HITACHI
Inspire the Next

Ink Jet Printer
UX Series
Twin nozzle model
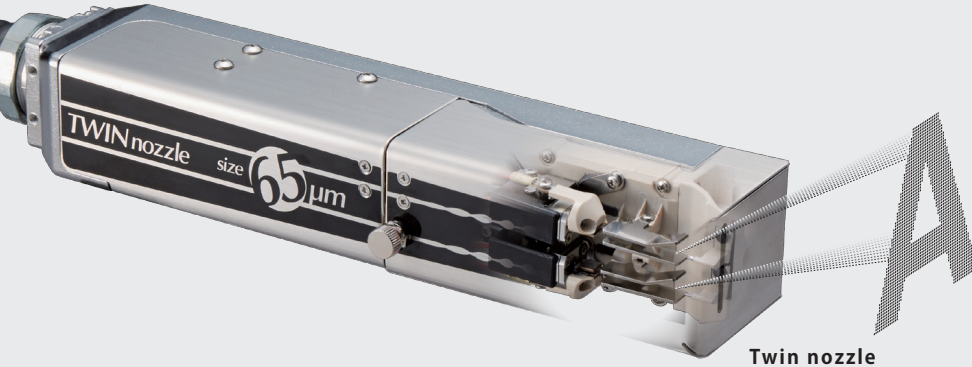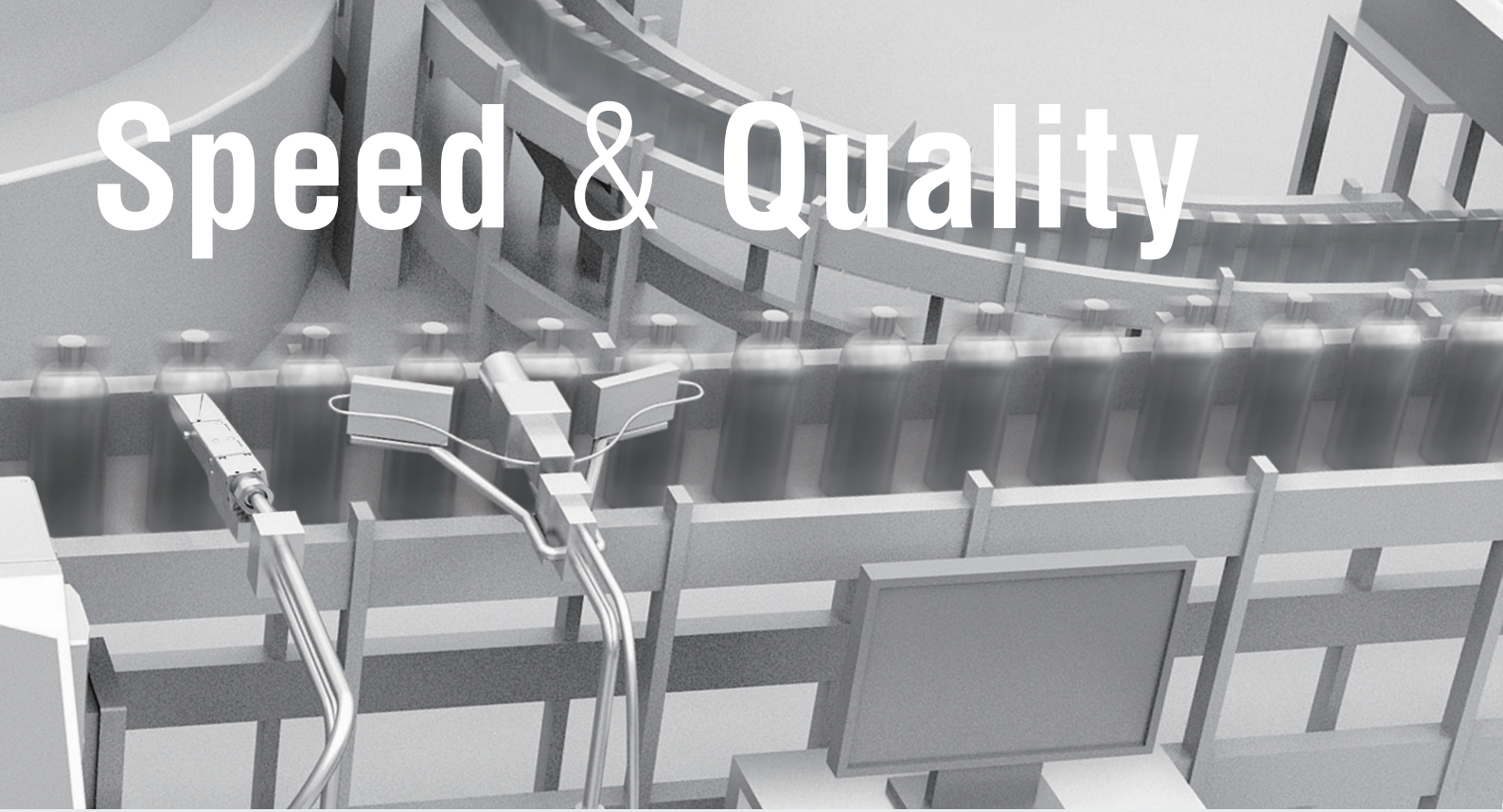
THE WORLDWIDE
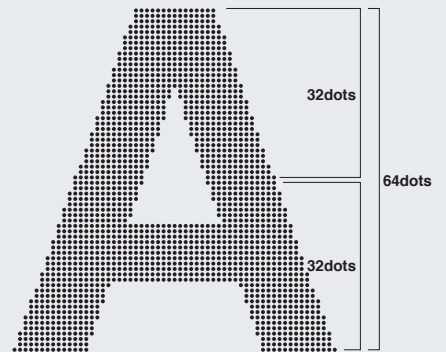
Twin nozzle

https://www.hitachi-ies.co.jp/english/products/ijp

Speed & Quality

**TWIN** nozzle   size **65**µm

Twin nozzle

32dots

64dots

32dots

∗ Represented by an image.

Flexible 8-Line Print

Our printhead now has the capability of producing 8 lines of text by utilizing two individual nozzles in one, compact design. In addition, by utilizing Hitachi's original "interlaced" print control technique, multiple line messages are printed clearly and legibly, further reducing coding errors due to misprint.
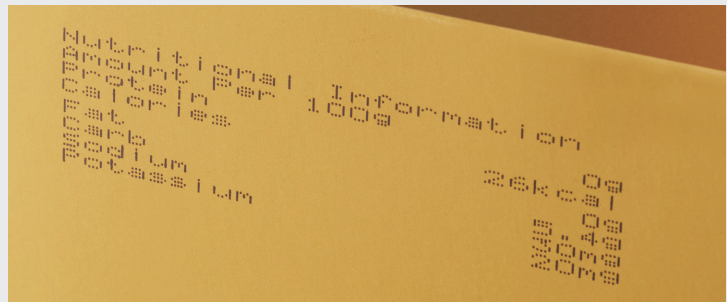
Versatile 64-Dots

Our innovative design can now produce 64 vertical dots of print resulting in large, bold characters. This makes our twin nozzle printer ideally suited to mark company logos or any other pattern previously unachievable with traditional print heads.
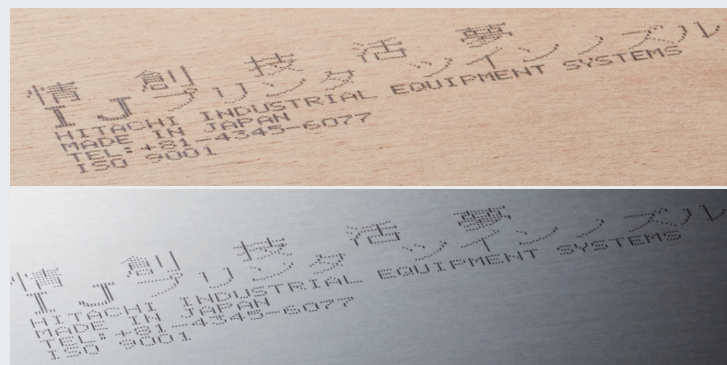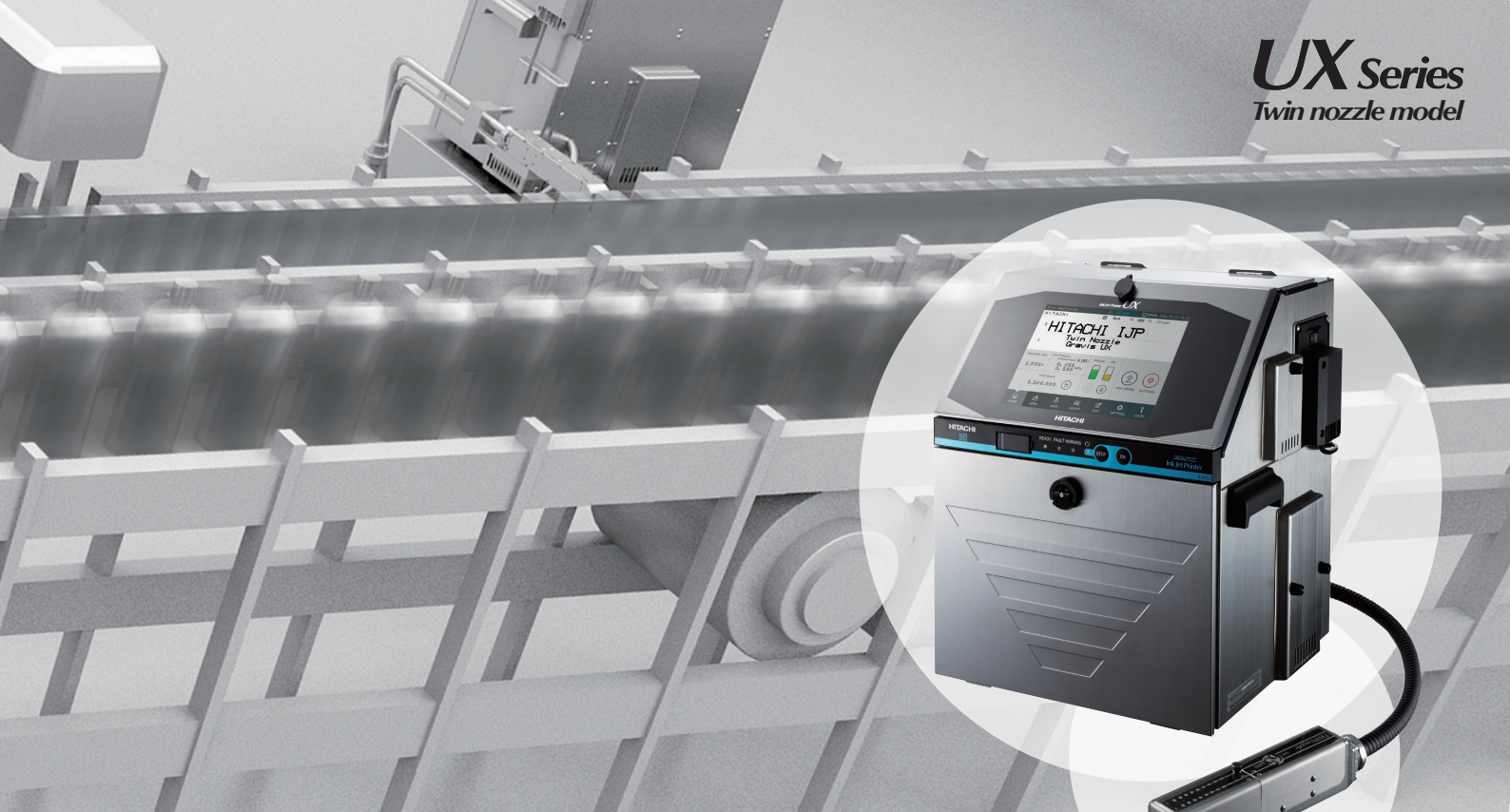
Right-angled Printing
[90 degrees rotated]

Hitachi UX Twin Nozzle model enables to print up to twelve characters at right angles*[1] to the direction of movement with consideration for design or position of printing objects and thus extending the possibility of print contents and meeting various customer's needs.

*[1] Depends on font size.
✻ Represented by an image.

General printing to the direction of movement

Right-angled Printing [90 degrees rotated]

Up to **twelve** characters
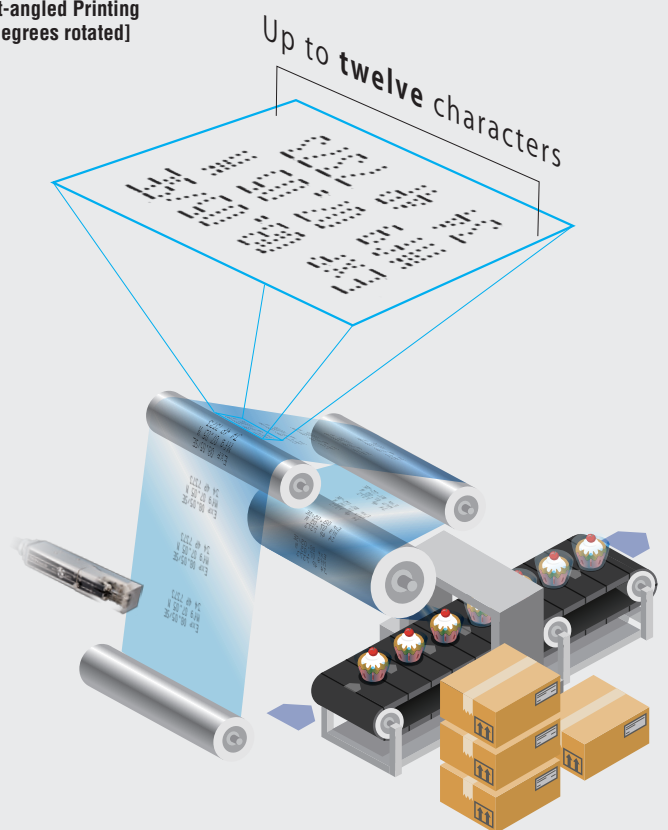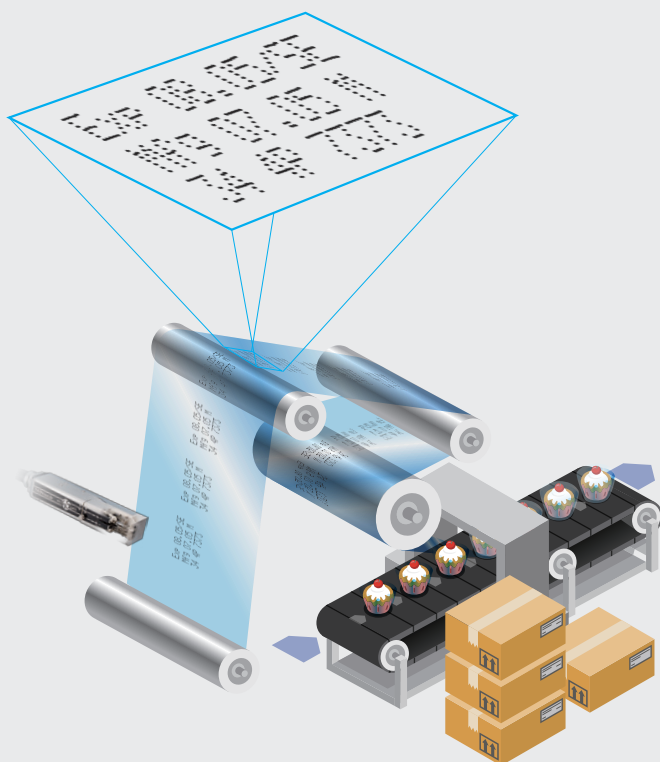
Speed & Quality

Higher print speeds

Having two nozzles on tap dramatically increases the speed of multi-line printing. Traditional, single nozzle print heads become taxed very quickly when printing multiple lines of print especially at speed. By sharing the work load between two separate nozzles, this effect is greatly reduced.

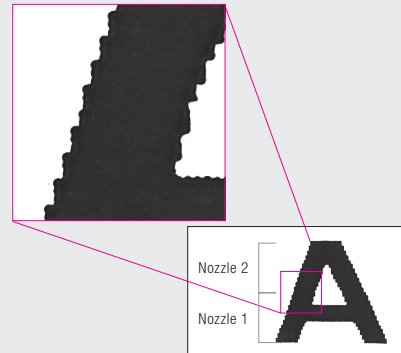Print sample of drink cartons

Print sample of PET bottle

Print sample of cans

Character stitch capability

In case of printing composite characters by two nozzles, the fine-tuning function provides smooth connection of dots at a print position, resulting in the high-quality printing.

Nozzle 2

Nozzle 1
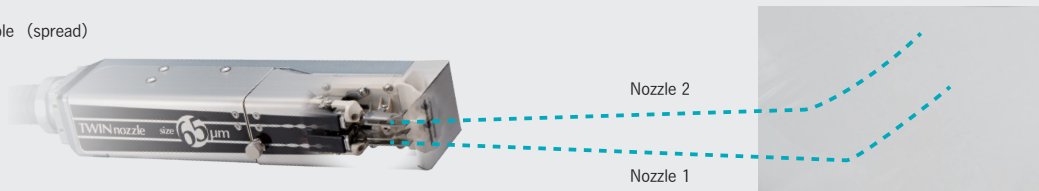
Nozzle-Space Alignment Function*1

By using this alignment function, our twin nozzle can print the characters without reducing the print speed even when adjusting the space between nozzles and thus can meet various printing needs.

*1 Print quality will vary before and after this function activated.

■Application sample（close up）

Nozzle 2

Space

Nozzle 1

N/08.05 LS

E/12.25 XM

N/08.05 LS

E/12.25 XM

Nozzle 2

Nozzle 1

Position centrally

90m/min

■Application sample （spread）

TWIN nozzle size 65μm

Nozzle 2

Nozzle 1
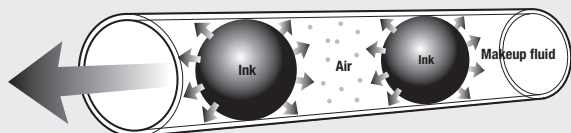
Low fluid consumption

A large factor in determining fluid consumption is the amount of fluid exposure to the outside environment. Hitachi designs their pump system in such a way that minimizes this exposure. Our ink recovery system pulsates ink with best-suited air flow rate while being transported back to the ink tank. This technique reduces the surface area or exposure area of ink, thus reducing the evaporation rate and your bottom line.

"Makeup fluid consumption reduction system"

Ink   Air   Ink   Makeup fluid

＊Represented by an Image.

Reduction of makeup fluid consumption
■ UX-D860W/S

About **30%** reduction *[1]

*[1] As compared to two units of Hitachi current PXR and RX models used with 1067K ink at 20°C.

Easy to Use Interface

The display of our Twin-nozzle model utilizes the same, easy-to-use touch panel incorporated in other UX models. A large 10.4" display, and intuitive parameter illustrations reduce the complexity typically found in traditional small screen printers. In addition, the messages can be easily changed in one screen, with a live WYSISYG display.
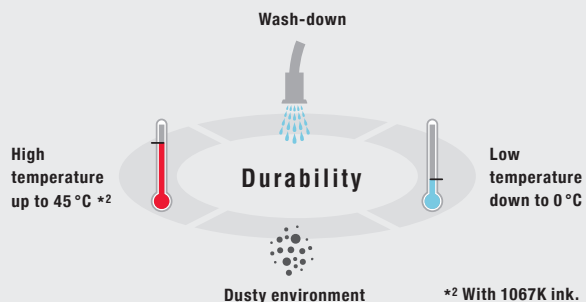
Low total cost of operation

Hitachi's design facilitates longevity. Each component of our print head can be replaced individually, thus reducing the need to purchase costly sub-assemblies. In addition, our preventative maintenance items are all replaceable individually as well, further reducing the unnecessary replacement of complete ink circuits or complete ink cores.

One-touch replacement
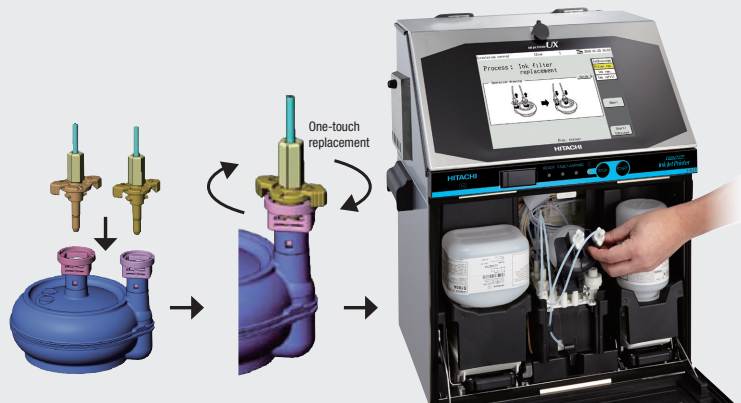
Designed for harsh environments

The stainless steel cabinet offers IP55 protection and allows for wash-down and dust protection. The UX Series Twin nozzle's protection is the ideal choice for a variety of printing needs.

Wash-down

High temperature up to 45 °C *[2]   **Durability**   Low temperature down to 0 °C

Dusty environment   *[2] With 1067K ink.   04
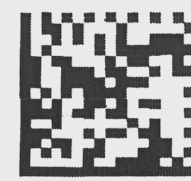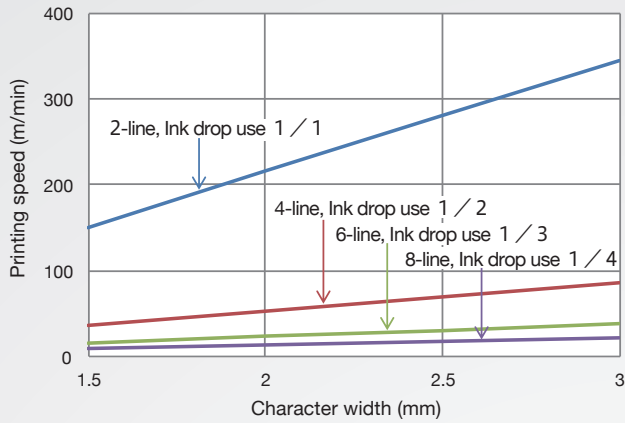
Standard print samples (Approx. full scale)

Printing specification		UX-D860W/S	
High-speed printing	2LINE	160m/min Font: 5x7 — Nozzle 2: `01234567` / Nozzle 1: `ABCDEFGH`	200m/min Font: 5x7 — Nozzle 2: `01234567` / Nozzle 1: `ABCDEFGH`
2, 3-line printing	2LINE	Font: 7x10 — Nozzle 2: `0123456789O` / Nozzle 1: `ABCDEFGHIJK`	
	3LINE	Font: 7x10 — Nozzle 2: `01234567890` / Nozzle 1: `ABCDEFGHIJK` `TWINNOZZLE8`	
Multi-line printing (4line, 8line)	4LINE	Font: 5x8 — Nozzle 2 (2line English): `05/08/18 ABCD` `05/02/19 1234` / Nozzle 1 (2line Arabic): `+0/+٨/١٨ ABCD` `+0/+C/19 ١٢٣٤`	
	8LINE	Font: 5x7 — Nozzle 2 (4line): `SELL BY AUG 8` `MANUFACTURED BY HIES 11:37:17` `BEST BY 05 FEB(FEB)2020` `LOV 8929 0417 6557` / Nozzle 1 (4line): `HITACHI INDUSTRIAL EQUIPMENT SYSTEMS` `MADE IN JAPAN` `TEL:+81-4345-6077` `IOS 9001`	
Dot mixture		Font: 5x7 12x16 — Nozzle 2: `ABCD` `BEST BY` `HIES UX` `017H04` `S28N02` / Nozzle 1: `05 FEB(FEB)2019`	
		Font: 5x7 12x16 — Nozzle 2: `UX TWIN` `TOKYO EXPO PACKAGING` `TECHNICAL AREA CODING` `860` / Nozzle 1: `HITACHI INDUSTRIAL EQUIPMENT SYSTEMS`	
Logos *1		40 dots — Nozzle 2 / Nozzle 1: `C E`	48 dots — Nozzle 2 / Nozzle 1: `JIS`
		64 dots — Nozzle 2 / Nozzle 1: `A`	64 dots — Nozzle 2 / Nozzle 1: (wave image)

*1 In case of printing the logos, please make sure if its image quality is acceptable to the association or the organization.
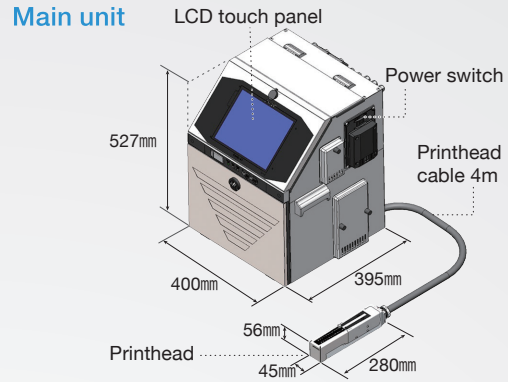
Printing specification	UX-D860W/S		

Bold characters

Font: 5x7

Nozzle 2
Nozzle 1

5×7 BOLD 2 LINE B 5×7 BOLD 2 LINE B
5×7 BOLD 2 LINE B 5×7 BOLD 2 LINE B

Chimney characters

Font: 7x5

Nozzle 2
Nozzle 1

Font: 7x5

Nozzle 2 (4line)

Nozzle 1 (4line)

Right-angled Printing [90 degrees rotated]

Font: 7x5

Nozzle 2 (6line)

Nozzle 1 (6line)

Barcodes

Font: 18x24 5x7

Nozzle 2

Nozzle 1

0 1 2 3 4 5 6

Font: 24x32 5x7

Nozzle 2

Nozzle 1

6 11942 03936 4
4400 4" X 10'

QR codes

Font: 29x29 5x7

Nozzle 2

Nozzle 1

Our Web Here

Font: 25x25 5x7

Nozzle 2

Nozzle 1

Sanki Web

Font : 15x15 5x7

Nozzle 2

Nozzle 1

Micro QR Code

Datamatrix

Font: 16x16 5x7

Nozzle 2

Nozzle 1

HITACHI

Font: 16x36 5x7

Nozzle 2

Nozzle 1

Our Web Here

64 dots *2

Nozzle 2

Nozzle 1

*2 This printing will be made with use of graphics data [dot-pattern] but not with 2D code function, also the graphics data [dot-pattern] should be prepared by the users. Read rate will vary depending on the print condition.

Nozzle size: 65μm; Font: 5x8; Ink type: 1067K

Printing speed (m/min) vs **Character width (mm)**

- 2-line, Ink drop use 1／1
- 4-line, Ink drop use 1／2
- 6-line, Ink drop use 1／3
- 8-line, Ink drop use 1／4

Main unit / Printhead dimension

Main unit

- LCD touch panel
- Power switch
- Printhead cable 4m
- 527mm
- 400mm
- 395mm
- Printhead
- 56mm
- 45mm
- 280mm

*Main unit dimensions do not include any projections.

Specification

Item		Model
		UX-D860W/S
Nozzle size		65μm
Maximum number of print lines		Up to 8 lines
Maximum number of print characters		Up to 1,000 characters (Depends on print lines)
Font (Horizontal x Vertical)	4 x 5	✓
	5 x 5	✓
	5 x 7(8), 9 x 7(8)	✓
	7 x 10	✓
	11 x 11	✓ (Chinese only)
	10 x 12	✓
	12 x 16	✓
	18 x 24	✓
	24 x 32	✓
	30 x 40	✓
	36 x 48	✓
	48 x 64	✓
Character height		2 - 21 mm (Depends on print distance, print speed and operating temperature)
Display & input device		WYSIWYG design Display: TFT LCD (10.4" color), backlight provided Input device: Touch panel, input sound provided
Screen language (2 languages selectable)		English, Chinese, Korean, Thai, Vietnamese, German, French, Dutch, Italian, Spanish, Portuguese, Swedish, Danish, Greek, Russian, Czech, Polish, Arabic, Serbian, Turkish, Hungarian, Bulgarian, Catalan, Romanian, Finnish, Norwegian, Slovenian
Maximum print rate		Up to 4,592 (Characters per second) (Font 5x5, space 1, 2 line)
Standard characters		Alphanumeric (A-Z, a-z, 0-9), symbols (27) and space: Total 90
User patterns		200 patterns each for dot matrix (50 patterns for 30x40, 36x48, 48x64 fonts)
Print functions		Calendar, Count, Font mixture
Barcode printing		code39, ITF, NW-7, EAN-13, EAN-8, UPC-A, UPC-E, code128/EAN-128, GS-1 DataBar
2D code printing		Data Matrix (Alphabet: 49 characters/Numerals: 98 characters), QR code, Micro QR code
Message storage capacity		Up to 2,000 messages (Depends on data content)
Input signal		Print target detection, Printing stop, Rotary encoder pulse, Reciprocative printing, Remote control (Run, Stop, High-voltage ON / OFF, Reset), (NPN / PNP Selectable)
Output signal		Print in progress or Print complete, Online (NPN / PNP Selectable), Print ready, Fault, Warning (NPN Only)
Data interface		RS-232C at baud rates selectable up to 115,200bps
Ethernet (Modbus communication)		IEEE802.3, 100BASE-T
External memory		USB for user data storage
Printhead cable length / angle		4m (in-line/90 degrees)
Operating temperature range		0-45℃ (1067K Ink)
Operating humidity range		30-90% RH (no condensation)
Power supply (Automatic voltage selection)		AC100-120/220-240V±10% 50/60Hz 150VA
Approval		CE, UL, cUL, RCM, FCC, ICES
Dimensions (Width x Depth X Height)		400 x 395 x 527 mm
International protection		IP55 (Printhead is excluded)
Approximate weight		34kg

◎ Hitachi Industrial Equipment Systems Co., Ltd.

- For further information, please contact your nearest sales representatives.
- Hitachi Industrial Equipment Systems Co., Ltd. (Hitachi) shall not be liable for any manufacturing loss, or any product damage due to trouble or malfunction of the IJ printer.
- Hitachi continually improves products. The right, therefore, is reserved to alter the designs and/or specifications without giving prior notice.
- Information in this brochure is subject to change without notice.

Printed in Japan (D) **SX-E156Q** 0119