

HP

LaserJet 4050

Printers

## The HP LaserJet 4050/T/N/TN More solutions - effortless management - more yes with less stress

HP laser printers have defined the industry standard for over a decade, consistently offering more features and innovations. The HP LaserJet 4050 series is yet another benchmark for workgroup laser printers, offering more printing solutions, great looking output, compatibility, reliability and effortless management.

### Printing solutions beyond basic office needs

- HP JetSend enabled FIR (fast infra red) printing for wireless printing from Laptop and Palmtop PCs, hand held capture/share devices, pagers, digital cameras etc
- Enhanced document management: private printing, proof and hold, booklet printing and quick copy
- Connectivity and paper handling solutions for virtually any business need

### Printer management is easier than ever

- Easy installation, configuration and management
- Remote (unattended) installation
- Printer driver compatibility
- Toner and paper usage gauges offer information at the desktop

### Great looking output - even faster

- 1200 dpi at 16 pages per minute
- Increased data throughput and faster processing
- Less user interaction for increased productivity

### Lower Cost of Ownership

- More standard features right out of the box
- Intuitive software printer management tools mean less training and reduced help-desk calls
- Reduced power consumption and low maintenance costs
- Extended support and services to meet your specific needs

### The HP LaserJet 4050 Series Printers:

#### HP LaserJet 4050

Input capacity 1 x 100, 1 x 500  
8 MByte RAM  
Network capable with optional HP JetDirect Print Server

#### HP LaserJet 4050T

Input capacity 1 x 100, 2 x 250  
8 MByte RAM  
Network capable with optional HP JetDirect Print Server

#### HP LaserJet 4050N

Input capacity 1 x 100, 1 x 500  
16 MByte RAM  
Network ready  
JetSend enabled FIR

#### HP LaserJet 4050TN

Input capacity 1 x 100, 2 x 250  
16 MByte RAM  
Network ready  
JetSend enabled FIR



## The HP LaserJet 4050 Series

### More solutions for workgroup printing

With the HP LaserJet 4050 series printers, you get more innovative business solutions than ever before and truly significant improvements to workgroup laser printing - from paper handling to reduced printer management.

**HP JetSend enabled FIR** (fast infra red) allows mobile users to print to the HP LaserJet 4050 from their Laptop and Palmtop PC's, hand held capture/share devices and digital cameras, without the hassle of cables and drivers.

**Enhanced document management** includes booklet printing and ZoomSmart which scales your document to the available paper size. With an EIO hard disk you can do even more. It means PIN-enabled private printing; quick copy which provides extra copies of your last print job without returning to the PC; and 'Proof and Hold' which enables you to review hard copy before printing multiple sets, saving a lot of time and frustration.

**HP Web PrintSmart** - makes printing from the Internet as easy as printing from documents created on your PC.

**Connectivity solutions** - HP's accessible architecture which includes Enhanced IO (EIO) interface, offers flexibility of connectivity in virtually all network environments. HP JetAssist Paper Handling Architecture provides seamless integration of paper handling solutions, minimising installation and support requirements.

**A variety of connectivity solutions** from USB to Token Ring are available via HP JetDirect Print Servers and dozens of Partner solutions.

**Electronic forms and image printing** include storage of e-forms and fonts on Flash memory or hard disk. Additional solutions for e-forms, barcodes and MICR are available through HP's wide range of Partner offerings.

**Versatile paper handling accessories** for every printing need are available either from HP or from one of our Partners. The HP LaserJet 4050 series offers flexible input tray configurations (1 x 100 and 1 x 500 or 1 x 100 and 2 x 250) upgradable to 4 input trays (1100 sheets) as well as a duplex printing accessory and an envelope feeder. Additional paper handling for every printing need, including flexible input, output or finishing options are available through HP's wide range of Partner solutions. Refer to the HP Network Printing Solutions Guide for a comprehensive list of solutions from HP and our Partners.

**Stunning quality at full engine speed.** The HP LaserJet 4050 supports RIP in RAM and MOPying with a single HP Transmit Once command. Optional duplex printing allows economical production of large multi-page reports and other documents.

**HP's Resolution Enhancement technology (REt)** offers users two new print qualities:

**FastRes 1200** - allows users to print documents at virtual 1200 dpi resolution without the compromises of slower processing and additional memory requirements normally attached to high resolution printing.

**ProRes 1200** - 1200 dpi professional quality output at 16ppm printer engine speed.

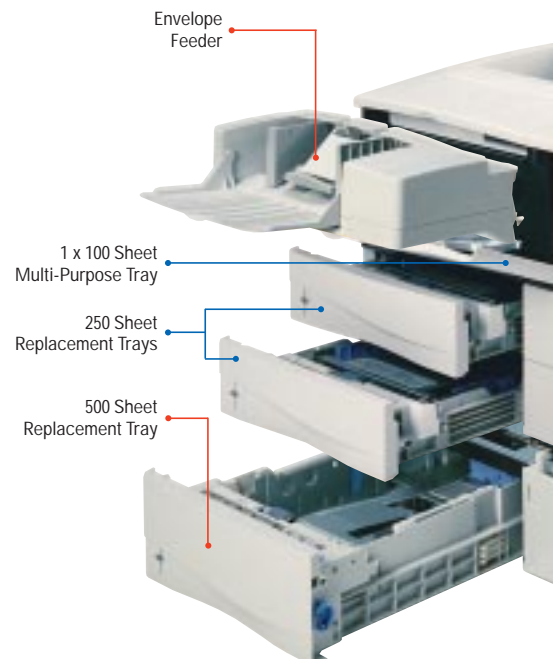
**HP's UltraPrecise High-Capacity toner cartridge** optimises the delivery of toner, providing the highest quality output at a low cost per page.

### Less print management - means less hassle

More printing solutions means more possibilities, less interaction and less stress. With the HP LaserJet 4050, users and administrators can all concentrate more effort on their work and less on maintaining their printer.

The HP LaserJet 4050 is designed for seamless connectivity with your network and with remote automatic or on-demand installer/driver facilities available over the Internet. Resource Manager is included to enable easy use of mass storage devices. A printer usage page keeps track of the exact toner and paper usage for each printer.

HP LaserJet 4050T/TN



HP LaserJet 4050/N



HP LaserJet 4050T/TN



**HP JetAdmin and HP Web JetAdmin** make your life easier. They allow easy network installation, real-time remote diagnostics and error correction. The HP LaserJet 4050 drivers are designed for unattended installation, with status gauges, for paper and toner for each unit visible from the desktop.

For those familiar with the HP LaserJet 4000, the HP LaserJet 4050 requires no re-training or re-qualification.

**HP Transmit Once, RIP Once and MOPying.** The HP LaserJet 4050 combines outstanding quality output with unbeatable performance and increased productivity. HP Transmit Once, RIP Once and MOPying mean simplified workflows and reduced network traffic.

### **Innovative technologies combine to save costs**

The HP LaserJet 4050's many cost saving features add up to substantially reduced cost of ownership: MOPy, HP Transmit Once, EIO, Instant-On Fuser, and 3.3 volt power saving technology. Both EconoMode and HP's advanced toner cartridge help reduce toner consumption.

**Great performance, great network reliability and less administrative support.** With the HP LaserJet 4050, operating productivity is increased and support costs are lowered substantially.

**MOPy and HP Transmit Once save time.** By rasterising the page once, users receive their output faster. In addition, EconoMode offers superior draft output at greater toner savings.

**An Instant-On Fuser** eliminates printer warm-up time, reducing both energy consumption and waiting time dramatically.

**Effortless printer management.** By providing status information at the desktop, innovative software solutions such as HP JetAdmin and HP Web JetAdmin benefit both the Network Administrator and the end user by minimising help desk calls and support costs.

**Duplex printing (optional)** - the duplex (both sides) printing facility, reduces paper consumption by up to 50%. Duplex printing can therefore help recover the cost of both printer and duplex accessory in 1 year.

**Flexible service options** - a range of warranty packages and service options are available, tailored for the needs of every business.

### **Environmentally sound printing**

Energy efficiency gains are realised via: instant-on fuser and 3.3 volt technology, Economode for reduced toner usage, and HP toner cartridges designed for recycling.

Blue Angel Environmental certification for the HP LaserJet 4050 guarantees low energy consumption, low noise levels, extremely low emissions, take back systems for printer and consumables, non halogenated flame retardants in housing parts, a 5-year guarantee for printer service, and parts designed for recycling.

### **HP JetSend**

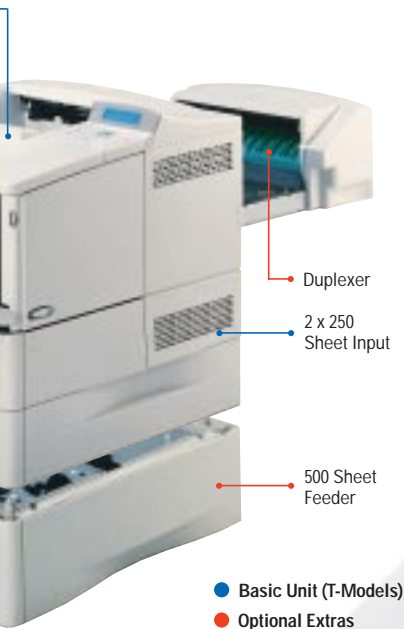
The HP LaserJet 4050 Series with HP JetSend enabled FIR, now brings the benefits of JetSend connectivity to mobile users. HP JetSend allows devices to connect, interface, and exchange information transparently without drivers.

As part of HP's Network Peripheral Solutions, HP JetSend and HP JetDirect allow seamless connectivity for print solutions, HP Digital Senders, HP CapShare (Capture and Share device) and also HP Partner software support.

### **HP Service and Support**

HP has a range of support services to fit your needs. For more information go to: [www.hp.com/go/support](http://www.hp.com/go/support) and click on HP Support Guide.

The HP LaserJet 4050 series is the new standard for office workgroup printers - with more print solutions and less administrative hassle. In simple terms it means more yes, and less stress.





## HP LaserJet 4050/T/N/TN

### Technical Specifications

<b>Speed and Throughput</b>	16 ppm engine speed. 133MHz RISC processor (NEC VR4310). 8MB Memory standard; 16MB in N/T. First page out in less than 15 seconds*. MOPying: HP Transmit Once in RAM (8MB min.). RIP Once in RAM (16MB min.).
<b>Print Quality</b>	ProRes 1200 (true 1200 DPI) @ 16 ppm. FastRes 1200 in PostScript & HP PCL 6. 600 dpi. HP Resolution Enhancement technology (RET). Standard 10,000 pages (18,000 pages ECMA 132/ISO 10561) HP UltraPrecise toner cartridge. Toner usage gauge (pixel count). Printer Usage Page.
<b>Connectivity/Expandability</b>	3 100-pin DIMM slots standard (2 in N and TN) 200MB DRAM maximum. 2 EIO expansion slots for optional HardDisk, HP JetDirect and 3rd Party cards. 10BT/100TX HP JetDirect Print Server bundled with N and TN. IEEE 1284 parallel connector. RS232 serial (9 pin). Fast IR port HP JetSend enabled. Optional USB and LocalTalk (Sept 1999).
<b>Printer Languages and Software Support</b>	HP PCL 6, HP PCL 5e, PostScript level 2 emulation standard in all versions. 80 Scaleable TrueType® fonts built in, 30 via HP FontSmart. Intellifont and TrueType rasterizer built in. Single CD-ROM with localised s/w. Internet installer for up-to-date software. Driver Support: Enhanced driver support of standard printer features for Microsoft Windows NT Workstation 3.X/4.X, Windows 95/9X, Windows 3.1X, Macintosh, IBM OS/2 Warp, AutoCAD Rel 14/15 and MS-DOS. Internet installer automatically updates printer drivers. All printer software and driver utilities ship on one CD ROM. Unattended/remote installation supported. HP JetAdmin: Enhanced HP JetAdmin and printer management software is standard providing easy set-up, use and management. HP Web JetAdmin for easy intranet administration.
<b>Control Panel</b>	Intuitive operation and complete, easy to understand messages with extensive help menus. Two line back-lit LCD display and three LEDs. Control panel can be locked through software. Cancel job feature.
<b>Paper Handling</b>	Up to five input bins with a total capacity of 1,100 sheets and 75 envelopes. Standard input capacity of 600 sheets (100 sheet multipurpose tray and a 500 sheet tray or two 250 sheet trays). Standard output capacity of 300 sheets (250 sheets facedown with output full sensor and 50 sheets face-up) Straight-through paper path. HP JetAssist connector for easy installation of paper handling accessories. Paper level indicators. HP ZoomSmart papersize adjustment.
<b>Standard Media Sizes</b>	Copier, Bond, special application, recycled paper, labels and transparencies. Minimum size 76 x 127mm, maximum size 216 x 356mm. Tray 1: 60 - 199g/m <sup>2</sup> , sizes postcard to legal. Tray 2: (on standard & N) 60 - 105 g/m <sup>2</sup> letter, A4 & legal. Tray 2 & 3 (on T and TN): 60 - 105g/m <sup>2</sup> , letter, A4, legal, A5, B5 - JIS, ISO and Executive. Duplex: 60 - 105 g/m <sup>2</sup> . Envelope Feeder: 60 - 105g/m <sup>2</sup> # 10 Regular 105 x 241mm, Monarch 98 x 191mm, DL, C5, B5.
<b>Mass Storage</b>	HP 2 and 4 MBytes Flash DIMMs, HP 2 GByte EIO disk drive, for storage of Macros and Fonts. HP Resource Manager included in box. With HP EIO disk drive: Job retention: Private printing, Proof-and-hold and Quick Copy.
<b>Environmental Ranges</b>	Temperature for printing and toner: Operating 10° to 32° C, Storage 0° to 35° C Humidity: Operating 20% to 80% RH. Storage 10% to 95% RH. Acoustics: Operating position - L<54dB(A) printing, L<36dB(A) standby (ISO 9296, DIN 45635, T.19). Bystander 1m L<50dB(A) printing, L<30dB(A) standby (ISO 7779, DIN 45635, T.19). Sound Power inaudible PowerSave - L <sub>1000</sub> = 0 bels (A) Printing at 16ppm L <sub>1000</sub> = 6.6bels (A)
<b>Power Requirements</b>	Source 100 to 120V or 220 or 240V (+/- 10%). Printer's voltage ranges depends upon the country in which the printer is purchased. Frequency 50 or 60 Hz (+/- 2Hz). Power Consumption: HP LaserJet 4050 and 4050T: Printing 317W, Standby 21W, PowerSave 16W (EPA Energy Star). HP LaserJet 4050N and 4050TN: Printing 385W, Standby 26W, PowerSave 19W (EPA ENERGY STAR).
<b>Dimensions</b>	HP LaserJet 4050 and 4050N: (WxHxD) 390 x 343 x 493mm, Weight: 17.8kg HP LaserJet 4050T and 4050TN: (WxHxD) 390 x 385 x 426mm, Weight: 22kg
<b>Product Certification</b>	UL 1950/CSA 950 certified, complies with IEC 950/EN 60950, FCC Class B certified, CISPR-22 level B, Product CDRH certified Class 1 Laser Product (safe for office/EDP use). Blue Angel Certified.
<b>Duty Cycle</b>	Up to 65K pages per month.
<b>Year 2000 and Euro compliance:</b>	The HP LaserJet 4050/T/N/TN including all the software, hardware, firmware and accessories meet Year 2000 Compliance and support the Euro currency symbol.
<b>Warranty</b>	Standard one year return to HP. SupportPacks: Various SupportPacks for 1 to 5 year onsite or 2 to 5 year return to HP. Availability depends on country in which the SupportPack is purchased.

\*Throughput is application and system dependent.



For more information, please call your local HP sales office or representative: **Austria:** (01) 25000-536, **Azerbaijan:** (+994) 12 97 40 40, **Belgium and Luxembourg:** (02) 778 34 00, **Bulgaria:** (+359) 2943 4889, **CIS:** (007) 095 797 3500, **Croatia and Slovenia:** (+385 1) 484 36 28, **Czech Republic:** (00 420) 261307111 (Prague), **Denmark:** 45 99 1125, **East Central Europe (Vienna HQ plus Albania):** (+43) 1-25000, **Finland:** (09) 88 721, **France:** (1) 69 82 6060, **Germany:** 0180 532 6222 (0.48 DM per minute), **Greece:** (01) 689 64 11, **Hungary:** (1) 343-0310, **Iceland:** (91) 67 10 00, **Ireland:** (00) 353 1 61 58 200, **Italy:** (02) 92121, **Kazakhstan:** (+7) 3272 47 37 53, **Netherlands:** (020) 547 6666, **Norway:** 22 73 56 00, **Poland:** (22) 608 77 00, **Portugal:** (0808) 206 001, **Romania:** (+401) 250 6197, **Slovakia:** (+4217) 82 20 26, **Spain:** (91) 631 16 00, **Sweden:** (08) 444 20 00, **Switzerland:** 0848 88 44 66, **Turkey:** (0212) 224 59 25, **UK:** (0990) 474747, **Ukraine:** (+380) 44 459 0348, **Uzbekistan:** (+998) 71 120 6320, **Yugoslavia:** (+381) 11 627 134, **International Sales Branch (ISB) for Middle East and Africa (Geneva):** (22) 780 41 11, **European Headquarters (Geneva):** (22) 780 81 11.

### Ordering Information

#### Printer Product Numbers

C4251A	HP LaserJet 4050
C4252A	HP LaserJet 4050T
C4253A	HP LaserJet 4050N
C4254A	HP LaserJet 4050TN

#### Accessories and Supplies

##### Paper Handling Accessories

C4122A	75-sheet envelope feeder
C4123A	Duplex assembly for two-sided printing
C4124A	500-sheet optional paper feeder
C3122A	500-sheet standard replacement tray (letter, legal, A4)
C4125A	500-sheet universal replacement tray (x, y adjustable)
C4126A	250-sheet replacement tray (7 sizes)

##### Service, Supplies & Accessories

C2985B	HP 2-Gbyte hard disk drive
C4103A	HP Fast Infra red Receiver
C4127X	HP UltraPrecise toner cartridge (10,000 pages at 5% coverage, 18,000 ECMA 132/ISO 10561)
C4127A	HP UltraPrecise toner cartridge (6,000 pages at 5% coverage, 10,000 ECMA 132/ISO 10561)
C4118-69002	220V Maintenance kit (200,000 pages)
C4118-69001	110V Maintenance kit (200,000 pages)
H5479A	HP SupportPack: 3 year onsite next day

##### HP JetDirect 600N Internal Print Services

J3110A	for Ethernet 10Base-T networks
J3111A	for Ethernet 10Base-T/10Base2 and LocalTalk networks
J3112A	for Token Ring networks
J3113A	for Ethernet 10/100Base TX networks (bundled with N & TN printers)

##### Interface & Cables

J4135A	HP JetDirect Connect Card USB/Serial/LcITk (Sept 1999)
J4134A	HP JetDirect Connect Card 3 Parallel Ports (available Sept 1999)
C2951A	HP IEEE Parallel (25-pin male to 36-pin female) 3m/10ft cable for HP Vectra, IBM PC/AT & compatibles
C2809A	Serial (25-pin female to 9-pin male) cable adaptor
92215S	Macintosh serial cable
92215N	HP Cable Kit for AppleTalk/PhoneNet

##### Memory

C4286A	2-Mbyte Flash DIMM
C4287A	4-Mbyte Flash DIMM
C4135A	4-Mbyte EDO DIMM
C4136A	8-Mbyte EDO DIMM
C4137A	16-Mbyte EDO DIMM
C4140A	4-Mbyte SDRAM DIMM
C4141A	8-Mbyte SDRAM DIMM
C4142A	16-Mbyte SDRAM DIMM
C4143A	32-Mbyte SDRAM DIMM
C3913A	64-Mbyte SDRAM DIMM

For more information contact the Hewlett-Packard Internet website at: <http://www.hp.com>  
For more information on Third Party printing solutions, including electronic forms, barcodes, OCR, SAP R/3 and connectivity to mini or mainframe computer systems, please refer to HP's Network Printing Solutions Guide and to <http://www.jetcaps.com>

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