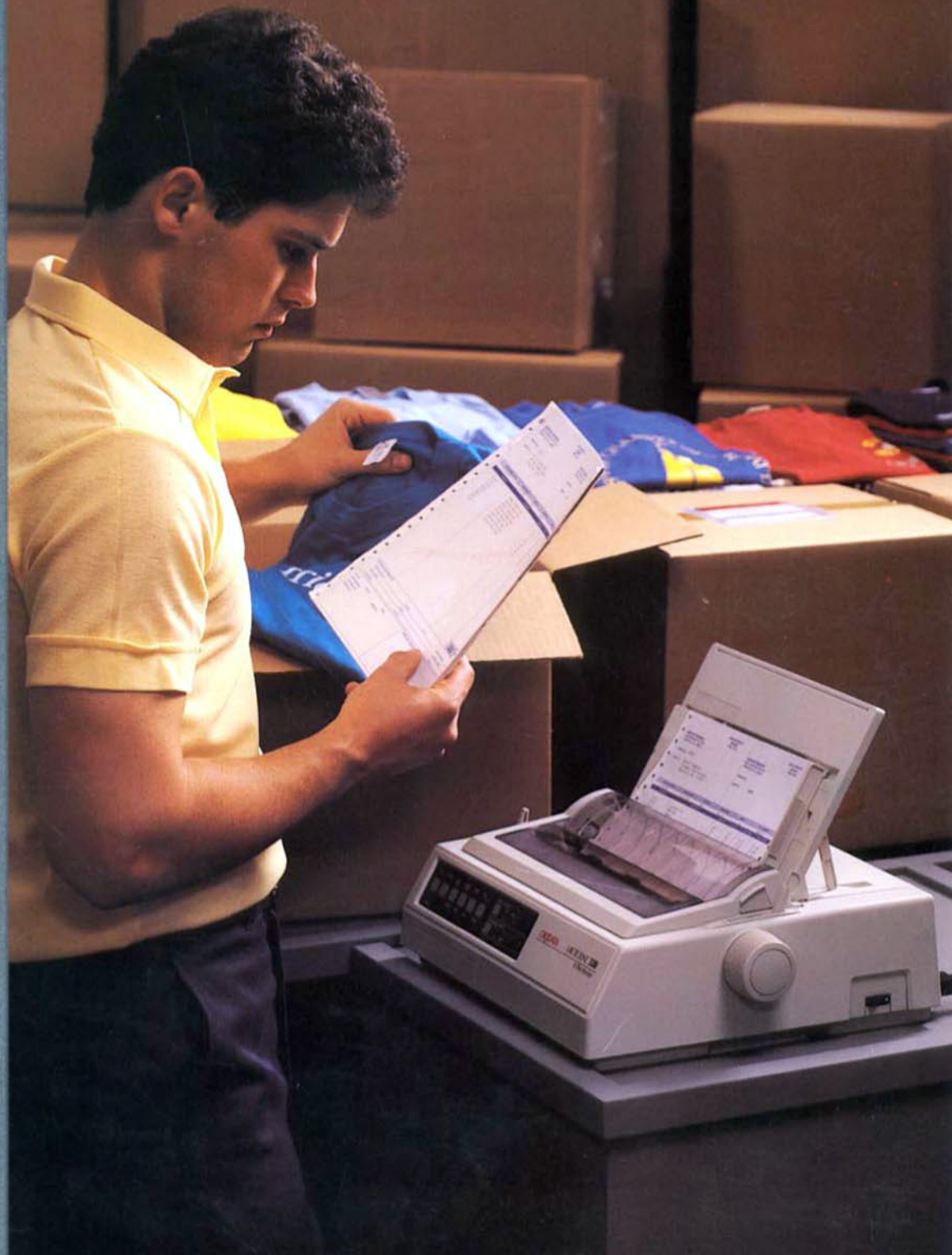


OKIDATA®

MICROLINE® 320/321

*The
9-Pin Printer
For Demanding
Work Station
Applications*



MICROLINE® 320/321. It's Economical. It's Versatile.

The MICROLINE 320/321 9-pin printer is setting the standards for utility printers. Okidata-engineered for demanding applications, the ML 320/321 combines reliability and durability, versatility and economy.

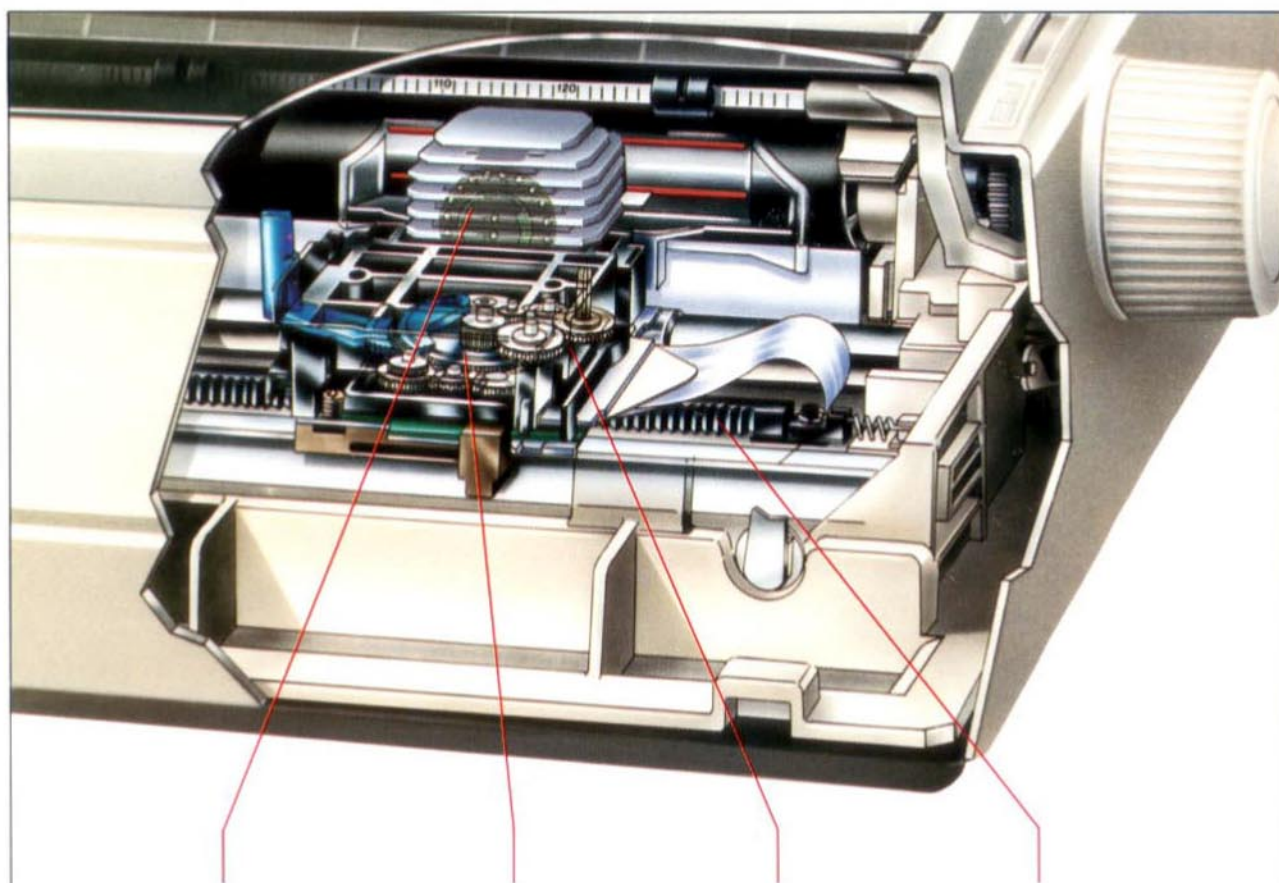
The result is a fast printer with exceptionally high throughput. One that can simplify any job on virtually any stock. A printer with a MTBF of 5,000 hours – 20% longer than most printers in its class.

The ML320/321 puts the “work” in

workstations. It's ideal for *dedicated* printing requirements: set it up with a box of forms – even *5-part* invoices! – and let it run and run and run...

Think of it as the productivity printer for financial departments, warehouse or manufacturing environments, and wholesale or retail sales desks. And, as economical enough to put wherever you need data on the spot, in a hurry.

Just ask the million-plus professionals who rely on them.



Rugged printhead design for longer life:

The printhead uses a stored-energy mechanism with a lightweight samarium cobalt magnet. Super-hard cemented carbide alloy printhead wires keep your print images sharp for the 200-million-character life of the printhead.

Exclusive OKIDATA closed-loop feedback system with patented optical sensor:

A proprietary closed loop feedback system, with patented optical sensor and microprocessor control, accurately positions the printhead for precisely formed characters.

Lighter, stronger motor for higher efficiency:

The printhead is powered by a brushless motor that reduces friction, heat build-up, and wear for longer life. This high-efficiency DC motor is lighter, stronger, and 40% more efficient than a conventional stepper motor.

Positive-tracking rack and pinion drive:

The rack and pinion drive system maintains accuracy longer than belt or cable systems that wear and stretch.

And It Has Over A Million Satisfied Users.

Better built for better results.

The ML320 and wide-carriage ML321 are engineered for durable, reliable performance, from the inside out. But you'll love them just as much for the performance they deliver.

High speed and high quality for everything you print.

Turn the ML320/321 loose at 300 characters per second (cps) in draft print mode and quickly clean up detailed jobs like internal financial reports or inventory listings.

Cut turn around time on invoices, shipping documents, and receipts, with Utility mode print at 250 cps.

Turn out Near Letter Quality documents, as required, at 63 cps.

Convenient paper handling options prevent backlogs.

The ML320/321 puts work out quickly, regardless of the type of work you feed in.

The bottom feed feature, when using the optional pull tractor, keeps the paper path short and straight, reducing opportunities for paper-

feed problems when running multi-part forms, stiff card stocks, or labels.

A rear feed paper path incorporates a built-in push tractor for continuous forms that won't waste a form every time you print. And an automatic paper park feature lets you switch from continuous forms to sheet-fed printing and back, without ever handling the forms.

Use the top feed with the Semi-Automatic Sheet Feed for single-sheet insertion.

And for volume printing, an optional single-bin cut sheet feeder handles up to 170 sheets of plain paper.

The most useful features are also the easiest to use.

A direct access panel on the front of the 320/321 printer gives you quick and easy control over frequently used selections like type size, print quality, and form feed.

But when you want to stick with one printing format— to fit a particular label or printed form, for

example—a lockout feature lets you disable the front panel so the ML320/321 prints only the type size and style you want.

Get added value from your current software and hardware.

The ML320/321 offers popular Epson/IBM emulation or a separate MICROLINE version. So you can use your existing software to add extra muscle to your printing without added cost.

What's more, there's an optional, user-installable serial interface for compatibility with virtually all systems.

OKIDATA, always your choice for reliable printers.

The OKIDATA tradition of reliability ensures that ML320/321 printers are built to stand the test of time—the short time they take to print your work, and the long time they last on the job.



OKIDATA® MICROLINE® 320/321 Specifications

Technology, Speed and Print Characteristics

Print Method:	Impact, Dot Matrix		
Printhead:	9-pin (.34 mm diameter)		
Graphics Resolution:	60 x 72 dpi minimum, 240 x 216 maximum (Epson/IBM) 288 x 144 max. (MICROLINE Std.)		
Print Speed and Character Matrix:			
Mode:	NLQ	Utility	High Speed Draft
Speed (All CPIs):	63 CPS	250 CPS	300 CPS
Matrix (H x V):	17 x 13	9 x 7	7 x 7
Characters Per Line:	Maximum Characters Per Line		
	CPI	ML-320	ML-321
	10	80	136
	12	96	163
	17	137	233
	20	160	272
	Prop	—	—
Line Spacing:	1/6, 1/8, n/72, n/144, n/216 inch (E/I only)		
Character Sets:	IBM Set I, II, III } (E/I) Epson Set I, Set II } Standard ASCII, Block and Line Graphics (ML Std.) 14 Foreign Character Sets (E/I) 12 Foreign Sets (ML Std.)		
Print Attributes:	Italics Emphasized Enhanced, Underline Sub and Superscript, Double High and Wide Overscore (E/I only)		

Fonts

Resident Typestyles:	
NLQ	Courier Proportional San Serif
Utility/HSD	Gothic
Custom Characters:	E/I = 256 char. (Utility) Std = 160 char. (Utility)

Paper Handling

Paper Input:	ML320	ML321
Cut Sheet (Width):	7.2" to 8.5"	7.2" to 14.3"
(Weight):	12 to 24 lb. max.	12 to 24 lb. max.
Envelopes (Weight):	24 lb. max.	24 lb. max.
Continuous (Width):	3" to 10"	3" to 16"
(Weight):	12 to 24 lb.	12 to 24 lb.
(# of copies):	Original + 4	Original + 4
(Thickness):	.014" max.	.014" max.
Standard Tractor:	Push with paper park feature	
Paper Path:	Rear bottom (w/pull tractor), top	
Line Feed Time:	70 ms at 6 lpi	
Slew Rate:	4.5 ips	

Emulation, Interface and Memory

Standard Interface:	Centronics® Parallel
Optional:	RS-232C serial, 3001 19.2K baud (Ready-busy or XON/XOFF protocol)
Emulation:	Co-resident Epson FX and IBM PP Series or MICROLINE
Memory:	28K standard for receive buffer or DLL character storage

Warranty, Service, Reliability and Environmental

Limited Warranty:	One year parts, labor, and printhead
Service:	Authorized OKIDATA Service Centers
Reliability:	
MTBF:	5,000 hours
MTTR:	15 minutes
Printhead Life:	200,000,000 characters (user replaceable)
Size:	
MICROLINE 320:	15.7" (w) x 13.6" (d) x 4.6" (h)
MICROLINE 321:	21.7" (w) x 13.6" (d) x 4.6" (h)
Net Weight:	
MICROLINE 320:	16 lbs. (UPS Shippable)
MICROLINE 321:	20 lbs. (UPS Shippable)
Electrical:	120 VAC, + 5%, -15%, 220 VAC + 5%, -15% (Special order) 50/60 Hz ± 2%
Power:	145 VA (Max.) operating
Operating Temperature:	40° F to 104° F, 10 to 95% Rel. Humidity
Safety:	UL: UL114/UL478, CSA: C22.2 (154), FCC: Class B
Noise:	57 dBA (Utility)

Options and Accessories

Pull Tractor Kit:	Use for bottom fed continuous forms. Includes acoustic cover. Specify narrow or wide model.
Cut Sheet Feeder (CSF 3000):	For both 320 and 321. 170 (16 lb.) or 100 (24 lb.) sheet capacity. Paper width: 7.2" to 8.5" Length: 10.1" to 14.3" Paper weight: 16 to 24 lbs.
Serial RS-232C Interface:	User installable. 300 to 19.2 K baud. Set up from printer menu.
Self-Inking Ribbon Cartridge:	MICROLINE 100 Series Ribbon. 3,000,000 characters nominal life in utility.

All specifications subject to change without notice.

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