

REQUIREMENTS

• Input Voltage: 208-240 VAC, 50/60 Hz, Single-phase

10 Amps Max

Operating Temperature: 55°F to 86°F (+13°C to + 30°C)

Humidity: 35% to 90% RH Non-Condensing

Air Pressure: 80psi (5.5 bar)
Air Flow: 6 SCFM (max)



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