HITACHI
Inspire the Next

Coding & Marking Solutions
Inkjet Printer

UX series

For over 40 years, Hitachi has developed and produced high-performance ink jet printers based on the well-proven Continuous InkJet (CIJ) principle for industrial marking.

Hitachi Industrial IJ printers are high-speed printers adopting a non-contact printing method, ideal for a wide range of applications. They are capable of applying best before dates, logos, barcodes, lot numbers and data matrix codes, which makes the new UX-Series the perfect solution for both complex and standard applications.

The UX-Series is a global model with highly evolved "Reliability", "Efficiency", Ease of Use" and even "Eco-friendly" performance.

About the UX Series

High reliability

Hitachi Products are renowned for being extremely reliable in harsh environments. All functionally critical parts are manufactured in-house. The use of Hitachi's own components reinforces the high quality levels, reliability and excellent value for money.

Cost-effective

The new economical ink recovery technique achieves industry-leading levels of make-up consumption and the very low maintenance costs minimise the total cost of ownership.

Intuitive Print Control

Worry-Free Integration

Simple Fluid Management

Reliable Circulation System

New Versatile, Durable Print Head

Global sales & service network

Are you looking for a proven global company that can work with you at a local level? Hitachi offers a global sales and service network when marking, coding and traceability challenges demand a coordinated answer. For each of your locations, and across your entire organization we will champion your goals by providing international consistency, global perspective, broad expertise and coordinated service with dedicated contacts. Our global team applies its worldwide technical expertise to your unique challenges in a consistent way. Tangible deliverables and proven solutions are results of our business analysis and project implementation. Mechanical integration supported by 3D CAD design, electrical schematics, customized circuits, application specifications and customized documents. In addition, cross-border project management and coordination between suppliers, OEM's and end-users are part of our deliveries. You gain more visibility and save time and money.

Simplicity

Mess-free, Mistake-proof Fluid Refills

Intelligent fluid cartridges reduce the possibility of hazardous fluid spills during refill. Shaped differently, the Ink and Make-up cartridges are easily identifiable as well as sized to fit in each respective receptacle.


RFID Recognition

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

*Some geographic areas are excluded.
 Hitachi Industrial Equipment Systems Co. Ltd, declares that the IC tag reader is in compliance with the essential requirements and other relevant provisions of the FDD Part 15 subpart C, EN 301 489 1/3, EN 300 330-1/2
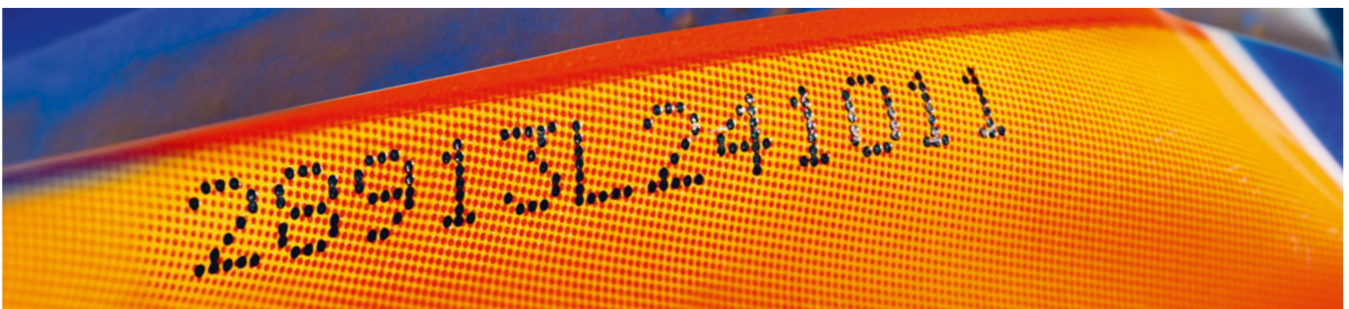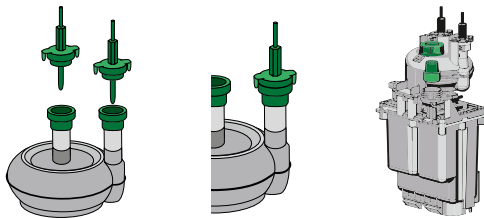
Tool-less Filter Replacement

Ink filters can be replaced without the use of tools or a technician, resulting in virtually zero downtime for easy maintenance. No more mandatory, timebased failure due to machine operation.

(Original Hitachi patent: EP 226 1037 A1 / EP 230 5470 A1)

IC Card with RFID function

With the new Hitachi IC Card any login information and print data can be managed fast, easy, and safely.

User Login
By scanning the IC Card, only the registered user can login quickly without entering a password. Each user operation can be limited to prevent human error.

Print data selection
By scanning the IC Card the print data can be quickly called up. Prevent calling up incorrect data which may happen with manual operation.

Intuitive Machine Interface

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.

On-Screen Guidance

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.
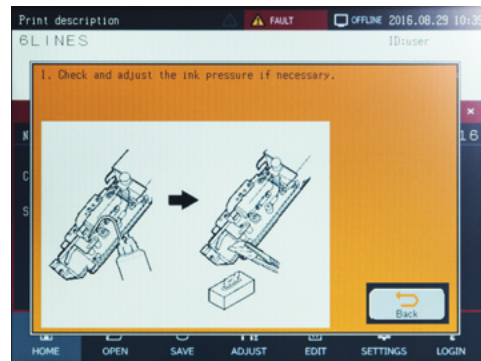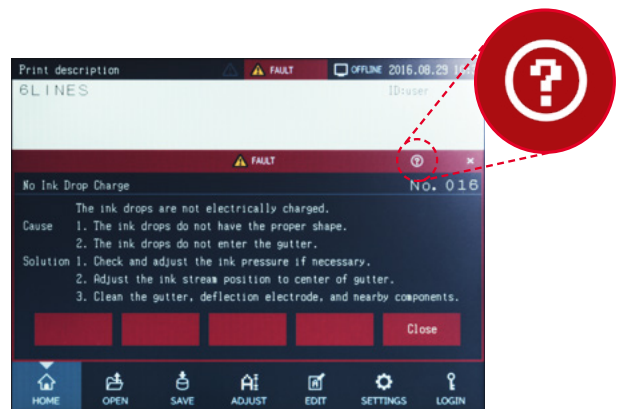
Convenient Remote Management

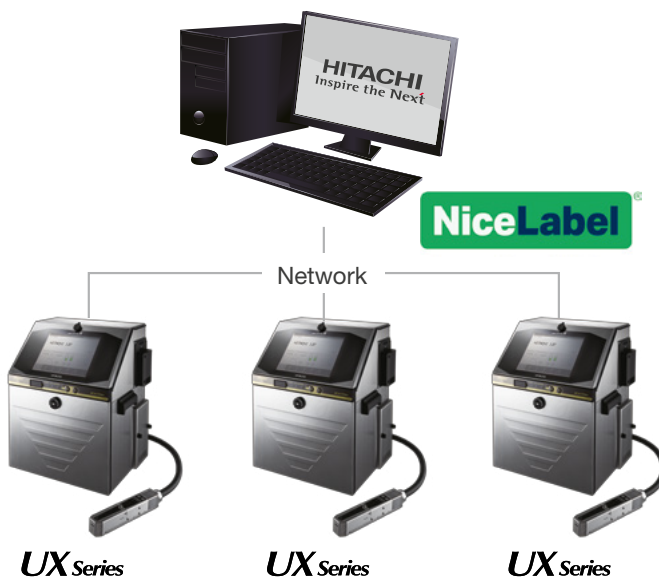Ethernet is a standard feature on UX machines.* In addition, open network is supported, allowing easier system integration. Collective management via a host system enables two or more devices to be easily networked.

*UX-B excluded

Print Error Recognition

The Hitachi Vision System has been optimised to work with Ink Jet typical dot matrix characters. It verifies the content of each printed message instantaneously while allowing for typical CIJ character variations, assuring an optimal level of print quality.

HITACHI
Inspire the Next

NiceLabel®

Network

UX *Series*   **UX** *Series*   **UX** *Series*

HITACHI

Dictionary

Matching

Size variations

Density variations

Readable distortions

Misreadable distortions

Typo

no print

✔ Examples of pass patterns

✘ Examples of error patterns
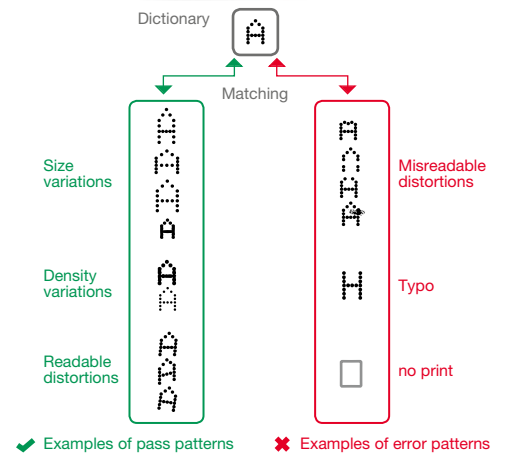
Versatile Durable Print Head

Versatile Tapered Print Head

Proximity to product can be challenging using traditional print heads, but the UX's new Tapered print head technology allows for even closer printing, resulting in improved print quality.

Durable Ni-Cr Plating

Ni-Cr

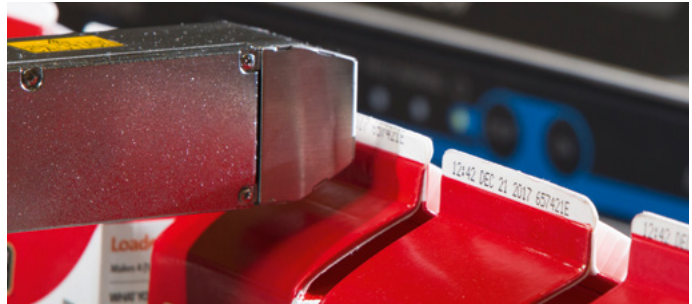The UX-Series print head features a new Nickel-Chrome finish, giving it exceptional corrosion resistance and increasing the print head's lifespan in demanding environments like those requiring wash-down or exposure to caustic chemicals.
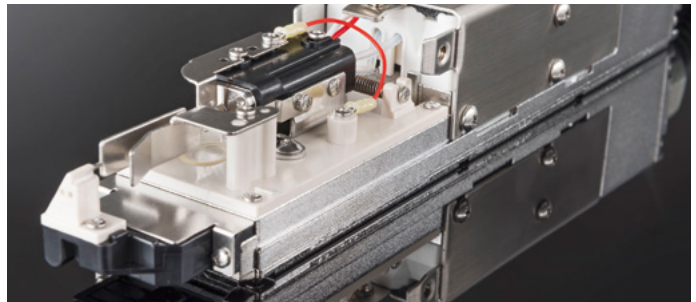
Up to 6-Line Print

A single UX print head can print up to six lines by employing an innovative print control system. High-speed single line printing of excellent quality is also possible. Hitachi's original interlaced-print-control-system makes each print character appear extremely clear regardless of print height.
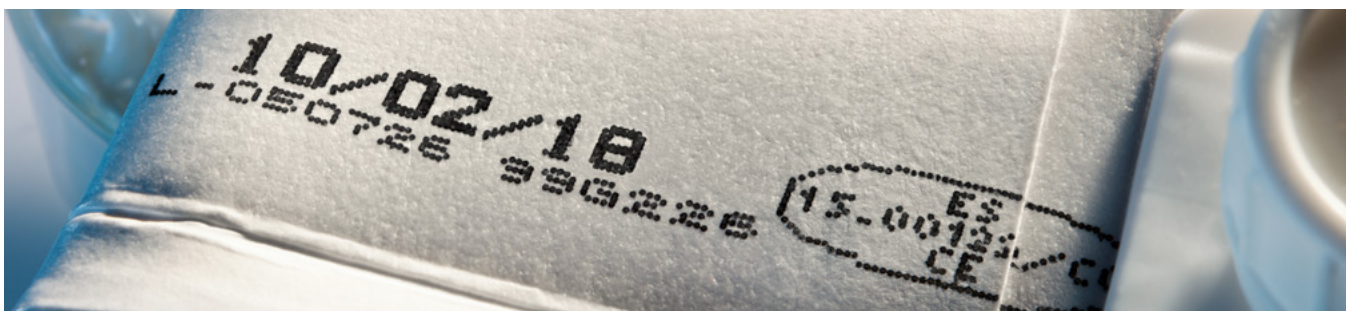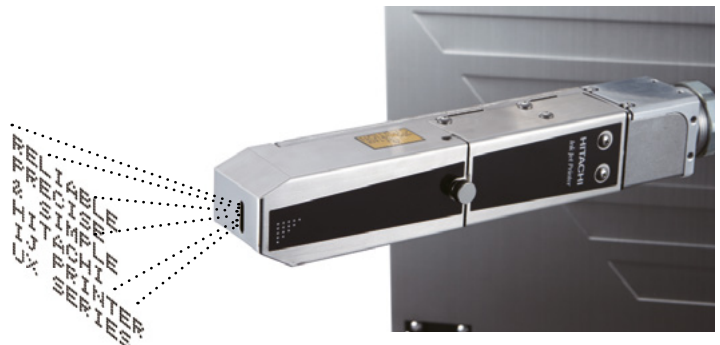
Reliability

Pump Unit (Valves and Camshaft)

At the heart of the UX Series inkjet printer is a diaphragm based circulation system. Unique to Hitachi, the UX's diaphragm system dramatically improves reliability, leading to a reduction in total cost of ownership.

A dedicated viscometer gives a true measure of the ink's viscosity further increasing reliability and uptime.
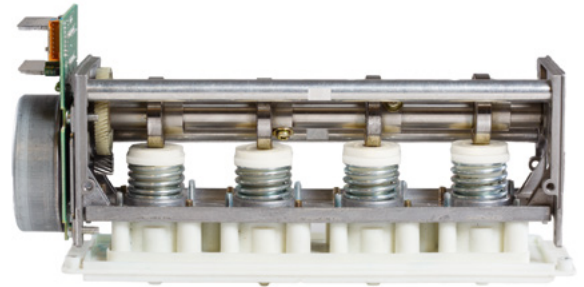
Reduced Make-up Consumption and Running Cost

Motor Speed Control Function suppresses make-up evaporation and offers industry-leading level of make-up consumption.

The premium model UX-E achieves a consumption of only 2.5 ml/h thanks to Hitachi's latest patented Fluid Consumption Reduction System.

2.5 ml/h*

*Hitachi Ink 1067k at 20°C

Designed for harsh environments

The stainless steel cabinet offers IP65 and allows a wash-down with pressured water and industrial detergent, to meet any environment and hygiene requests.
The UX Series with IP65 protection is the ideal choice for applications in the meat and dairy industries.

High temperature up to 50°C

Wash-down

Durability

Low temperature down to 0°C

Dusty environment

Twin Nozzle Model

Flexible 8 Line Print

The UX twin print head now offers the abilty to produce 8 lines of text by combining two individual nozzles into one, compact design. In additon, by utilizing Hitachi's first on the market "interlaced" print control technique, multiple line messages are printed clearly and legibly, further reducing coding errors due to misprint.
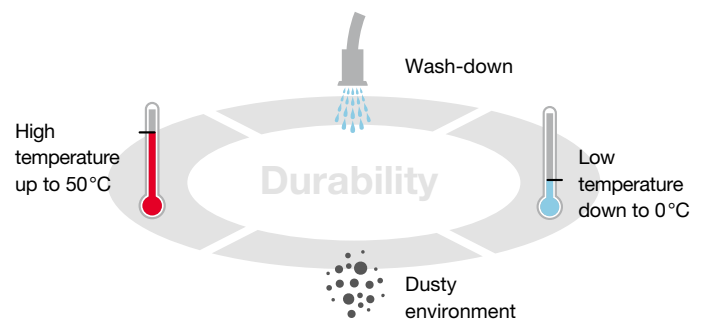
High-speed printing

Two nozzles at one print head realizes double-speed printing, which can track even on a high-speed production line, resulting in high-quality printing regardless of the number of print lines.

Versatile 64-Dot

Hitachi's innovative design now produces 64 vertical dots of print, resulting in large, bold characters. This makes the UX twin nozzle printer ideally suited to mark company logos, UL marks, or any other pattern previously unachievable with traditional print heads.

Character Stitch Capability

A unique option in the new twin-nozzle printer is the ability to stitch both nozzles together. This results in characters that are bigger and bolder than ever, compared to those printed by individual nozzles. This is particularly useful when character recognition is needed at a distance from the product.

32dot
32dot
64dot
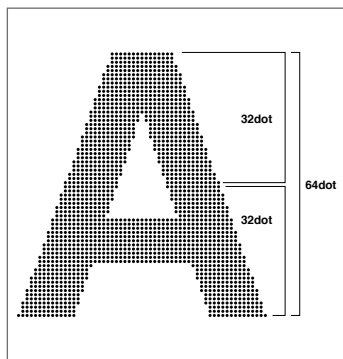
Image is for illustration purposes

UX-P For Pigmented Inks

UX-P for pigmented inks

The UX Printer is designed for high contrast marking on dark surfaces with pigmented inks at highest quality. Typical application areas include automotive parts, cables, plastic piping and electronic components.

Pigmented ink stirring system

The electric stirrer system prevents the agglomeration and the setting of pigments.

In addition, the Pigment model is equipped with an "Ink circulation control" function, which allows the ink to circulate even in a standby mode to avoid the ink fixing and ensures a smooth operation during production.

Smooth supply for ink and make-up fluid
Ink and make-up fluid can be supplied at any time with no interruption

Stirring bar

Magnetic stirrer

Ink reservoir

Motor
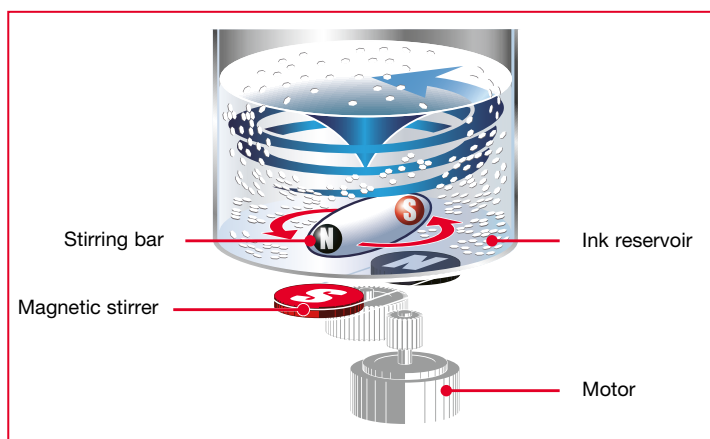
Electric stirrer

UX-D Model (Standard)

Standard Print Samples

Size		Line	Sample		Line	Sample		Line	Sample		Line	Sample
5 x 5		1 LINE	0123456789ABCDEFGH / 012345678		2 LINE	012345678 ABCDEFGHI		3 LINE	012345678 ABCDEFGHI JKLMNOPQR		6 LINE	(sample text)
5 x 7		1 LINE	0123456789ABC / 0123456		2 LINE	012345678 ABCDEFGHI		3 LINE	012345678 ABCDEFGHI JKLMNOPQR		4 LINE	012345678 ABCDEFGHI JKLMNOPQR STUVWXYZA
7 x10		1 LINE	0123456789 / 012345		2 LINE	01234567 ABCDEFGH		3 LINE	0123456789013456 ABCDEFGHIJKLNOPQ TUVWXYZABCDEGHIJ			
10 x 12		1 LINE	0123456789ABC / 0123456789		2 LINE	01234567890 ABCDEFGHIJK						
12 x 16		1 LINE	0123456789ABC / 0123456 01 ▨		2 LINE	012 ABC ▨						
18 x 24		1 LINE	0123456789 / 0123456ABC									
24 x 32		1 LINE	012345ABCD ▦									
30 x 40		1 LINE	012345ABCDEF									
36 x 48		1 LINE	012345ABCD									

Standard Specifications

Item		UX-D160W
Nozzle Size		65μm
Maximum number of print lines		Up to 6 lines
Maximum number of print characters		Up to 240 characters (Option: 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
Maximum print rate (Character per second) (Font 5x5, space 1, 1 line)		Up to 1,148 (Option: Up to 2,563)
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 and 36x48 fonts)
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 printing		Data Matrix (Alphabet: 49 characters/Numbers: 98 characters), QR Code, Micro QR code
Message storage capacity		300 Messages [Option: 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; Option: 6m)
Operating temperature range		0-45°C (1069K Ink)*
Operating humidity range		30-90% RH (no condensation)
Power supply (Automatic voltage selection)		AC100-120/220-240V±10% 50/60Hz 120 VA
Approval		CE, UL, cUL, C-Tick, FCC, ICES
Dimensions (Width x Depth x Height)		400 x 320 x 527 mm
International protection		IP65
Approximate weight		27kg

* Ink types and temperature are limited.
** Please consult your sales representative for further upgrade options.

LCD Touch Panel
Power Switch
527
Print Head Cable 4,000
320
400
40
Print Head
40
235

Note: Main unit dimensions do not include any projections.

Standard Print Samples

5 x 5	1 LINE	0123456789ABCDEFGH 012345678	2 LINE	012345678 ABCDEFGHI	3 LINE	012345678 ABCDEFGHI JKLMNOPQR
5 x 7	1 LINE	0123456789ABC 0123456	2 LINE	012345678 ABCDEFGHI	3 LINE	012345678 ABCDEFGHI JKLMNOPQR	4 LINE: 012345678 ABCDEFGHI JKLMNOPQR STUVWXYZA
7 x10	1 LINE	0123456789 012345	2 LINE	01234567 ABCDEFGH	3 LINE	0123456789012 34567 ABCDEFGHIJKLMNOPQR TUVWXYZABCDEFGHIJK
12 x 16	1 LINE	0123456789ABC 012345 01			2 LINE	01234 ABCDE
18 x 24	1 LINE	0123456789 0123456ABC				

Standard Specifications

Item		UX-D150W
Nozzle Size		55μm
Maximum number of print lines		Up to 4 lines
Maximum number 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	-
	10 x 12	-
	12 x 16	✓
	18 x 24	✓**
	24 x 32	-
	30 x 40	-
	36 x 48	-
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
Maximum print rate (Character 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 patterns		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 printing		Data Matrix (Alphabet: 49 characters/Numbers: 98 characters), QR Code, Micro QR code
Message storage capacity		300 Messages [Option: 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		0-40°C (1069K Ink)*
Operating humidity range		30-90% RH (no condensation)
Power supply (Automatic voltage selection)		AC100-120/220-240V±10% 50/60Hz 120 VA
Approval		CE, UL, cUL, C-Tick, FCC, ICES
Dimensions (Width x Depth x Height)		400 x 320 x 527 mm
International protection		IP65
Approximate weight		27kg

* Ink types and temperature are limited.
** Please consult your sales representative for further upgrade options.

LCD Touch Panel
Power Switch
527
Print Head Cable 4,000
320
400
Print Head
40
40
235

Note: Main unit dimensions do not include any projections.

nozzle size 40 μm

Standard Print Samples

	1 LINE	2 LINE	3 LINE	4 LINE
5 x 5	0123456789 / 123456789	0123456789 KLMNOPQRST / ABCDEFGHIJ	0123456789 IJKLMNOPQR 0123456789	0123456789 IJKLMNOPQR 0123456789 IJKLMNOPQR
5 x 7	12345679ABCDEFGH / 123456789R	123456789012345 ABCDEFGHIJKLMN	123456790123456 ABCDEFGHIJKLMNO abcdefghijklmno	
7 x10	1234567890 / 123456789	1234567890123 ABCDEFGHIJKLM	1234567890123456789012345678 ABCDEFGHIJKLMNOPQRSTUVWXYZAB OPQRSTUVWXYZ1234567890123456	
12 x 16	01234ABCDE / 123456789ABC			2 LINE 0123456789 ABCDEFGHIJ
18 x 24	1234567ABCDEF			
24 x 32	1234567ABCDEF			

1275369
02/2019

Standard Specifications

Item		UX-D140W
Nozzle Size		40μm
Maximum number of print lines		Up to 4 lines
Maximum number 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		1 - 5mm
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 (Character 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 patterns		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 printing		Data Matrix (Alphabet: 49 characters/Numbers: 98 characters), QR Code, Micro QR code
Message storage capacity		300 Messages [Option: 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		0-35°C (1069K Ink)*
Operating humidity range		30-90% RH (no condensation)
Power supply (Automatic voltage selection)		AC100-120/220-240V±10% 50/60Hz 120 VA
Approval		CE, UL, cUL, C-Tick, FCC, ICES
Dimensions (Width x Depth x Height)		400 x 320 x 527 mm
International protection		IP65
Approximate weight		27kg

* Ink types and temperature are limited.
** Please consult your sales representative for further upgrade options.

LCD Touch Panel
Power Switch
527
400
320
Print Head Cable 4,000
Print Head
40
40
219

Note: Main unit dimensions do not include any projections.

UX-D Model (Large Characters)

Standard Print Samples

Matrix	1 LINE	2 LINE	3 LINE	4 LINE
4 x 5	01234567	01234567 ABCDEFGH	01234567 ABCDEFGH IJKLMNOP	01234567 ABCDEFGH IJKLMNOP 89012345
5 x 5	01234567	0123456 ABCDEFG	12345678 ABCDEFGH 89012345	12345678 ABCDEFGH 89012345 IJKLMNOP
5 x 7	12345678	12345678 ABCDEFGH	12345678 ABCDEFGH 90123456	12345678 ABCDEFGH 90123456 IJKLMNOP
9 x 7	12345678	12345678 ABCDEFGH	123456789 ABCDEFGHI 012345678	123456789 ABCDEFGHI 012345678 JKLMNOPQR
7 x 10	1234567	123456 ABCDEF	123456789 ABCDEFGHI 012345678	
12 x 16	123456789	12345 ABCDE		
18 x 24	123456789			
24 x 32	123456789			

Standard Specifications

Item		UX-D110W
Nozzle Size		100µm
Maximum number of print lines		Up to 4 lines
Maximum number 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	-
	10 x 12	-
	12 x 16	✓
	18 x 24	✓
	24 x 32	✓
	30 x 40	-
	36 x 48	-
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
Maximum print rate (Character 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 patterns		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 printing		Data Matrix (Alphabet: 49 characters/Numbers: 98 characters), QR Code, Micro QR code
Message storage capacity		300 Messages [Option: 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		0-35°C (1069K Ink)*
Operating humidity range		30-90% RH (no condensation)
Power supply (Automatic voltage selection)		AC100-120/220-240V±10% 50/60Hz 120 VA
Approval		CE, UL, cUL, C-Tick, FCC, ICES
Dimensions (Width x Depth x Height)		400 x 320 x 527 mm
International protection		IP65
Approximate weight		27kg

* Ink types and temperature are limited.
** Please consult your sales representative for further upgrade options.

LCD Touch Panel
Power Switch
527
Print Head Cable 4,000
320
400
Print Head
40
40
243

Note: Main unit dimensions do not include any projections.

Head Office

Sales Offices

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