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Printer and Paper Specifications

This appendix provides the physical, functional, and performance specifications for your mobile printer. It also contains detailed paper specifications.

Physical Specifications

Dimensions (vertical orientation)

Height:	311 mm (12.25 in.)
Width:	444.5 mm (17.5 in.)
Depth:	166.6 mm (6.5 in.)

Enclosure is injection molded plastic with hinged cover for access to paper loading, print head and ribbon replacement. Enclosure provides edge for paper to tear off.

Color	Night Sky Grey
Weight	Not to exceed 8.02 kg (17.7lbs)
Power requirements	Automotive, 12 VDC (10.5 – 18 VDC))
	110/220 VAC as option
Power consumption	Not to exceed 150 Watts
Heat generation	Average 65 kcal/h
Interface and connectivity	USB2.0 full speed, RS232
	and Blue Tooth Class 2 ver1.2 (Standard)
	IEEE 802.11b (Option)
Data buffer size	64K bytes
Operating environment	-4°F +140 º F (-20 ºC to + 60ºC) DC
	-4ºF to +113º F (-20ºC to + 45ºC)AC
	10% - 85% Relative Humidity, no condensation
Storage	-22ºF + 158ºF (-30ºC to + 70ºC)
	05% - 95% Relative Humidity, no condensation

Shock, Vibration, Acceleration   Units may be vertically mounted using shock mounts to a bracket installed in a vehicle; operated horizontally while located on a passenger seat in a vehicle, or operated in office environments.

Vibration resistance (as tested)

Operating   Acceleration   0.5G

Frequency   5 to 55HZ

Sweep Time   120 Sec/Cycle

Non-Operating   Acceleration   1.5G RMS

Frequency   5 to 55HZ

Sweep Time   120 Sec/Cycle

Impact Resistance   Operating   3G (print quality not guaranteed)

Non-operating   10G

Dust Proof, Corrosion Resistance   Ingress Protection (IP) rating IP30. No special protection against fluids or immersion.

Functional Specifications

Print method   Impact dot matrix with a 0.2 mm (0.009 in),

24-wire head

Print direction   Bidirectional logic-seeking

Character cell   Horizontal X vertical

Letter (10 cpi):	36 X 24 dots
Letter (12 cpi):	30 X 24 dots
Draft::	12 X 24 dots

Paper handling

Single Forms:	With the Paper Path Select Lever in the Single Sheet position, single sheets or forms may be used. The printer automatically senses that paper has been manually inserted. When paper is detected, the printer will advance the form to the first print line.
Continuous forms:	With the Paper Path Lever set to the Continuous Form position, continuous forms may be printed. Paper is loaded and adjusted via pushbuttons. Forms may be advanced to tear off feature by operator or by host. Continuous forms are parked while single sheets are used.

Paper type
1-to 4-part side-glued or paper-stapled fanfolded continuous forms or single page top-glued forms.

Paper size

Continuous	Width:	102–267 mm (4–10.5 in)
	Length:	102 mm (4 in) or greater
Cut sheets	Width:	102–267 mm (4–10.5 in)
	Length:	76–364 mm (3–14.3 in)

Paper thickness
Up to 0.35 mm (0.014 inch)

Paper length

By software	Programmable in one line or inch increments
By control panel	3, 3.5, 4, 5.5, 6, 7, 8, 8.5, 11 (Letter), 11 2/3 (A4), 12, 14, or 15 inches (Default is 11 inches.)
	1 to 126 lines

Number of copies
Up to 4, including the original

Command sets
Epson EP2

(emulations)
IBM 2390+

Character sets

Code Page

19 character sets
CP 437 (USA)
CP 437 (Greek)
CP 850 (Multilingual)
CP 851 (Greek)
CP 852 (East Europe)
CP 853 (Turkish)
CP 855 (Cyrillic)
CP 857 (Turkish)
CP 858 (Multilingual)
CP 860 (Portugal)
CP 862 (Israel)
CP 863 (Canada)
CP 864 (Arabic)
CP 865 (Norway)
CP 866 (Cyrillic)
CP 869 (Greek)
CP 920 (Latin-5)
CP 923 (Latin-9)
USSR GOST

EPSON National Character

15 character sets

USA	France	Germany
UK	Denmark 1	Sweden
Italy	Spain 1	Japan
Norway	Denmark 2	Spain 2
Latin America	Korea	Legal

Fonts

Resident

13 fonts available
Draft, Roman, Sans Serif, Courier, Bold, Prestige Elite,
Script, Orator, Gothic, OCR A, OCR B, Roman T
and Sans Serif H

Line spacing

2, 3, 4, 6, 8, or 12 lines per inch.
(1, 2, or 4 lines per centimeter).

Character pitch

10, 12, 15, 17.1 or 20 characters per inch

Characters per line

10 cpi:	80 cpl
12 cpi:	96 cpl
15 cpi:	120 cpl
17.1 cpi:	136 cpl
20 cpi:	160 cpl

cpl = characters per line

Barcodes

IBM:	9 Barcodes available UPC/A, UPC/E, EAN8, EAN13, CODE39, CODE128 CODABAR (NW7), INTERLEAVED 2 of 5, INDUSTRIAL 2 of 5
EPSON:	7 Barcodes available UPC/A, UPC/E, EAN8, EAN13, CODE39, CODE128 INDUSTRIAL 2 of 5

Performance Specifications

Print speed

	10 cpi	12 cpi
Draft:	400 cps	480 cps
Letter:	133 cps	160 cps

cpi = characters per inch
cps = characters per second

Line feed speed   60 ms per line at 6 lines per inch

Form feed speed   7 inches per second

Pages per Hours   ECMA 132 Letter Test Pattern

Draft Quality   321 pph

Letter Quality   172 pph

Ribbon service life   2 million characters

Printer Life   5 million lines or five years

Print Head Life   400 million impacts

MTBF   15,000 hours (50 hr/week power-on, 5% power on print duty cycle)

MTTR   0.5 hours

Certification

Safety:

Regulation	Country
UL 1950-D3 (for 100-120 VAC)	United States
CSA C22.2/950 (for 100-120 VAC)	Canada
EN 60 950 (for 220-240 VAC)	Germany

RFI regulation:

Regulation	Country
Class B of FCC Part 15B (for 100-120 VAC)	United States
CE mark (for 220-240 VAC)	European Union

Paper Specifications

Print Area

Wc

25.4 mm (1 inch)

May be decreased
to
4.23 mm (1/6 inch).
However,
line spacing
may be uneven.

102 mm
(4 inches)
or more

Print area

25.4 mm (1 inch)

Perforation

25.4 mm (1 inch)

Print area

Approx. 80 mm (3.2 inches)
for push-tractor feed

Paper end

Print area may be off the
paper, depending on paper
setting or width.

Lc

5.08 mm or more
(0.2 inch or more)
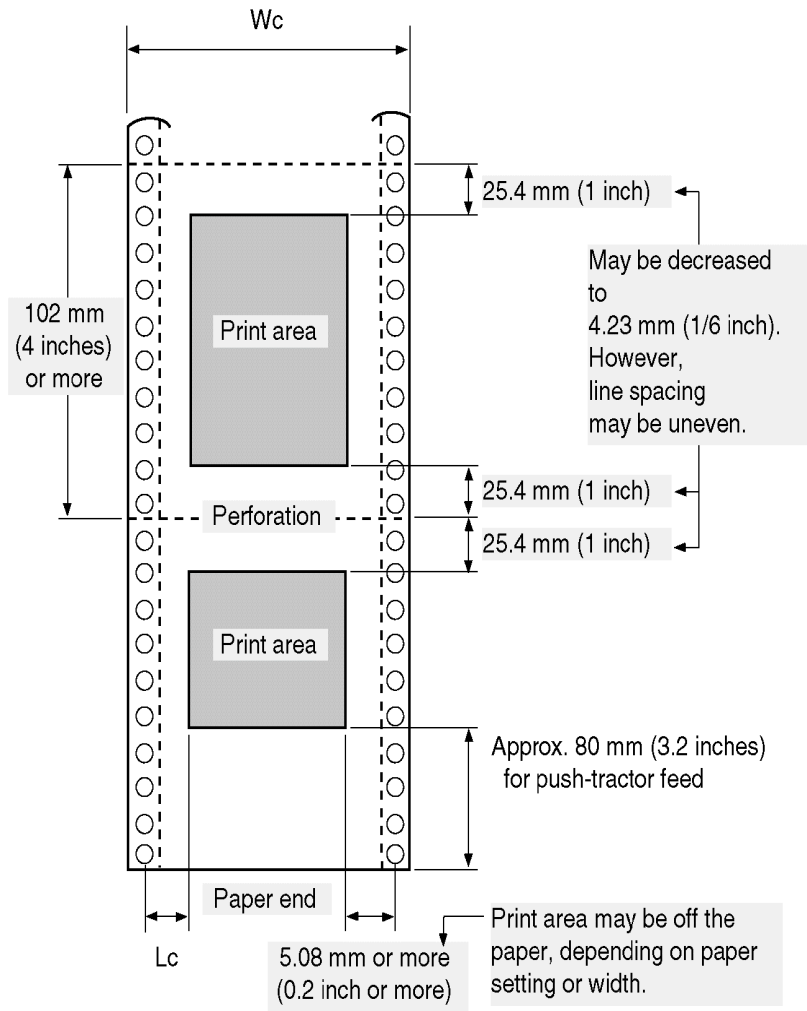
Print Area for Continuous Forms

Wc   102 to 267 mm (4 to 10.5 in)
Lc   5.08 to 25.4 mm (0.2 to 1 in)

Ws

Hs

H   H

Print area

H   H

Ls   5.08 mm or more
(0.2 inch or more)

May be decreased
to 4.23 mm
(1/6 inch).
However, line
spacing may be
uneven.

25.4 mm (1 inch)

May be decreased to
8.5 mm
(1/3 inch).
However, line spacing
may be uneven.

25.4 mm (1 inch)

Print area may be off
the paper, depending
on paper setting or
width.
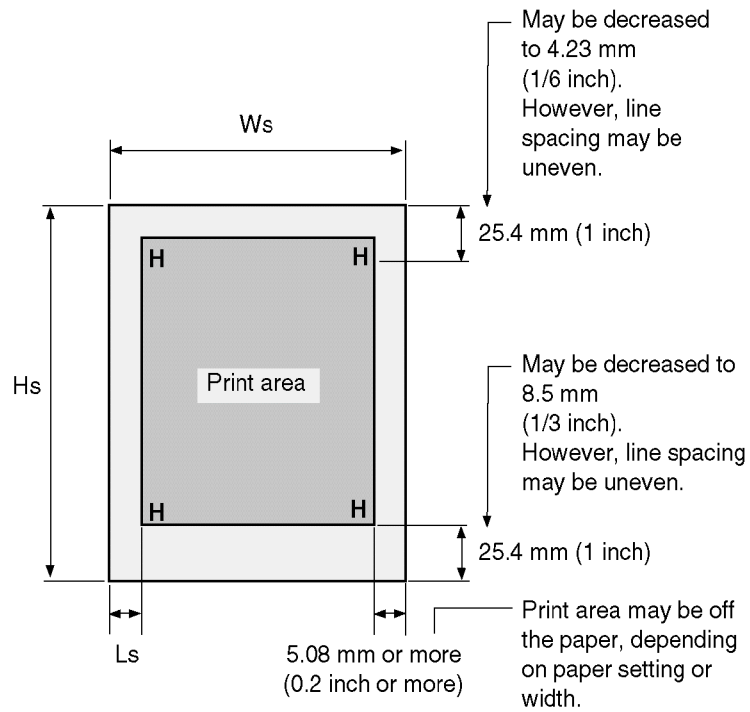
Print Area for Single Sheets

Ws   102 to 267 mm (4 to 10.5 in)
Hs   76 to 364 mm (3 to 14.3 in)
Ls   5.08 to 32 mm (0.2 to 1.26 in)

Paper Thickness

Paper thickness is given by the weight of the paper in either grams per square meter (g/m^2) or in pounds per bond (lbs/bond). The following table shows the allowable paper thickness for one-part paper or for each sheet of multipart paper. The total thickness must not exceed 0.35 mm (0.014 inch).

The weight of carbonless or carbon-backed paper may vary, depending on the paper manufacturer. When using paper of borderline thickness, test the paper before running a job.

Type of Paper	Number of Parts	Thickness
One-Part Carbonless	Single	47-81 g/m^2 (40-70 kg or 12-22 lb)
Two-Part Carbonless	Top	40-64 g/m^2 (34-55 kg or 11-17 lb)
	Bottom	40-81 g/m^2 (34-70 kg or 11-22 lb)
Three-Part Carbonless	Top	40-64 g/m^2 (34-55 kg or 11-17 lb)
	Middle	40-64 g/m^2 (34-55 kg or 11-17 lb)
	Bottom	40-81 g/m^2 (34-70 kg or 11-22 lb)
Four-Part Carbonless	Top	40-64 g/m^2 (34-55 kg or 11-17 lb)
	Middle	40-64 g/m^2 (34-55 kg or 11-17 lb)
	Middle	40-64 g/m^2 (34-55 kg or 11-17 lb)
	Bottom	40-81 g/m^2 (34-70 kg or 11-22 lb)

kg: Weight in kilograms of 1000 sheets of 788 X 1091 mm paper (1.16 g/m^2)

lb: Weight in pounds of 500 sheets of 17 X 22 inch paper (3.76 g/m^2)

Type of Paper	Number of Parts	Thickness
Two-Part Carbon-Backed	Top	40-64 g/m^2 (34-55 kg or 11-17 lb)
	Bottom	40-81 g/m^2 (34-70 kg or 11-22 lb)
Three-Part Carbon-Backed	Top	40-64 g/m^2 (34-55 kg or 11-17 lb)
	Middle	40-64 g/m^2 (34-55 kg or 11-17 lb)
	Bottom	40-81 g/m^2 (34-70 kg or 11-22 lb)
Four-Part Carbon-Backed	Top	40-64 g/m^2 (34-55 kg or 11-17 lb)
	Middle	40-64 g/m^2 (34-55 kg or 11-17 lb)
	Middle	40-64 g/m^2 (34-55 kg or 11-17 lb)
	Bottom	40-81 g/m^2 (34-70 kg or 11-22 lb)

Carbon-backed   *Do not use in high humidity environments.*

Carbon-interleaved   *Avoid using single sheets format in carbon-interleaved.*

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Printer and Paper Specification

Type of Paper	Number of Parts	Thickness
Two-Part Carbon-Interleaved	Top	40-64 g/m^2 (34-55 kg or 11-17 lb)
	Carbon Bottom	Counted as one sheet 40-81 g/m^2 (34-70 kg or 11-22 lb)
Three-Part Carbon-Backed	Top	40-64 g/m^2 (34-55 kg or 11-17 lb)
	Carbon Middle	Counted as one sheet 40-64 g/m^2 (34-55 kg or 11-17 lb)
	Carbon Bottom	Counted as one sheet 40-81 g/m^2 (34-70 kg or 11-22 lb)

kg: Weight in kilograms of 1000 sheets of 788 X 1091 mm paper (1.16 g/m^2)

lb: Weight in pounds of 500 sheets of 17 X 22 inch paper (3.76 g/m^2)