

C - 680 LabelJet **User's manual**





Output Solutions C-680 LabelJet Printer

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Scope of delivery of Output Solutions C-680 LabelJet Printer

Your printer will be delivered in a carton with the following contents:

Printer

(Packed in a plastic bag and foam plastic sleeve)



Carton with accessories

- Power supply unit
 (the appearance may differ from the picture shown, possibly a seperate line cord is included)
- 2. Printer software CD
- 3. Roll unit and roll pick-up with steelplate
- 4. Tri-color printcartridge*
- 5. Black printcartridge *
- 6. User's manual

*not included in shipment for every country!







In case the content of the package is not complete please contact your local dealer or **Output Solutions GmbH**.



Terms and conventions

The following terms and conventions are used in this user's manual.

Terms

The **Output Solutions C-680 LabelJet Printer** is also specified as **C-680 LJ** Printer or simply as printer.

Conventions

- marks a listing
- □ marks instructions as shown on pictures
- ⇒ marks result of action

MAJUSCULES mark commandos, instuctions/funktions and key symbols.

Symbols

A Note icon indicates that additional information is provided



Note:

The printer can also be used with only one printer cartridge.

A Caution indicates possible damages of the **Output Solutions C-680 LJ** – Printer or of an other device.



Caution!:

Do not touch nozzles or copper contacts of the printer cartridge.

A Warning indicates possible harm to you or others:



Warning:

Keep new and used print cartridges out of the reach of children.



Connectivity

There are several connection options:

- parallel port
- USB-port
- network port (optional)

Parallel port

Acquire by purchase the parallel cable type IEEE-1284 (for Windows 2000- or Windows XP-operating systems).



USB-port

Acquire by purchase the USB 2.0 cable. (for Windows 2000- or Windows XP-operating systems). the cable should not be longer than 3 meter.



Network port (optional)

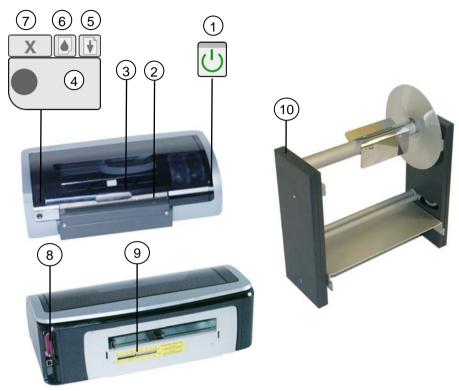
The printer can also be connected with a Fast Ethernet Print Server to a network **(optional and against extra charge)**. Connect the Fast Ethernet Print Server to the parallel port and connect the print server via Ethernetnetwork cable to the LAN.



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Printer overview



- 1 Power button
- 2 Sensor paper tear
- 3 Paper tear edge
- 4 Button (no function)
- Print cartridge status symbol and -LED 6
- 7 Print cancel button
- Interfaces and net work port 8
- Sensorposition GAP / BlackMark
- 5 Resume button and -LED 10 Roll unit and roll pick-up

Power button

The printer can be activated and deactivated with the power button. After pushing the button it will take a couple seconds till the printer is ready. The power-LED starts flashing when the computer processes data.





Caution!:

Basically turn on/off the printer with the power button. Switching on and off with a connection plug board, surge protector or a (power outlet switch) can cause damages of the printer and/or the cartridge can run dry.

Sensor paper tear

After the printing the sensor detects if a label is available (only active if chosen in the printer driver).

Tear edge

Tear off label by pulling it up against the tear edge.



Warning:

Tear edge is sharp!. Risk of injury!

Button (no function)

On this printer this button has no function.

Resume button and -LED

Resume-LED flashes, if e.g. the paper tray is empty or a paper jam has to be cleared. When the problem is solved press the resume button to continue printing.

Print cartridge status symbol and -LED

The print cartridge status-LED is on up or flashes if the cartridge must be tested or replaced. In the driver service function you can find out which one of those two must be changed.

Print cancel button

Pressing the print cancel button cancels the current print job.



Sensorposition GAP / BLACKMARK

Sensor flag for adjustment for the GAP-/BLACKMARK-Position.

Installation process



Observe the following order:

- Install driver, connect printer, restart your computer
- Connect printer without label roll pick-up
- Start calibration process
- Adjust printer to label size
- Install label roll pick-up

Install driver

Put the printer driver software CD in CD-ROM and follow the
instructions.
Install driver software.
Shut down computer.
Connect printer without the label roll pick-up (see the following page).
RESTART your computer.
The operating system identifies new hardware.

i Note:

If you do not have administrator rights, the administrator has to install the driver software!

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Connect printer without roll unit

- ☐ Place the printer on its intended place.
- ☐ Connect the cable of the power supply unit to the power input socket of the printer.





- ☐ After that, connect the power supply unit with the power outlet.
- ☐ Press power button.



- □ Check if printer is turned on.
- □ Open top cover.







- ☐ Unpack print cartridges and peel the pink (colored) protection film off the tri-color print cartridge.
- ☐ Lift the print cartridge latch.



Caution!:

Do not touch ink nozzles or copper contacts!



☐ Insert new cartridges with contacts backwards and slide it into the print cartridge cradle.







- □ Push down the print cartridge latch until it snaps in.
- ☐ Now insert the black print cartridge and close top cover.
- ☐ Connect the USB-cable to the USB-port of the printer and connect the printer to the computer, or





☐ Connect the parallel cable to the parallel port of the printer and connect the printer to the computer.

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Note:

Connection cables are not included in the scope of delivery!

i

Note:

Calibrate the print head after each cartridge exchange. The status report will be printed on a DIN A4 sheet of paper!

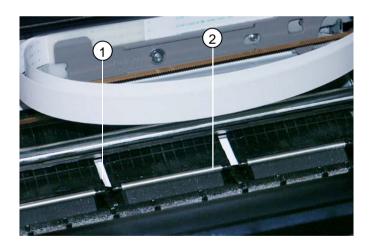


Execute the calibration process

□ Slide paper guides [1] firmly against the paper and slide a DIN A4-paper sheet forward until stop [2].



□ Uplift the top cover and check if the paper is slided in until stop [2].





☐ Open START/SETTINGS and click on PRINTER and FAXES (For an example see graphic below).



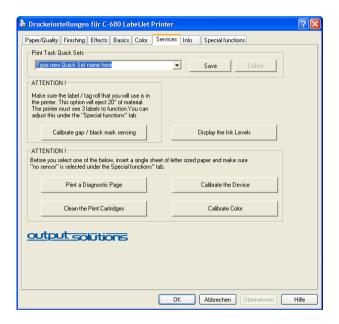
- ⇒ All installed printer driver will be displayed.
- ☐ Click with the right mouse button on driver name C-680 LabelJet Printer.
- ☐ Activate the function PRINTERSETTINGS.



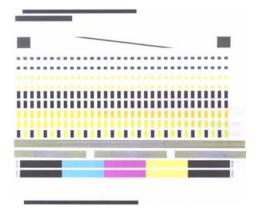
 \Rightarrow The tabs of the driver appear.



☐ Click on tab SERVICES.



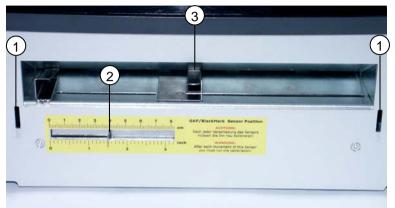
- ☐ Click on button CALIBRATE THE DEVICE.
- ⇒ A calibration test page will be printed.





Set printer to label size

Press CALIBRATE GAP/BLACK MARK SENSING if printer is adjusted to the label size. Thereby the driver calibrates the sensor to the label and the label carrier. After that the GAP-/BLACKMARK sensor is able to detect the gap between labels.



- ☐ Measure the width of the label roll
- ☐ Set the sensor flag GAP-/BLACK MARK [2] into a position, at which the gap between labels will be detected.

i Note:

If labels are round or oval you must place the sensor lever into a position where the gap between the labels is most minimum.

At Black Mark detection (black mark on label carrier adjust the sensor to the marks on the rolls.

Depending on the label type you must set SENSOR SETTING!

☐ On the right side set paper feed [3] to the label width.



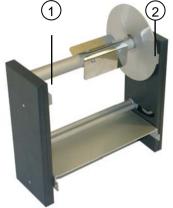
Caution:

To avoid e.g. paper jam slide the paper guides firmly against the edges of the paper.



Install roll unit

☐ Insert roll pick-up [1] in(to) the core of the label roll until stop [2].





- Attach roll unit to the back of printer by hanging it in the slots positioned at both sides of the paper tray.
- ☐ Insert labels into the paper feed until stop.



Caution!:

Be cautious that the label is not bended downwards to avoid paper jam.





□ Lay the roll pick-up with the label roll in the retainer of the roll unit and tighten it slightly by spinning the label roll gently backwards.



- ☐ Press the power and resume button at the same time.
- ⇒ The labels will be moved forward.



- ☐ In the printer driver click the CALIBRATE GAP/BLACK MARK SENSING button.
- ☐ The printer learns which label type is inserted and starts the print process.
- ☐ The paper feed transports the label to the tear edge.
- ☐ Tear off label.



Caution!:

Tear edge is sharp. Risk of injury!



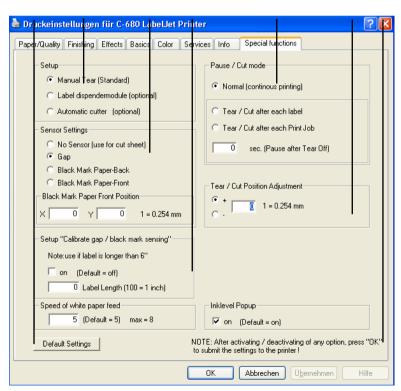
- Deactivate the checkbox ON which can be found in LEARN MODE on tab SPECIAL FUNCTIONS.
- ⇒ LEARN MODE is deactivated.
 - ☐ The printer is ready for use.

Driver settings

Tab SPECIAL FUNCTIONS

Enter the following data in printer driver:







Speed of white paper feed [1]

The default value is 5.

Choose a value between 1 and 8 whereas 8 stands for maximum paper movement speed. We recommend the default value 5.



Note:

Using very thin paper you should reduce the paper movement speed.

Setup [2]

Manual Tear (standard)

Set this radiobutton if you want to tear off the label manually.

Peeler (optional)

Set this radiobutton if the label will be peeled off the strap automatically (You need to install an optional label dispender.)

Automatic Cutter (optional)

Set this radiobutton if the label will be cut off automatically (You need to install an optional Automatic Cutter.)

Sensor Settings [3]

None Sensor/Cut Sheet Paper

Set this radiobutton if sensor should be deactivated and the label roll has no gap and/or continous labels/media is used.

Gap

Set this radiobutton if the form feed is regulated by the gap between the labels.

Black Mark Paper-Back

Set this radiobutton if the form feed is regulated by the black mark on the paper-back.

Setup "CALIBRATE GAP/BLACK MARK SENSING" [4]

The driver software calibrates the sensor GAP-/BLACK MARK on the label and label carrier. Thereafter the sensor can measure the gap between the



labels. The sensor detects 3 gaps and generates the exact gap space between the labels.

The form feed can not handle labels longer than 6 Inch (Inch = 2,54 cm) automatically as a result set label length manually.

Checkbox ON

Activate this checkbox to activate LEARN MODE.

Label Length

Enter label length (100 = 2,54 cm) if labels are longer than 16 cm (6 lnch).

Pause/Cut Mode [5]

Normal (continous printing)

The print process ends when the amount of printed labels is reached.

Tear/Cut after each label

The paper feed pauses after each printed label so it can be torn off. The next print job starts after the tear off and the previously set pause after tear-off.

Tear/Cut after each print job

The paper feed pauses after each print job and the printed labels can be torn/cut off.

Pauses After Tear Off

The next print cycle starts after the pause after tear-off which was set.

Tear/Cut Position Adjustment [6]

In case the tear edges are not centric between the labels you can adjust the position in both directions (forward/backward) doing so by pressing plus or minus.

Set radiobutton plus or minus.

Enter a value in the data field (1 = 0.254 mm).

Print the next label and check if the tear position is centric.

Inklevel Popup [7]

After each print job the ink level popup appears. The software informs the user about the current fill level of the ink cartridges.



i Note:		
After activation/deactivation of any option press "OK" to submit the settings to the printer!		
Default Cattings		
Default Settings Activate this button to set standard values!		
Activate this button to set standard values:		
Load labels		
☐ Press the power and resume button at the same time.		
\Rightarrow The labels will be transported to the first print row.		
Print labels		
☐ Find out the exact label size.		
☐ Set label size in the respective program.		
☐ Enter values for margins.		
☐ Write your text.		
☐ Select printer driver C-680 LabelJet Printer.		
☐ Open properties.		
☐ Set print quality.		

Unload labels

☐ Press the power and resume button at the same time.

☐ Set the respective label parameter in Special Functions.

 \Rightarrow The labels will be ejected to the back.

Change label roll ☐ Unload labels

_	OTHOGG IGDOIO
П	Take roll nick-up out of the roll unit

Start the print process.

□ Pull the roll pick-up out of the core of label roll and put it aside.



If the core diameter of the new roll is the same as the old one insert roll pick-up until stop otherwise you have to adjust the roll pick-up to the core diameter of the new label roll. (An applicable roll pick-up optional available)
Adjust printer to new label width.
Insert paper into paper feed.
Put roll pick-up with the new label roll in the retainer on the roll unit.
Load labels.
Before using new labels you have to execute CALIBRATE GAP/BLACK MARK SENSING.

Troubleshooting

Printer does not print

Check the following:

- The printer is connected to the power supply.
- All cables are connected properly.
- Printer is switched on.
- Print cartridges are installed correctly.
- Paper or other print media is inserted correctly in the tray.
- Top cover is closed.

Check printer-LEDs

The printer LEDs indicate status of the printer and possible problems.

- Power-LED flashes.
 - The printer initializes the print process.
 - LED stops flashing when printer has received all data.
- Resume-LED flashes
 - Paper tray may be empty.
 - Refill paper tray.
- Press the resume button on the front of the printer



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Note:

There may be a paper jam.

 Print cartridge status-LED is on or flashing Check ink fill level.

The function DISPLAY THE INK LEVELS on register tab SERVICES checks which print cartridge low on ink is. Please change cartridge that are low on ink. If no print cartridge is low on ink press the resume button

If the print cartidge status-LED is still flashing switch printer off and on again.

If print cartridge status-LED is on and flashing

Make sure you inserted the correct print cartridges.

Open the printer's top cover, take the black cartridge out and close top cover again.

If LED is off: a problem with this cartridge exists.

If LED continues flashing: open the top cover, reinsert black cartridge and take the color cartridge out.

Clean print cartridge manually (Register tab SERVICES/CLEAN PRINT CARTRIDGES).

Reinstall cartridge after the cleaning.

If print cartridge status-LED still continues flashing replace print cartridge.

All LEDs are flashing

The printer may need a restart.

Press power button to switch printer off and then to switch it on again.

If LED is still flashing switch printer off.

Disconnect the printer's power cord out of the power outlet.

Plug power cord back in the power outlet.

Press power button to switch printer on.

Despite pressing the power switch the printer remains switched off

The printer may have drawn too much power.

Disconnect the printer's power cord from the power outlet.

Wait approx. 10 seconds.

Reconect power cord.

Switch printer on.



If you still can not switch the printer on try another power outlet or connect directly to the power outlet rather than into a surge protector.

Check printer cable connections

Printer connection via USB
 If the printer cable is connected to a USB hub printing conflicts may occur.

Attach USB cable directly to the computer. When printing do not use other USB devices that are connected to the hub.

Printer still does not print

Paper jam
 Clear paper jam.
 Press resume button.

i Note:

If you print on labels make sure that no label has separated from the label carrier.

Poor print quality

- Streaks and missing lines:
 If lines or dots on printed pages are missing or streaks appear the print cartridges may be low on ink or need to be cleaned.
- · Print is faded:

Make sure that black print cartridge is installed.

If the black text and images on the print-outs are faded you may be print with the tri-color cartridge. In addition to the tri-color cartridge insert a black print cartridge to achieve an optimal print quality. Make sure that no print cartridge is low on ink. If any print cartridge is low on ink you should replace it.

Make sure that the protection film has been peeled off the print cartridges.

Consider selecting a higher print quality.

Blank pages print:
 May be the pink protection film is still attached to the cartridge. Make



sure that the protection film has been peeled off.

May be the print cartridges are low on ink. Replace empty cartridges.

Too much or little ink appears on the page:

Adjust the ink volume: open the DRUCKEN dialog box.

Select the Kontrollfeld GRUNDLAGEN.

Click on tab ERWEITERTE FUNKTIONEN.

Move the ink volume slider toward LIGHT or HEAVY.

Click OK.

Document is misprinted

Text and images are misaligned:
 If text and imaged are misaligned on your print-out the calibrate the printer.

• Parts of the document are missing or not centered:

Open dialog box PAPIERFORMAT and confirm the following options: Kontrollfeld SEITENEINSTELLUNGEN

PAPER SIZE: appropriate paper size

GRÖßE: activate this option that text and graphics will be adjusted to the paper format.

AUSRICHTUNG: verify the appropriate orientation.

Print-out does not reflect new print settings:

You can adjust certain print settings, e.g. print sequence/order. The default print settings may differ from the ones set in the dialog boxes DRUCKEN or PAPIERFORMAT.

Select appropriate print settings in the application that these settings conform with the settings in the dialog boxes PRINT / PAPERSIZE.

Photos are not printed correctly

Check paper tray:

Make sure that the photopaper is inserted in the optional tray with the pintable side down.

Slide the paper forward until stop.

Slide the paper guides firmly against the paper.

Check printer properties:

Open dialog box PAPERSIZE and check the following options:

PAGEADJUSTMENT

PAPERSIZE: appropriate paper size



ADJUSTMENT: appropriate orientation

Open dialog box DRUCKEN und check the following settings:

PAPER/QUALITY

PAPER: appropriate photopaper Quality: best or maximum resolution

 Colors are tinted or incorrect: Calibrate the ink cartridges.

Reprint the photo.

If colors are still tinted or incorrect calibrate print cartride.

To calibrate the print cartridge a photo print cartridge must be installed.

 If colors are still tinted or incorrect, then open the dialog box DRUCKEN, select the tab PAPIERART/QUALITÄT, then FARBOPTIONEN and then do the following:
 If colors are too yellow move the slider towards cooler.
 If colors are too blue move the slider towards warmer.
 Reprint photo.

If colors are still tinted or incorrect, calibrate the print cartridges.

Printer is slow

The printer's performance can be slowed down by a number of variables.

- Multiple software applications are opened
 The printer does not have sufficient ressources for the printer to print at its optimum speed.
 - Close all unnecessary applications to increase printer speed.
- Complex documents, graphics or photos are printing Documents containing graphics or photos take longer to print than text documents.
- Best or maximum dpi mode is selected
 If the best or maximum dpi mode is selected the printer prints slower.
 Select a different print quality mode if you want to increase the printer speed.
- computer does not meet system requirements
 If your computer does not have enough RAM or free space on the hard drive, the printer processing time will be longer.

 Check if the computer's RAM, hard disk space and processor speed meet system requirements.
 Free up space on the hard drive.



Printer is in ink-backup mode
 In ink-backup mode the printer may print more slowly
 Use two print cartridges to increase print speed.

Printer doesn't feed any paper

Labels are not slided in until stop.

Printer passes labels through/LEARN mode not executed

Wrong sensor settings on tab SPECIAL FUNCTIONS.

Resume light is flashing

Paper tray may be empty or there may be a paper jam.

After several print processes the printer start passing labels through without printing

 The manual sensor setting GAP/BLACKMARK has been changed. execute CALIBRATE GAP/BLACK MARK SENSING mode again.

Printer executes LEARN Mode permanently.

 Deactivate CALIBRATE GAP/BLACK MARK SENSING mode on tab SPECIAL FUNCTIONS.

LEARN MODE mode does not detects gaps between labels

Move the GAP/BLACKMARK sensor slightly.

If you continue to have problems

If you continue to have problems after investigating the troubleshooting topics, shut down, then restart your computer.

If you still have problems after restarting your computer please go to contact hotline at **info@outputsolutions.de** or contact the **Output Solutions** custumer support +49 21 74- 78 32-0

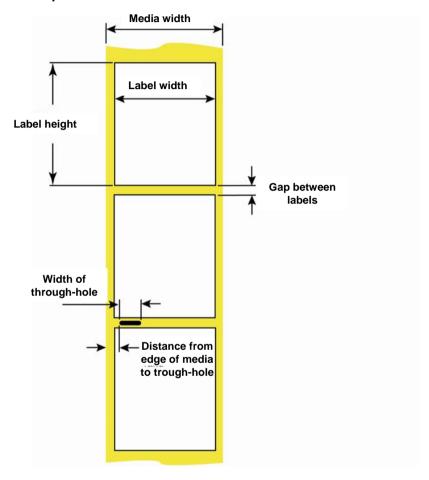


Disposal

Please contact your local dealer!



Label specification



	Max	Min
Label width	8" (203 mm)	1.5" (38 mm)
Media width	8.25" (210 mm)	1.5" (38 mm)
Label height	24" (610 mm)	0.75" (19 mm)
Gap between labels	10" (253 mm)	0.10" (2,5 mm)
Width of through-hole opening	0.5" (12,65 mm)	0.25" (6,325 mm)
Distance from edge of medie to throughhole	2.25" (57 mm)	0.20" (5,06 mm)



Technical specification

Print cartridges 416 ink nozzles on black print cartridge, ink jet impact frequency max. 18 kHz; 300 ink nozzles on tri-color print cartridge, ink jet impact frequency max. 21 kHz Print speed Up to 12 ppm Print resolution Black: up to 1200dpi Color: up to 4800 x 1200dpi (optimized) in color and 1200 Input-dpi Comptabile operating systems Microsoft Windows 2000 Professional, XP Memory 8 MB built-in RAM Printer languages (Emulationen) HP PCL Level 3 Enhanced, ASCI Font information 8 built-in fonts (4 each in portrait & landscape): CG Times, CG Times Italic;	Print method	Drop-on-demand thermal inkjet printing
frequency max. 18 kHz; 300 ink nozzles on tri-color print cartridge, ink jet impact frequency max. 21 kHz Print speed Print speed Print resolution Black: up to 1200dpi Color: up to 4800 x 1200dpi (optimized) in color and 1200 Input-dpi Comptabile operating systems Microsoft Windows 2000 Professional, XP Memory 8 MB built-in RAM Printer languages (Emulationen) HP PCL Level 3 Enhanced, ASCI Font information 8 built-in fonts (4 each in portrait & landscape): CG Times, CG Times Italic; Univers, Univers Italic; Courier, Courier Italic; Letter Gothik, Letter Gothic Italic Paper feed 9 Sensor controlled label/paper feed DIN A4 - manual Media handling Continous rolls, label rolls, single sheets endless rolls, label rolls, single sheets Custom size media for manual paper feed Length: min. 70 mm - max. 230 mm Length: min. 70 mm - max. 600 mm Input voltage: 100 to 240 V (±10%) Input frequency: 50 to 60Hz (±3 Hz). external Power consumption (maximum) 32 watts average when printing 4 watts when idle 2 watts when off Connectvity - EEEE 1284 Centronics/bi-directional - USB 2.0 compatible - Plug & Play (Windows-Environment) - Ethernet 10/100/1000, TCP/IP (optional) Dimensions Printer: 447 (W) x250 (H) x 235 (D) mm - approx. 10 kg Paper sensor GAP-/BlackMark-Sensor 0 - 8,13 mm (0 - 3,2 Inch) adjustable - adjustable BlackMark on top (BMT) Noise level Add (d)(A) Print cartridge capacity black: 19ml, tri-color: 17 ml Temperature: ca. 5°C bis 40°C (41 to 104 degrees) Humidity: 15% to 80% relative humidity non-condensing Roll diameter	Print cartridges	, , ,
frequency max. 21 kHz	<u> </u>	
Print speed Up to 12 ppm Print resolution Black: up to 1200dpi Color: up to 4800 x 1200dpi (optimized) in color and 1200 Input-dpi Comptabile operating systems Microsoft Windows 2000 Professional, XP Memory 8 MB built-in RAM Printer languages (Emulationen) HP PCL Level 3 Enhanced, ASCI Font information 8 built-in fonts (4 each in portrait & landscape): CG Times, CG Times Italic; Univers, Univers Italic; Courier, Courier Italic; Letter Gothik, Letter Gothic Italic Paper feed Sensor controlled label/paper feed DIN A4 - manual Media handling Continous rolls, label rolls, single sheets endless rolls, label rolls, single sheets endless rolls, label rolls, single sheets Custom size media for manual paper feed Electrical specifications Input voltage: 100 to 240 V (±10%) Input frequency: 50 to 60Hz (±3 Hz). external Power consumption (maximum) 32 watts average when printing 4 watts when idle 2 watts when idle 2 watts when off Connectvity		
Print resolution Black: up to 1200dpi Color: up to 4800 x 1200dpi (optimized) in color and 1200 Input-dpi Comptabile operating systems Microsoft Windows 2000 Professional, XP Memory 8 MB built-in RAM Printer languages (Emulationen) HP PCL Level 3 Enhanced, ASCI Font information 8 built-in fonts (4 each in portrait & landscape): CG Times, CG Times Italic; Univers, Univers, Italic; Courier, Courier Italic; Letter Gothik, Letter Gothic Italic Paper feed Sensor controlled label/paper feed DIN A4 - manual Media handling Continous rolls, label rolls, single sheets endless rolls, label rolls, single sheets Custom size media for manual Width: min. 55 mm - max. 230 mm Length: min. 70 mm - max. 600 mm Electrical specifications Input voltage: 100 to 240 V (±10%) Input frequency: 50 to 60Hz (±3 Hz). external Power consumption (maximum) 32 watts average when printing 4 watts when idle 2 watts when off Connectvity -IEEE 1284 Centronics/bi-directional -USB 2.0 compatible - Plug & Play (Windows-Environment) - Ethernet 10/100/1000, TCP/IP (optional) Dimensions Printer: 447 (W) x250 (H) x 235 (D) mm - approx. 10 kg Paper sensor GAP-/BlackMark-Sensor 0 - 8,13 mm (0 - 3,2 Inch) adjustable - adjustable BlackMark on top (BMT) Noise level A40 db(A) Print cartridge capacity Dlack: 19ml, tri-color: 17 ml Operating conditions max. label roll 22,86 cm (9 Inch)		' '
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CG Times Italic; Univers, Univers Italic; Courier, Courier Italic; Letter Gothik, Letter Gothic Italic Paper feed Sensor controlled label/paper feed DIN A4 - manual Media handling Continous rolls, label rolls, single sheets endless rolls, label sheets endless rolls, label sheets endless rolls, label sheets endless rolls,	Printer languages (Emulationen)	HP PCL Level 3 Enhanced, ASCI
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Custom size media for manual paper feed Electrical specifications Input voltage: 100 to 240 V (±10%) Input frequency: 50 to 60Hz (±3 Hz). external Power consumption (maximum) 32 watts average when printing 4 watts when idle 2 watts when off Connectvity -IEEE 1284 Centronics/bi-directional - USB 2.0 compatible - Plug & Play (Windows-Environment) - Ethernet 10/100/1000, TCP/IP (optional) Dimensions Printer: 447 (W) x250 (H) x 235 (D) mm – approx. 10 kg Paper sensor GAP-/BlackMark-Sensor 0 - 8,13 mm (0 - 3,2 Inch) adjustable - adjustable BlackMark on top (BMT) Noise level Print cartridge capacity Diagram of the first single sheets Vidth: min. 55 mm - max. 230 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm - max. 600 mm		DIN A4 - manual
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Print cartridge capacity Diack: 19ml, tri-color: 17 ml Operating conditions Temperature: ca. 5°C bis 40°C (41 to 104 degrees) Humidity: 15% to 80% relative humidity non-condensing Roll diameter max. label roll 22,86 cm (9 Inch)		adjustable - adjustable BlackMark on top (BMT)
Operating conditions Temperature: ca. 5°C bis 40°C (41 to 104 degrees) Humidity: 15% to 80% relative humidity non-condensing Roll diameter max. label roll 22,86 cm (9 lnch)	Noise level	< 40 db(A)
Humidity: 15% to 80% relative humidity non-condensing Roll diameter max. label roll 22,86 cm (9 Inch)	Print cartridge capacity	black: 19ml, tri-color: 17 ml
Roll diameter max. label roll 22,86 cm (9 lnch)	Operating conditions	Temperature: ca. 5°C bis 40°C (41 to 104 degrees)
` ,		Humidity: 15% to 80% relative humidity non-condensing
Roll width max. 21,59 cm (8,5 lnch)	Roll diameter	max. label roll 22,86 cm (9 lnch)
	Roll width	max. 21,59 cm (8,5 Inch)



Diameter of roll core	standard: 7,62 cm (3 Inch)
	optional: 2,54 bis 12,7 cm (1 bis 5 Inch)
Paperthickness	max. 1mm (optional bis 1,5 mm)
Roll media width	3,81 bis 21,59 cm (1,5 bis 8,5 Inch)
Label detection	continous, GAP, BlackMark oben und unten
Label sensor	
Media size	min. 5,59 x 6,85 cm (2,2" x 2,7")
	max. 21,95 x 30,48 cm (8,5" x 12")