

Hx Ultra CTIJ Printer

Built for high-volume production lines that demand speed, seamless integration, and the lowest cost per print.



Coding & Marking Solutions

Manufacturer and supplier of industrial inkjet printers, consumables, and after-sales support.






Range of CTIJ



The Hx Ultro and Hx Ultimo Continuous Thermal Inkjet (CTIJ) printers are engineered for high-volume, high-speed production lines. A bulk ink supply—available in multiple capacities and compatible with the Advanced Ink System (AIS)—significantly reduces operator intervention by eliminating frequent cartridge changes, ensuring uninterrupted printing performance.

These industrial CTIJ systems support print resolutions of up to 600 dpi and line speeds of up to 240 m/min*, with long-distance, non-contact printing capability. They are compatible with solvent-based and water-based inks, offer browser-based message creation, and integrate seamlessly with MapleJet's Hx Platform for centralized monitoring, diagnostics, and production control.



PRINTER MODEL	Hx Ultro 600s (High Resolution - Solvent-based)	Hx Ultro CodeMax (Flexible Packaging Integration)	Hx Ultro 600w (High Resolution - Water-based)	Hx Ultro 25w (High Resolution - Water-based)	Hx Ultimo (High Resolution - Solvent-based)
PRINT HEIGHT	12.7mm (½ inch)	12.7mm (½ inch)	12.7mm (½ inch)	25mm (1 inch)	12.7mm (½ inch)
MATERIAL COMPATIBILITY	Non-porous	Non-porous	Porous	Porous	Non-porous
KEY FEATURE	Ultra high-resolution printing	Specialized bracket seamless integration to flexible packaging machine	High-resolution printing for absorbent surfaces	Larger character printing for branding & readability	Ultra high-resolution & high speed printing
BEST FOR	Clean, sharp prints on glossy or flexible films	Clean, sharp prints on glossy or flexible films	Clean, detailed prints on cartons/paperboard	Large logos, barcodes, and product info packages	Printing on uneven surfaces
RECOMMENDED INDUSTRIES	Pharmaceuticals, Cosmetics, Food in flexible packaging 	Pharmaceuticals, Cosmetics, Food in flexible packaging 	FMCG (cartons), Agriculture (sacks), Corrugated packaging 	E-commerce, FMCG (cartons/sacks), Warehousing, Distribution Centers 	Beverage (cans/bottles), Metals, Tubes, Caps, Aerosol containers 

*refer to specification to get the resolution at this speed



Hx Ultero

Key Features

Clean and precise non-contact printing:

Delivers sharp, smudge-free codes at high speeds, even on dark, uneven, or moving surfaces..

Bulk ink system for uninterrupted production:

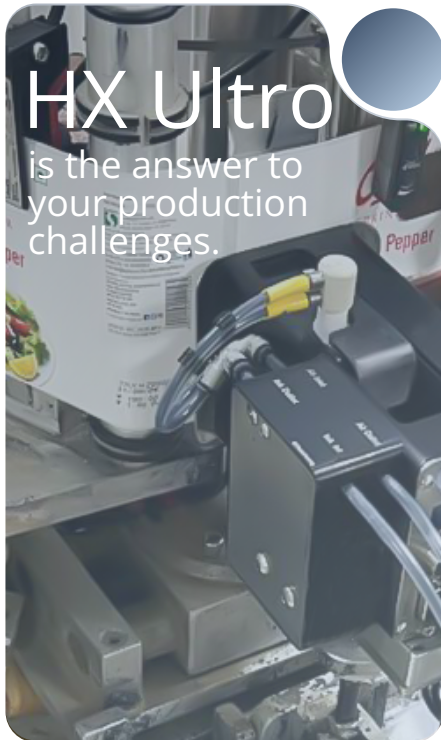
Large ink supply supports long, continuous runs and minimal operator intervention..

Optimized for high-volume operations:

Designed for 24/7 industrial environments where uptime, consistency, and throughput are critical.

Consistent performance on all packaging materials:

Prints reliably on plastics, metals, glass, cartons, and flexible films in demanding production conditions.



Quality Control Manager

Challenges

- High cost of rework due to printing errors
- Poor print quality on glossy or smooth surfaces
- Product waste caused by printing errors
- Need for constant operator presence for QC checks

Solutions

- Real-time inspection of printed messages
- Print system monitoring
- Fault Mode detection and reduction of printing errors
- Line-stop alerts
- Conversion of QC into a digital inspection process

Benefits

- High-quality, durable printing
- Improved product appearance
- Reduced printing errors
- Lower dependency on manual labor

Production Manager

Challenges

- High maintenance and consumable costs
- Lack of visibility into printer stoppages
- No accurate production tracking (track & trace)
- Difficulty monitoring ink usage and printer performance
- Unplanned downtime during production
- Lack of centralized reporting

Solutions

- Predictive maintenance and early fault detection
- Printer Health Check system
- Production and printing reports (Daily Reports)
- Ink consumption monitoring
- Remote printer management and diagnostics
- Real-time production and print status monitoring
- PLC connectivity and automation integration
- Centralized management through HX Console

Benefits

- Reduced consumable and maintenance costs
- Increased production efficiency by reducing downtime
- Accurate production tracking
- Improved consistency and reliability

Operator/Line Supervisor

Challenges

- Manual cartridge replacement and setup
- Incorrect printer adjustments due to operator error
- High training requirements
- Delays in resolving print issues
- Safety concerns when handling MEK inks

Solutions

- Tool-free cartridge replacement
- Automatic print settings
- Error alerts with clear guidance
- Access-level control (User Levels)
- Reduced MEK exposure through sealed ink systems

Benefits

- Easier operator usage
- Higher line uptime
- Faster response to print errors
- Safer working environment

Factory/Operations Manager

Challenges

- High Total Cost of Ownership (TCO)
- Production losses due to downtime
- Lack of accurate performance data
- Complex printer management
- High upfront and operating costs

Solutions

- Optimized purchasing and consumable usage
- Reduced production stoppages during cartridge replacement
- HX Console for centralized control and monitoring
- ERP and PLC integration
- Automated production data transfer

Benefits

- Lower Total Cost of Ownership (TCO)
- Improved factory performance visibility

Warehouse, Logistics & Procurement Manager

Challenges

- Delays in spare parts availability
- High inventory cost for MEK inks and spare parts

Solutions

- Local production and supply of spare parts
- Reduced need for MEK inventory and storage space

Benefits

- Lower direct and hidden costs
- Elimination of hazardous material handling risks

Why Hx Ultro CTIJ is a Smart Choice?

- **Easy Operation**
Simple to use with basic training – no technical expertise required
- **Lower Total Cost of Ownership (TCO)**
No periodic servicing, no expensive consumables, no hard-to-find spare parts
- **Zero-Downtime Production**
Stop the production line and restart the printer days later – instantly and without hassle
- **High-Resolution & Clean Printing**
Sharper than CIJ, with high-resolution output
Cleaner and longer-lasting than other TIJ printers



- **Software Upgrade Ready**
Keeps the printer up-to-date with regulatory coding requirements (e.g., health ministry standards)
- **Fast and Accurate**
Ideal for production lines with variable speeds
- **High-Quality Non-Contact Printing**
Prints on all materials with a print height of up to 12.7mm or 25mm
- **Eco-Friendly**
No VOC emissions and no unpleasant odors
- **Suitable for All Environments**
Operates reliably even in dusty or humid industrial conditions
- **Long Service Life**
Designed for years of continuous use

Industrial Power in a Compact, Professional Design

Hx Ultro

HX Ultro is MapleJet's new generation of compact, reliable Continuous TIJ (CTIJ) printers for product packaging on modern production lines. It uses a bulk-ink architecture and advanced control to deliver consistent, high-resolution variable data at speed. With web-based management and an integrated control system, multiple printers can be configured, monitored, and updated centrally.

Highlights

- Bulk Ink System: continuous supply and changeover without line stoppage.
- AIS – Advanced Ink Supply for uniform, stable print quality.
- Web-based device control, dedicated software, Wi-Fi/IP networking.
- Designed for variable-speed lines and mixed product formats.

● Applications of the CTIJ Inkjet Printer

Where is this printer ideal for?



High-volume factories requiring continuous, non-stop production. Built for long runs where stability and uptime are critical.



Multi-shift and 24/7 manufacturing environments. Supports round-the-clock operation with bulk ink supply and consistent output.



Established production lines with high throughput demands. Ideal for lines running at speed with minimal tolerance for interruptions.



Centralized plants standardizing coding across multiple lines. Well-suited for facilities seeking uniform print quality and centralized control.

CTIJ Printer

● Where is this printer most commonly used?



1

Food and Consumer Packaging Industry

Used for printing production dates, expiry dates, barcodes, and traceability codes on small or direct-contact food packaging such as:

- Yogurt cups, dairy products, and juice packaging
- Cake, confectionery, chocolate, and snack wrappers
- Plastic containers, metal cans, and flexible food packaging films



2

Pharmaceutical, Cosmetics & Personal Care Industry

Used for printing critical information such as batch number, lot code, expiry date, and traceability details on:

- Tubes, cream and ointment packaging
- Glass bottles and pharmaceutical containers
- Packaging for soap, shampoo, and hygiene products



3

PET and Glass Beverage Bottles

Direct printing on bottles such as:

- Soft drinks
- Mineral water
- Malt beverages, energy drinks, and juice bottles



4

Small Rigid Packaging

- Small paint cans
- Single-use chemical containers
- Adhesive and glue packaging
- Small resin containers for industrial washing applications



5

Other Primary Packaging Industries

- Electronic components (printing on anti-static packaging)
- Herbal medicines and nutritional supplements
- Tobacco products (printing on cigarette wraps or small tobacco packs)

The Choice is Yours! Use MapleJet's HMI or Connect to Your Internal Systems

To monitor, manage, and update print data, you can choose between two integration options:

1. Using MapleJet's Dedicated Software

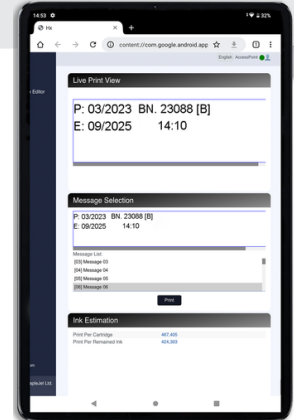
With the web-based platforms Hx Console and Hx Manager, you can control devices in real time, view reports, and apply necessary adjustments — all through a browser, with no software installation required.

These platforms are equipped with smart Business Intelligence (BI) and Business Analytics (BA) tools, allowing you to track what has happened and make data-driven decisions to optimize your production workflow.

2. API Integration with Your Internal Systems

If you prefer your print data to be sent directly into your existing ERP, CRM, or manufacturing software, you can use MapleJet's dedicated API.

This enables you to view and analyze printer data alongside other business information — all in a single dashboard, without switching between systems.



Introducing Hx Manager

Hx Manager is a dedicated platform for monitoring and controlling your printing process. Designed specifically for a single inkjet printer, it provides full access to device controls, status tracking, and performance insights. The software can be accessed from any smart device — including mobile phones, tablets, or computers — as long as it is connected to the same Wi-Fi network. Hx Manager includes five main sections:

- **Monitoring** • **Message Editor** • **Health Check** • **Settings** • **External Data Management**

HX Manager Features

Message Design Modes	1. Advanced Message Editor 2. Auto Pilot
Message Design	Design and edit static and variable data messages including: date, time, batch number, shift code, barcode,
Message Control	QR code, logo, text, external database fields, counters, authenticity barcode, and more Create, monitor, and manage print messages through a browser
Remote Upgrade	Printers on the line can be upgraded remotely without removing them from production, allowing instant updates.
Economy Mode	Ink consumption reduced by up to 50% increasing print quantity
Daily Report	Hourly and daily production monitoring
Health Check	Real-time printer status check to prevent production downtime
Send to Many	Design a message once and send it to multiple printers simultaneously
Auto Notify	Sends automatic alerts for events like print completion, online data updates, low ink level, etc. via selected channels such as USB, RS232, or Wi-Fi (HTTP) — keeping your team informed in real time.
Roller Date	Set date format according to shift schedule and global time
Custom Date	Customize date formatting (RTL, LTR, and other formats)
Auto Print	Automatically prints messages based on data scanned by barcode reader — no manual configuration needed
Print Job	Configure messages based on production counts (e.g. print 10 sachets with price, print 2 with free)
Web Print	Send the same or different messages to multiple printers from a single message design page in AME.
BCD Interface	Receives categorized PLC messages and prints accordingly (e.g., in ceramics packaging, the PLC defines the grade, then tells printer what to print).
Font Recovery	Font backup in two sections and auto-switch to alternate font in case of issues
Languages	Thai, Spanish, Portuguese, Japanese, German, Chinese, Persian, and English (more language upon request)
Static IP Address	Supported

Hx Console

Hx Console is a platform designed for executives and senior managers, enabling the monitoring, control, analysis, and adjustment of a network of printers simultaneously and centrally. This software can send and receive data from printers in both directions. It also provides advanced features such as creating and sending unified messages to multiple printers, sending customized messages, and exchanging XML-based requests and responses with the devices.

Business Intelligence

Business and Operational Analytics

- Provides detailed print reports categorized by hour and day.
- Monitors the number of active printers and their performance.
- Tracks sent messages and updates them when necessary.
- Monitors remaining print counts, device health status, and potential issues.

Remote Control

Printer Management and Connectivity

- Manage and control printers via Wi-Fi connection.
- No physical presence required near the device.
- Connect to ERP or CRM production software networks.
- Supports API-based integration.

Multi-Printer Support

Centralized Control and Management

- Enables managing and controlling multiple printers simultaneously from a single central panel.

Supported Languages

- English

No Application Installation Required.
Monitor everything online.



Full control of all printers

Even if you have purchased multiple printers from MapleJet, you can manage them without the need for installation, complex training, or major changes. Connect them all to one unified system and monitor their status and operation. This platform is designed for uniform use across all devices and can help greatly in this regard.

Human resource management

Reducing the need for manual intervention by operators on the production line and training new staff.

Saving time and cost



● Controller Specifications

Section	Description
Message Design	Advanced Message Editor (AME)
Message Capacity	Unlimited (Windows/tablet)
Start/Stop Time	Instant
Password Security	Yes
Alert	Internal buzzer; OLED display, 64×128
Number of Printhead	1
Product Certification	CE

● Printing Features

Section	Description
Resolution	600 dpi (standard ink throw distance cartridge)
Maximum Print Speed	240 meters per minute at 76 DPI (standard ink throw distance cartridge)
Logo Printing Option	Yes
Barcode Printing	Various barcode types
Number of Print Lines	Up to 6 lines (2 mm height per line)
Character Height Range	Up to 12.7 mm (0.5 inch)
Fonts	All Windows fonts
Date Formats	Multiple formats for date, message, etc.
Counters	User-defined counters
Message Components	Text, date, time, logo, counter, line, barcode, external data, serial number, letters, and numbers

● Connections and Communications

Section	Description
Connection Power	Easy connection without additional setup; Wi-Fi (direct or via access point), RS-232 isolated (optional), USB
Supply	Cable 15V adapter
Adapter	Optional connection for two or three-color beacon
External Light (Beacon)	Optional connection available
External Sensor	Optional connection
Stand & Holder	Available

● Cartridge Specifications

Section	Description
Technology	Brady Cartridge Technology
Compatibility	Compatible with porous and non-porous surfaces
Color	Black
Ink Dimensions	180 × 130 × 40 mm
Ink Identification	Automatic

● Physical Specifications

Section	Description
Controller Material	Anodized Aluminum + Stainless Steel (Anti-Corrosive)
Controller Weight	1050g
Dimensions	146 × 105 × 84 mm
Environmental Conditions	Temperature: up to 50 °C; Humidity: up to 80% (special enclosure for humid environments)

● Cable and Adapter Specifications

Section	Description
Input AC	100–240 VAC
Output DCV	15
Rated Current	4 A
Rated Power	Maximum 40 W
Ripple & Noise	Maximum 100 VP-P

● Advanced Features

Section	Description
Auto Notification	Sends automatic alerts for events such as low ink level, print completion, or online data reception through channels like USB, RS232, Wi-Fi, or HTTP – notifying your team in real time.
Auto Pilot	Allows external controller monitoring of the printer. Each printer can receive commands from another fixed system (like PLC).
Daily Production Report	Provides daily print reports for monitoring total production status.
Economy Mode	Reduces ink consumption by up to 50% increasing print quantity.
External Data	Enables easy integration with external devices such as PLC or scales for variable data printing.
Ink Estimation Calculation	Estimates the number of prints based on message and parameter data.
Printer Health Check	Detects and prevents errors or unexpected stoppages.
Print Scheduling	Schedules print jobs based on company shifts and work plans.
Signal Lock Connection	Enables quick connection to the main system to send instant signals such as “Error,” “Busy,” “Printing,” or “Ready.”

Ink Consumables

Ink Name	Ink Type	Volume/Colour	Suitable Surface	Application
Aqura	Water based	250ml / Black	Porous	Paper bags, Corrugated boxes, Cardboard
Chronplast W	Solvent based	250ml / Black,	Non Porous	Paper bags, Corrugated boxes, semi-coated cardboard
eUrex	Solvent based	250ml / Black	Porous & Non Porous	Flexible food Packaging, PVC, PP, PET, ABS, Metal, Glass polystyrene and treated polyethylene film



Chronplast W Black 250ml
SKU: 17375-05-01



Aqura Black 250ml
SKU: 17371-01-05



eUrex Black 250ml
SKU: 17320-02-01ME

Ink Consumables Head



HX Ultra Ink Cartridge 600S Head
SKU: 09045-03ME



HX Ultra Ink Cartridge 300S Head
SKU: 09045-03ME



HX Ultra 1/2" Cartridge
600W Head
SKU: 09044-02ME



HX Ultra 1" Cartridge
600W Head
SKU: 09060-01-01ME



Accessories



Power Supply with Cable
SKU: 20350



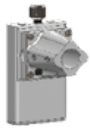
Daily Cap (1/2" or 1")
SKU: 36187-02-02



Product Sensor
SKU: 34056-02-01



Sensor Mounting
SKU: 36094-01



Fine Tune Module (Ultra)
SKU: 36187-02-02



Shaft Encoder (2500ppr)
SKU: 34004-05ME



Shaft Encoder (5000 ppr)
SKU: 34004-05ME



Encoder Mounting
SKU: 34018-02



Eye Mark Sensor
SKU: 10003-01



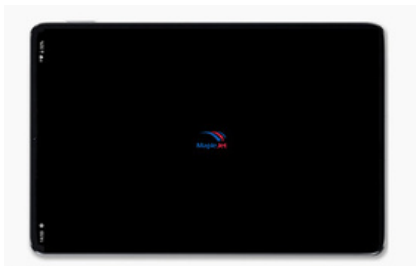
Hx Add On



Tri-coloured Beacon
SKU: 36115-01



Acreon Return Cassette 250ml
SKU: 37339-02-01



10" HMI
SKU: 30336-01



Anti-theft HMI Mounting
SKU: 30322



Advance Ink System (Solvent Based) with Magnet Interface
SKU: 261019-01



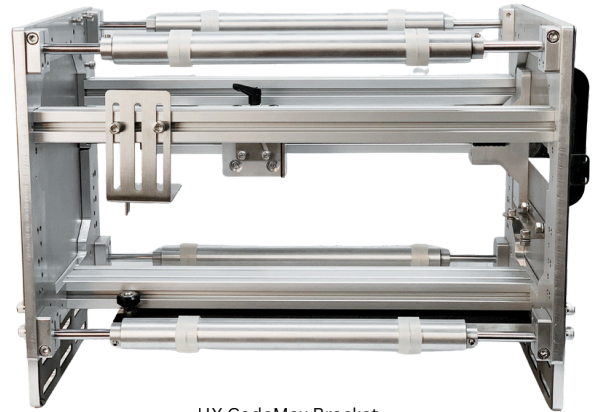
Stainless Steel L-shaped bracket
SKU: 37263-03



Slider Mounting
SKU: 37343-01-01



Stainless Steel Tripod Stand
SKU: 37312-02



HX CodeMax Bracket
SKU: 36179-01-05ME

OUR DISTRIBUTION NETWORK



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