DPP DIRECT □ PACKAGE □ PRICE

pre-configured packages yield no-haggle pricing

DATRON DIRECT ONLY [deeply-discounted prices based on machines stocked in volume — further discounts will not be granted]

DATRON Dynamics, Incorporated
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miniRaptor™

Note: Photo shows miniRaptor with optional flat screen monitor and workholding.

Tech Specs	miniRaptor™
Coordinate Table	Solid aluminum bed (granite optional), steel base, gantry, and double-sided Y-drive precision guides
Machining Area (X x Y x Z)	20" x 20" x 9.5"
Portal Height	8"
Drive System	Digital servo drives, precision ball screw
CAD Interface	ISO G-Code (standard for NC machining code)
Control System	Microsoft Windows®-based control (open PC), 3-axis decentralized high-speed
Lubrication & Cooling	Minimal quantity lubrication, electronically adjustable dispensing, Ethanol coolant
Machining Spindle	290W high-frequency spindle, 7,000 - 60,000 rpm 1/8" collet, hybrid ceramic bearings
Tool Changer	3-tool changing unit with tool length sensor or 10-tool changing unit with tool length sensor
Accuracy Accuracy (w/ Heavy Duty Upgrade)	Absolute: ±0.002" / Relative: ±0.001" Absolute: ±0.001" / Relative: ±0.0005"
Feed Rate	400" per minute
Footprint	51" x 51" x 77" (W x D x H)
Weight	1,760 lbs.
Power Requirement	208/220V, 7Amps (single phase)

ALL STANDARD FEATURES INCLUDED IN PACKAGE PRICE

ITEM	DESCRIPTION	QTY.	UNIT PRICE	TOTAL
miniRaptor Machining System	High-speed, 20" x 20" bed CNC w/ Ethanol Coolant System	1	$46,800	**$46,800**
290W Spindle with 1/8" Collet	0.4 hp, 60,000 RPM high-frequency spindle (up to 400"/min.)	1	Standard	no charge
Automatic Tool Management	3-tool changer, tool database, tool-length sensor	1	Standard	no charge
Standard 90-Day Warranty	Covers parts and electronics except in cases of user-error	1	Standard	no charge
Protective Enclosure	Full machining-area enclosure with door safety interlock	1	Standard	no charge
Chip Disposal Tray	Removable for easy disposal of accumulated chips	1	Standard	no charge
Computer & Control Software	850 MHz Pentium, 15" monitor, keyboard, hand-held control	1	Standard	no charge
	Microsoft Windows® and Windows-based control software	1	Standard	no charge
	256 MB RAM, 40 GB part/program storage	1	Standard	no charge
	Ethernet networking, CD-ROM drive, 3.5" drive & USB port	1	Standard	no charge
	Remote monitoring capability	1	Standard	no charge
Packing	Designed to protect machine in transcontinental shipping		Option	
Shipping	Estimated separately based on customer location		TBD	
Heavy-Duty Upgrade	Modifies spindle, calibration, accuracy, bed & gantry		Option	
10-Tool Changer Upgrade	Replaces smaller tool changer & upgrades to 10 tools		Option	
Z-Correction Probe	Measures surface iregularities & compensates dynamically		Option	
3D Probe Extension	Enables the Z-Correction Probe to function in 3D (X, Y & Z)		Option	
RPM Control	Programmable spindle speed control by software		Option	
Windows Control (offline)	Enables programming & program testing from remote PC		Option	
Workholding Enabled Setup	Vacuum pump, tubing, guages, electric on/off on function key		Option	
15" Flat Screen Monitor Upgrade	Replaces standard 15" monitor with flat-screen option		Option	
Tutorial Kit	Manual, mounting fixture & hardware, 4 tools & 4 plates		Option	
On-Site Training	Machine installation and overview of control (cost per day)		Option	
Extended 1-Year Warranty	Extends standard 90-day warranty to 1 full year		Option	

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Whether you stick with the standard **tool changer** that comes with the package price or upgrade to one with more tools, you'll be pleased with some unique features. For example, our tool checker is a mechanical sensor that measures tool length and can detect a broken tool. And our software can be programmed with a macro to initiate a tool check at regular intervals by employing an "if/then" statement such as, "Measure this tool; if the length is shorter than the listed parameter, then change the tool."

Datron's optional, but integrated **Z-Correction Probe** recognizes irregular work-piece topography and compensates for it dynamically. It does this by taking measurements along the surface of a blank and feeding that data into the machining controller. The controller automatically adjusts for uneven surfaces or work piece position. Through this process, job setup times are reduced and piece/part rejection is minimized.

With the addition of the **3D Extention**, the Z-Correction Probe locates parts and material irregularities in the X, Y, and Z co-ordinates, finds centers of holes and bosses, pre-measures blanks before the machining starts, compensates for material variations, feeds data into ISO 9000 information chain for quality control, and even allows for the reverse engineering of many parts.

Windows-based Control Software comes standard on all Datron machines. But often, product development and programming is done on a different workstation. That's why we offer an **offline version** as an option. This allows R&D to be done remotely within the same program and software environment. The user can see how the machine will respond to their program and work out the kinks before uploading the files to the machine's operating computer.

The **Workholding Enabled Setup** includes a vacuum pump, tubing, vacuum pressure guages and keyboard control — in other words, everything you need to interface with our revolutionary Quick-Pallets™ and VacuMate™ workholding systems. Both of these systems are mounted securely onto the bed using a beveled boss-in-cavity system (see photo on left) that insures location repeatability and registers automatically in the X, Y, and Z axis, every time, all the time.

You can order an optional **15" Flat Screen Monitor** to replace the standard CRT monitor included in this miniRaptor Package Price. Compact and lightweight, LCD monitors take up less of your valuable space and can be positioned for easy viewing from the operator's setup area. LCD's work on the principle of blocking light rather than emitting it and are more energy efficient. The resulting energy savings yields a drop in operational costs that leads to a better bottom line.

Transform the already rugged miniRaptor into an industrial workhorse with the **Heavy-Duty Upgrade.** While the miniRaptor's work envelope is large enough for many applications, and the small footprint is appealing to most manufacturers, this upgrade delivers the added power, strength and accuracy required by some. It includes a solid granite bed, a 600W spindle with a 1/4" collet (replacing the standard 290W spindle), a heat-treated, aged, steel gantry for added rigidity and laser calibration for absolute accuracy of 0.001" and relative accuracy of 0.0005".

Note: Package Price can be obtained directly through Datron Dynamics only and not through any represenative, distributor or reseller. In our constant effort to improve our products we reserve the right to change specifications with or without notice.