

Inkjet Printers

**HITACHI**  
Inspire the Next

# UX Specialty Series

40µm | 55µm | 100µm | Pigmented

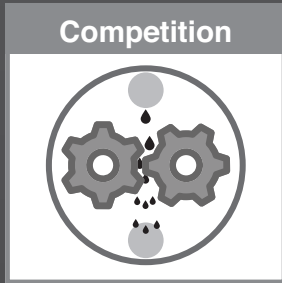
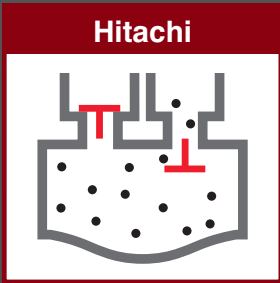
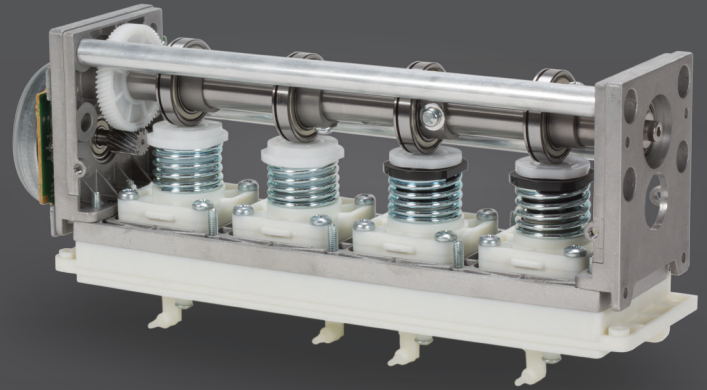




# THE HEART OF RELIABILITY

## Increased Ink Integrity

Unlike a gear pump, a diaphragm pump does not shear the ink passing through it. Ink shearing results in lower viscosity and can adversely affect print quality. Hitachi diaphragm pumps provide a consistent supply of ink to the print head.



## Designed & Built by Hitachi

The diaphragm pump is the heart of each Hitachi printer. For this reason, Hitachi doesn't use an off-the-shelf product. Each pump is designed and built by Hitachi to the highest standards.



## Heavy on Quality

Hitachi diaphragm pumps are one of the heaviest components in each printer. This weight is due to the high-quality components used in the manufacturing of each pump. Quality is never compromised. You create superior products. You should have a partner who does too.



## Quad Chamber Design

Each pump is designed with four chambers allowing pump load to be distributed. Subsequently, the life span of each printer is significantly improved over single chamber pump designs.

# 4

## Individual Pump Replacement

By allowing each ultra-reliable pump to be replaced individually, the Total Cost of Ownership for a UX Series printer is minimized.



# UX Specialty Key Features

Hitachi's UX Series continuous inkjet printers represent the pinnacle of innovation in marking and coding technology, all while showcasing Hitachi's reputation for Reliability, Efficiency, and Ease of Use.

## Efficient Ink Recovery



### Reduced Makeup Consumption and Running Cost

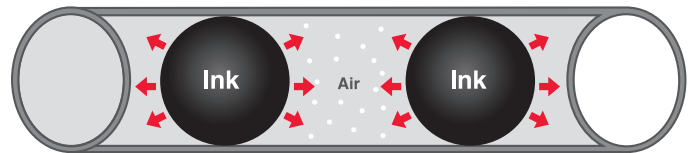
#### Featuring Pulse Recovery Technology

Hitachi's ink recovery technique and motor speed control, that is based on environmental conditions, suppresses makeup evaporation, thus achieving industry levels of low makeup consumption.



### Traditional Fluid Recovery Systems

Ink passes through a channel of air increasing the evaporation rate and, consequently, fluid makeup consumption.



### Hitachi's Pulse Recovery System

Ink is recovered using a pulsating system, which reduces the evaporation rate and makeup consumption, thus increasing your bottom line.

\* As compared to Hitachi's current models with 1067K ink at 20°C. About 30% reduction for UX-B and UX-D.

## Worry Free Integration



### IP-65

The UX Dynamic model printer is IP-65 rated, meaning it can be integrated into a variety of production environments without worry or modification to current production processes such as wash-down procedures. Hitachi UX Series printers can operate in High and Low temperature environments as well as dusty environments, allowing them to be placed close to the action. UX Basic machines are IP-55 standard.



High-Temperature  
up to 50°C (122°F)



Dusty Environment



Low-Temperature  
down to 0°C (32°F)



Wash-Down

# Simple Fluid Management



## Mess-Free, Mistake-Proof Fluid Refills

Intelligent fluid cartridges reduce the possibility of hazardous fluid spills during refill. Being two different shapes, the Ink and Makeup cartridges are easily identifiable as well as sized to fit in each respective receptacle.



## Smart Cartridge

Error reduction is key to increased uptime and that's why the UX Series now features RFID Recognition for ink and makeup replacement. A quick scan of each bottle allows the system to identify the ink or makeup in question and instruct the operator based on compatibility.



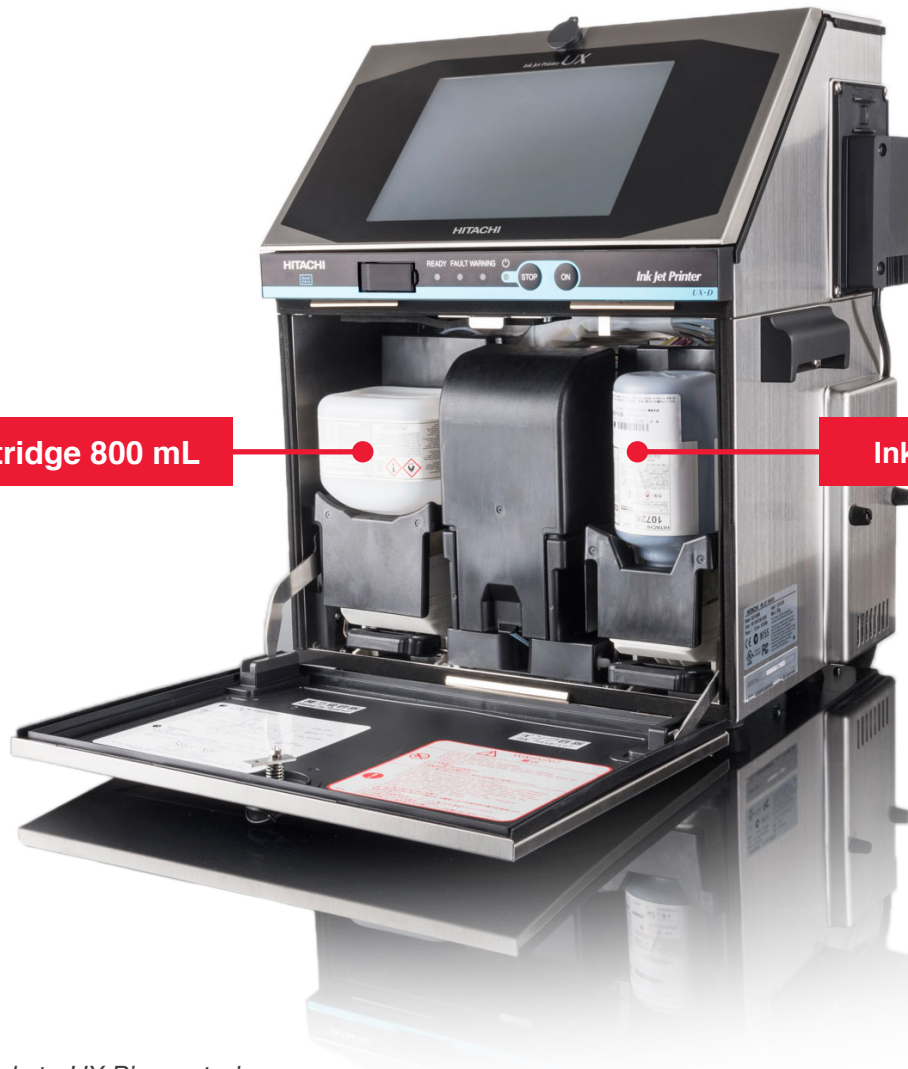
## Tool-less Filter Replacement

Ink Filters can be replaced without the use of tools or a technician, resulting in virtually zero downtime for simple maintenance. No more mandatory, time based failure due to machine operation. These printers provide the lowest total cost of operation on the market.



## Simple, Economical Disposal

Ink and Makeup cartridges can be used right up to the last drop, and drain fully into their respective reservoirs. Complete fluid evacuation allows ink and makeup containers to be disposed of through conventional means instead of costly hazardous disposal methods.



Makeup Cartridge 800 mL

Ink Cartridge 500 mL

*Note: Does not apply to UX Pigmented*

# Intuitive Print Control



## Intuitive User Interface

A 10.4-inch TFT LCD touch-panel screen provides a wide, easy-to-see viewing angle and intuitive operation. In addition, when changing print messages, a preview function allows the operator to verify on screen what message will be changed to help avoid erroneous printing.



## Troubleshooting Guide

The UX Series features an integrated, easy to access troubleshooting guide, helping operators easily find answers to common issues and reducing downtime due to simple problems.



## Easy USB Message Transfer

Messages can be easily backed up onto a USB flash drive for convenient transferring to other printers.



## Informative Icons

Icons on screen provide simple, visual feedback to an operator. Ink and Makeup level gauges show the current fluid level and indicate when it's time to replace each cartridge. This allows for more efficient ink usage, reduces waste, and further contributes to cost reduction.



# 40µm (Small Characters)

## Application Photos

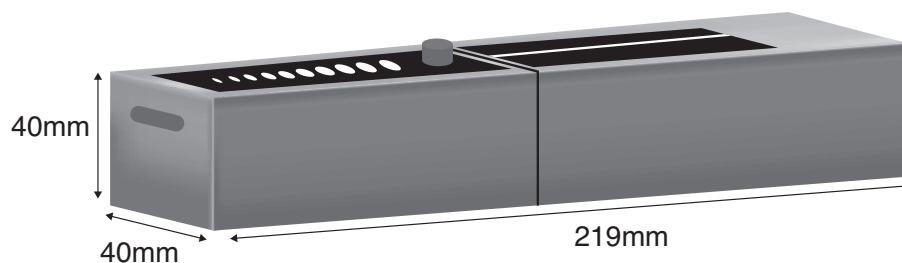


## Print Samples (Approx. Full Scale)

Font (Horizontal x Vertical)	UX-D140W			
5 x 5	1 LINE 0123456789	2 LINE 0123456789 KLMNOPQRST	3 LINE 0123456789 IJKLMNOPQR 0123456789	4 LINE 0123456789 IJKLMNOPQR 0123456789 IJKLMNOPQR
12 x 16	1 LINE 01234ABCDE アイウエオ			2 LINE 01234 ABCDE

Item	Model	
	UX-D140W	
Nozzle Size	40µm	
Max. # of Print Lines	Up to 4 lines	
Max. # of Print Characters	Up to 1,000 characters	
Font (horizontal x vertical)	4 x 5	✓
	5 x 5	✓
	5 x 7(8), 9 x 7(8)	✓
	7 x 10	✓
	11 x 11	-
	12 x 16	✓
	18 x 24	✓
24 x 32	✓	
Character Height	1 - 5 mm	
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, 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	
Max. Print Rate (Characters per second) (Font 5x5, Space 1, 1 Line)	Up to 3,030	
Standard Characters	Alphanumeric (A-Z, a-z, 0-9), Symbols (27) and Space: Total 90	
User Pattern	200 patterns each for dot matrix	
Print Functions	Calendar, Count, Font mixture, Password	
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 <sup>†1</sup> , Micro QR code	
Message Storage Capacity	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	
Print Head Cable Length/Angle	4m (in-line/90 degrees)	
Operating Temperature Range	0-35°C (1067K Ink)	
Operating Humidity Range	30-90% RH (no condensation)	
Power Supply (Automatic Voltage Selection)	AC100-120/220-240V±10% 50/60Hz 120VA	
Approval	CE, UL, cUL, C-Tick, FCC, ICES	
Dimensions (W x D x H)	400 x 320 x 527 mm	
International Protection	IP65	
Approximate Weight	27kg	

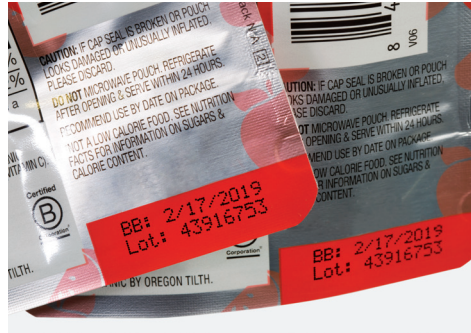
<sup>†1</sup> Please consult your nearest sales representative when "18x24 font" or "QR code" is required with UX-D for High-speed printing.





# 55µm (High Speed)

## Application Photos



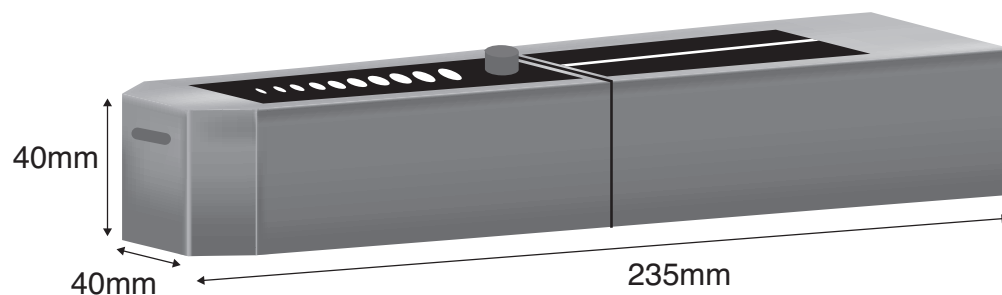
## Print Samples (Approx. Full Scale)

Font (Horizontal x Vertical)		UX-D150W
5 x 7	1 LINE	0123456789ABCDEFGHIJKLMN
	2 LINE	0123456789ABCDEFGHIJKLMN ABCDEFGHIJKLMNOPQRSTUVWXYZ
	3 LINE	0123456789ABCDEFGHIJKLMN ABCDEFGHIJKLMNOPQRSTUVWXYZ 0123456789ABCDEFGHIJKLMN
	4 LINE	0123456789ABCDEFGHIJKLMN ABCDEFGHIJKLMNOPQRSTUVWXYZ 0123456789ABCDEFGHIJKLMN ABCDEFGHIJKLMNOPQRSTUVWXYZ



Item	Model	
	UX-D150W	
Nozzle Size	55µm	
Max. # of Print Lines	Up to 4 lines	
Max. # of Print Characters	Up to 1,000 characters	
Font (horizontal x vertical)	4 x 5	✓
	5 x 5	✓
	5 x 7(8), 9 x 7(8)	✓
	7 x 10	✓
	11 x 11	—
	12 x 16	✓
	18 x 24	✓ *1
24 x 32	—	
Character Height	2 - 8 mm	
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	
Max. Print Rate (Characters per second) (Font 5x5, space 1, 1 Line)	Up to 3,173	
Standard Characters	Alphanumeric (A-Z, a-z, 0-9), Symbols (27) and Space: Total 90	
User Pattern	200 patterns each for dot matrix	
Print Functions	Calendar, Count, Font mixture, Password	
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 <sup>*1</sup> , Micro QR code	
Message Storage Capacity	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	
Print Head Cable Length/Angle	4m (in-line/90 degrees)	
Operating Temperature Range	0-40°C (1067K Ink)	
Operating Humidity Range	30-90% RH (no condensation)	
Power Supply (Automatic Voltage Selection)	AC100-120/220-240V±10% 50/60Hz 120VA	
Approval	CE, UL, cUL, C-Tick, FCC, ICES	
Dimensions (W x D x H)	400 x 320 x 527 mm	
International Protection	IP65	
Approximate Weight	27kg	

\*1 Please consult your nearest sales representative when "18x24 font" or "QR code" is required with UX-D for High-speed printing.





# 100µm (Large Characters)

## Application Photos

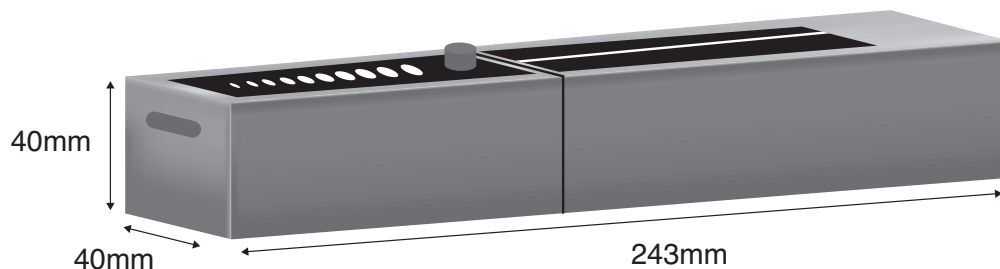


## Print Samples (Approx. Full Scale)

Font (Horizontal x Vertical)	UX-D110W	
	Standard	Bold
18 x 24	01A	01A
	01A	01A
24 x 32	01A	01A
	01A	01A

Item	Model	
	UX-D110W	
Nozzle Size	100µm	
Max. # of Print Lines	Up to 4 lines	
Max. # of Print Characters	Up to 1,000 characters	
Font (horizontal x vertical)	4 x 5	✓
	5 x 5	✓
	5 x 7(8), 9 x 7(8)	✓
	7 x 10	✓
	11 x 11	—
	12 x 16	✓
	18 x 24	✓
24 x 32	✓	
Character Height	3 - 15 mm	
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	
Max. Print Rate (Characters per second) (Font 5x5, space 1, 1 Line)	Up to 468	
Standard Characters	Alphanumeric (A-Z, a-z, 0-9), Symbols (27) and Space: Total 90	
User Pattern	200 patterns each for dot matrix	
Print Functions	Calendar, Count, Font mixture, Password	
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 <sup>†1</sup> , Micro QR code	
Message Storage Capacity	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	
Print Head Cable Length/Angle	4m (in-line/90 degrees)	
Operating Temperature Range	0-35°C (1067K Ink)	
Operating Humidity Range	30-90% RH (no condensation)	
Power Supply (Automatic Voltage Selection)	AC100-120/220-240V±10% 50/60Hz 120VA	
Approval	CE, UL, cUL, C-Tick, FCC, ICES	
Dimensions (W x D x H)	400 x 320 x 527 mm	
International Protection	IP65	
Approximate Weight	27kg	

<sup>†1</sup> Please consult your nearest sales representative when "18x24 font" or "QR code" is required with UX-D for High-speed printing.



# Pigmented - High Performance for High Contrast



## Easy Automated Nozzle Cleaning

Nozzle cleaning is as simple as pressing a button. Once nozzle cleaning is completed the printer will be set to stop mode automatically. The UX Series Pigmented printer also supports nozzle backwash functions, which allows cleaning fluid to be ingested through the nozzle, quickly and easily clearing any clogs.



## Airless Stirring System

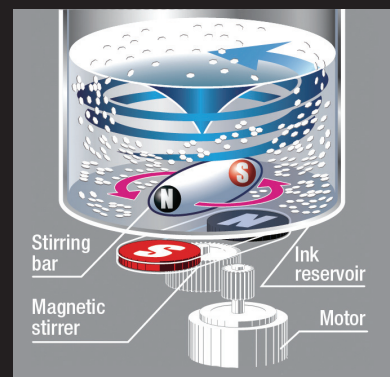
Most pigmented inkjet systems require air to prevent settling and agglomeration, but the UX Series Pigmented inkjet printer relies on a simple, yet highly effective Magitate system. This system reduces filter and nozzle clogging and eliminates the need for costly modifications to your compressed air system.



## Worry-Free Standby Circulation

The UX Series Pigmented inkjet printer also incorporates an ink circulation control method that allows ink to circulate even in standby mode. This helps to prevent ink fixing, increasing operational efficiency and further reducing potential downtime.

## Magnet + Agitate = Magitate



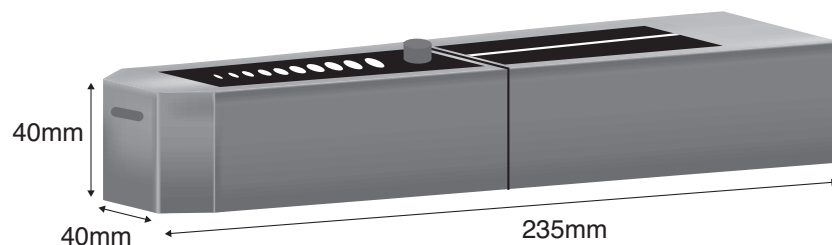
# Application Photos



# Print Samples (Approx. Full Scale)

Font (Horizontal x Vertical)	UX-P160W/S					
5x5	1LINE 小 0123456789ABCDEF GH 大 012345678	2LINE 012345678 ABCDEFGHI	3LINE 012345678 ABCDEFGHI JKLMNOPQR	6LINE 012345678 ABCDEFGHI JKLMNOPQR STUVW XYZ		
5x7	1LINE 小 0123456789ABCD 大 0123456	2LINE 012345678 ABCDEFGHI	3LINE 012345678 ABCDEFGHI JKLMNOPQR	4LINE 012345678 ABCDEFGHI JKLMNOPQR STUVWXYZ		
7x10	1LINE 小 0123456789 大 012345	2LINE 01234567 ABCDEFGH	3LINE 0123456789012345678 ABCDEFGHIJKLMNOPQRS TUVWXYZABCDEFGHIJKL			
10x12	1LINE 小 0123456789ABCD 大 0123456789	2LINE 01234567890 ABCDEFGHIJK				
12x16	1LINE 小 0123456789ABC アイウエオカキクケコ 大 0123456 01	2LINE 01234 ABCDE				
18x24	1LINE 小 0123456789	2LINE 0123456789ABC				
24x32	1LINE 小 0123456789ABCDEF 大 012345					
30x40	1LINE 012345ABCDEF					
36x48	1LINE 012345ABCD					
Logo	JIS mark	CE mark	UL mark	DIN printing	Chimney printing	
				ABC 08H	0 1 2 3 4 5 6 7 8 9	

Item		Model UX-P160 W / S
Nozzle Size		65µm
Max. # of Print Lines		Up to 6 lines
Max. # of Print Characters		Up to 1,000 characters
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	✓	
Character Height		2 - 10 mm
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
Max. Print Rate (Characters per second) (Font 5x5, space 1, 1 Line)		Up to 2,083 (JP-W89 Ink)
Standard Characters		Alphanumeric (A-Z, a-z, 0-9), Symbols (27) and Space: Total 90
User Patterns		200 patterns each for dot matrix
Print Function		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		IEEE802.3, 100BASE-T
External Memory		USB for user data storage
Print Head Cable Length/Angle		4m (in-line/90 degrees)
Operating Temperature Range		0-40°C (JP-W89 Ink)
Operating Humidity Range		30-90% RH (no condensation)
Power Supply (Automatic Voltage Selection)		AC100-120/220-240V±10% 50/60Hz 120VA
Approval		CE, UL, cUL, RCM, FCC, ICES
Dimensions (W x D x H)		400 x 320 x 527 mm
International Protection		IP65
Approximate Weight		27kg



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or call (866) 583-0048

For more information, please contact your nearest sales representative.

## Hitachi Industrial Equipment



Registration number: JQA-QMA12087  
Registration date: April 1, 2005

The Marking Systems and Hoist Systems Division (Taga Division) of Hitachi Industrial Equipment Systems Co., Ltd. obtained international standard ISO 9001 certification for the quality assurance of the Ink Jet Printer contained in this brochure.