

Updated: 02/2026



# Hx Nitro

## Thermal Inkjet Printer

High-Speed Industrial Inkjet Printer  
for production lines that cannot afford  
downtime.

Up to 12.7mm



**MapleJet**

## Coding & Marking Solutions

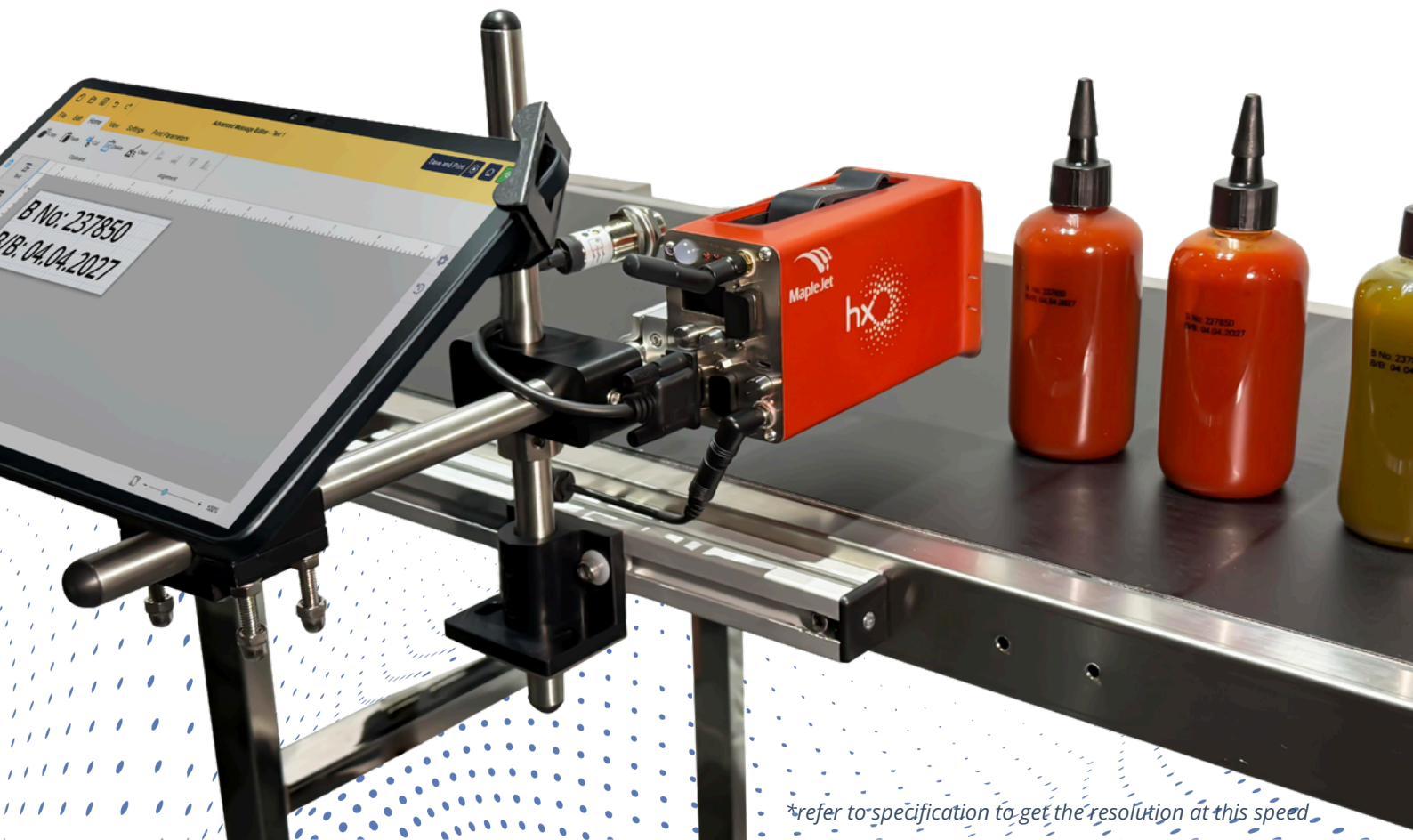
Manufacturer and supplier of industrial inkjet printers,  
consumables, and after-sales support.

[www.maplejet.com](http://www.maplejet.com)

# Hx Nitro



Industrial Thermal Inkjet printer  
**capable of printing up to 600 dpi  
and a maximum speed of 240  
m/min\***, featuring long-distance  
non-contact printing, solvent or  
water-based ink compatibility,  
browser-based message design, and  
seamless integration with MapleJet's  
Hx Platform for centralized  
monitoring, diagnostics, and  
production control.



*\*refer to specification to get the resolution at this speed*

## Key Features of

# Hx Nitro

### Clean and precise non-contact printing:

Ensures sharp, smudge-free codes even on dark or uneven surfaces.

### Zero maintenance with instant restart:

No cleaning or warm-up time, keeping production running smoothly.

### Easy message setup for all operators:

User-friendly interface reduces errors and speeds up job changes.

### Consistent performance on all packaging materials:

Works reliably on plastics, metals, glass, cartons, and flexible films



**HX Nitro**  
is the answer to  
your production  
challenges.

### Quality Control Manager

#### Challenges

- Unreadable or faulty prints
- Reduced print quality due to direct contact between the printer and the product
- Product waste caused by printing defects
- Decline in print quality in dusty or humid environments

#### Solutions

- High-resolution and high-precision printing
- Non-contact printing technology prevents product surface damage
- Real-time alerts for incomplete or failed prints to maintain production control
- Stable printing performance in humid and harsh industrial environments
- Operates in up to 85% relative humidity

#### Benefits

- High-quality and long-lasting print results
- Reduced product waste
- Lower printing errors

### Production Manager

#### Challenges

- Restarting the printer after every production stop is time-consuming and requires technical support
- High maintenance and service costs
- No real-time visibility into device status or potential failures
- Product waste caused by printing errors or device malfunction
- Lack of proper print validation and traceability (track & trace)
- Need for synchronized printing with product, warehouse, and logistics data
- Inconsistent performance across different printers within the factory

#### Solutions

- Hx Nitro restarts instantly, no specialist required
- Low-cost maintenance without complex servicing or training
- Equipped with Daily Report for fast device status monitoring
- HealthCheck system provides instant diagnostic reports and error alerts
- Variable data printing based on track-and-trace workflow
- Prints warehouse, logistics, and product-related data
- Supports rapid text changes for different SKUs and orders
- Compatible with PLC systems, industrial networks, and automation software

#### Benefits

- Zero-downtime printing across production lines
- Reduced printing errors with automatic control software
- Durable, high-quality print output
- Ability to print on different materials and adapt to moving conveyor lines

### CEO & Plant Manager

#### Challenges

- High total cost of ownership (TCO) for coding and marking equipment
- Lack of real-time visibility and reporting across production lines
- No data integration between printing systems and management platforms

#### Solutions

- Affordable hardware with low consumable and maintenance costs
- Reduced cost per print and overall TCO
- Centralized print management software for factory-wide monitoring
- Full integration with PLC and ERP systems
- Seamless data transfer between printing software and production management systems

#### Benefits

- Significant reduction in total cost of ownership (TCO)
- Improved oversight and performance control across the factory

### Production Line Operator & Supervisor

#### Challenges

- Restarting the printer after every production stop is time-consuming and costly
- Difficult and slow configuration of print speed and settings
- Complex software interfaces that require technical expertise
- Time-consuming message design and editing during production
- Non-technical operators forced to handle message creation and print setup
- Use of hazardous MEK-based inks, resulting in safety and health risks
- Troubleshooting requires on-site technical experts
- Slow and inaccurate fault detection in printers

#### Solutions

- Fast and effortless restart with Hx Nitro after production interruptions
- Automatic print speed adjustment
- User-friendly software designed for non-technical operators
- Pre-designed message templates with customizable fields (User Access Level)
- MEK-free ink options to ensure operator safety and compliance
- Smart cartridge system prevents ink drying during line stoppage
- Built-in Health Check system for real-time diagnostics and fault detection – no technician required

#### Benefits

- Increased productivity on the production line
- Reduced human errors
- Reduced printing failures and downtime
- Easy for operators to use with minimal training

### Warehouse, Logistics & Procurement Manager

#### Challenges

- High cost of purchasing spare parts
- High storage and handling costs for MEK-based inks and consumables
- Fire and safety risks associated with flammable solvents such as MEK

#### Solutions

- Spare parts supplied directly through MapleJet after-sales service
- No MEK usage and minimal consumables required for ink storage
- Long-lasting ink supply with no expiry issues
- No flammable solvents used in the printing system

#### Benefits

- Reduced storage and hidden operational costs
- Reduced fire and safety risks in industrial environments
- Lower warehouse and inventory management expenses

## ● Why is Hx Nitro with TIJ Technology 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

### ● 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 Nitro

Hx Nitro is an advanced thermal inkjet (TIJ) printer designed for high-quality printing of text, barcodes, graphics, and traceability codes on a wide range of surfaces. It can print on plastic bottles, metal cans, cardboard boxes, and many other industrial products, without being limited by material type or surface thickness. With support for multiple ink types, Hx Nitro enables consistent printing across different packaging materials. In addition, the BOOST feature enhances print sharpness and clarity, delivering exceptionally crisp results at up to 600 DPI.

Hx Nitro is equipped with a web-based software platform that allows users to design messages, manage multiple printers simultaneously, and control the device via IP address or Wi-Fi. This capability enables seamless integration with production line LOT systems, allowing operators to monitor multiple printers, synchronize data, and manage the printing workflow in real time. With these features, Hx Nitro is not just a professional coding device – it is a smart industrial printing solution that simplifies management, improves efficiency, and enhances overall production performance.

Applications of the HX Nitro Inkjet Printer

# Where is this printer ideal for?



Factories that require flexible stop-and-restart capability in production



Start-up companies and new production lines



New product launches or newly added production lines in large factories



Small and medium-sized manufacturing workshops

# Hx Nitro

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

<b>Message Design Modes</b>	1. Advanced Message Editor    2. Auto Pilot
<b>Message Design</b>	Design and edit static and variable data messages including: date, time, batch number, shift code, barcode, QR code, logo, text, external database fields, counters, authenticity barcode, and more
<b>Message Control</b>	Create, monitor, and manage print messages through a browser
<b>Remote Upgrade</b>	Printers on the line can be upgraded remotely without removing them from production, allowing instant updates.
<b>Economy Mode</b>	Ink consumption reduced by up to 50% increasing print quantity
<b>Daily Report</b>	Hourly and daily production monitoring
<b>Health Check</b>	Real-time printer status check to prevent production downtime
<b>Send to Many</b>	Design a message once and send it to multiple printers simultaneously
<b>Auto Notify</b>	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.
<b>Roller Date</b>	Set date format according to shift schedule and global time
<b>Custom Date</b>	Customize date formatting (RTL, LTR, and other formats)
<b>Auto Print</b>	Automatically prints messages based on data scanned by barcode reader — no manual configuration needed
<b>Print Job</b>	Configure messages based on production counts (e.g. print 10 sachets with price, print 2 with free)
<b>Web Print</b>	Send the same or different messages to multiple printers from a single message design page in AME.
<b>BCD Interface</b>	Receives categorized PLC messages and prints accordingly (e.g., in ceramics packaging, the PLC defines the grade, then tells printer what to print).
<b>Font Recovery</b>	Font backup in two sections and auto-switch to alternate font in case of issues
<b>Languages</b>	Thai, Spanish, Portuguese, Japanese, German, Chinese, Persian, and English (more language upon request)
<b>Static IP Address</b>	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, Red, White
Dimensions	60 × 74 × 25.5 mm
Ink Identification	Automatic

## ● Physical Specifications

Section	Description
Controller Material	Anodized Aluminum + Stainless Steel (Anti-Corrosive)
Controller Weight	910 g
Dimensions	146 × 60 × 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
<b>Auto Notification</b>	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.
<b>Auto Pilot</b>	Allows external controller monitoring of the printer. Each printer can receive commands from another fixed system (like PLC).
<b>Daily Production Report</b>	Provides daily print reports for monitoring total production status.
<b>Economy Mode</b>	Reduces ink consumption by up to 50% increasing print quantity.
<b>External Data</b>	Enables easy integration with external devices such as PLC or scales for variable data printing.
<b>Ink Estimation Calculation</b>	Estimates the number of prints based on message and parameter data.
<b>Printer Health Check</b>	Detects and prevents errors or unexpected stoppages.
<b>Print Scheduling</b>	Schedules print jobs based on company shifts and work plans.
<b>Signal Lock Connection</b>	Enables quick connection to the main system to send instant signals such as "Error," "Busy," "Printing," or "Ready."

# Ink Technical Specifications

Ink Name	Ink Type	Volume/Colour	Suitable Surface	Application
Aquamark	Water based pigment	46 ml/ Black	Porous	Lumber, Construction, and porous carton boxes
Aspro	Solvent pigment	46 ml/ White	Porous & Non Porous	General material
Boxtron SSD	Semi solvent based	33 ml/ Black, Blue White	Porous & Semi Porous	Paper bags, Corrugated boxes, semi-coated cardboard
Boxtron SSP	Semi solvent based	33 ml/ Black	Porous & Semi Porous	Tyvek, PVC, aqueous coated stocks, and plastic cards
Chronplast S	Solvent based	42 ml/ Black	Non Porous	Metal, PET, PE, Glossy coated paper
Chronplast W	Solvent based	42 ml/ Black, Red	Non Porous	General material: Glass and flexible packaging
Dynaplast	Solvent based	42 ml/ Black	Porous & Non Porous	General material: Flexible packaging
eUrex	Solvent based	42 ml/ Black	Porous & Non Porous	Flexible food Packaging, PVC, PP, PET, ABS, Metal, Glass polystyrene and treated polyethylene film
Hyprox	Solvent based	42 ml/ UVS	Porous & Non Porous	PE, PP, Metal & PETG (UV visibility)
Ultraflex	Solvent based	42 ml/ Black	Non Porous	BOPP, HDPE, PE, PVC, PP, PET, ABS, polystyrene and treated polyethylene film



Aquamark  
SKU: 17384-01-01



Aspro  
SKU: 17366-02



Boxtron SSD/SSP  
SKU: 17303-03



Chronplast S  
SKU: 17307-01



Chronplast W  
SKU: 17282-06



Dynaplast  
SKU: 17367-02



eUrex  
SKU: 17304-01



Hyprox  
SKU: 17317-01



Ultraflex  
SKU: 17304-01

# Accessories



Power Supply with cable  
SKU: 20350



Product Sensor  
SKU: 34056-02-01



Sensor Mounting  
SKU: 36094-01



Antenna  
SKU: 28351



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



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



Encoder Mounting  
SKU: 34018-02



Interface Module  
SKU: 36099-01



Eye Mark Sensor  
SKU: 10003-01



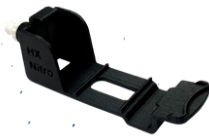
Daily Cap (1/2" or 1")  
SKU: 36187-02-02



Angled Mounting  
SKU: 37258-01

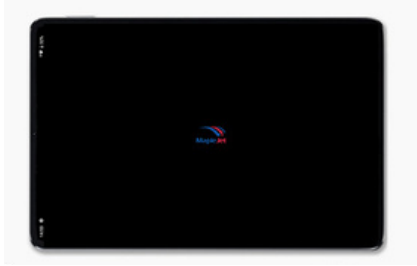


Fine Tune Module  
SKU: 37311-04-03



Priming Kit  
SKU: 37258-01

# HMI



10" HMI  
SKU: 30336-01



Anti-theft HMI Mounting  
SKU: 30322

# Mounting



Stainless Steel Tripod Stand  
SKU: 37312-02



Stainless Steel L-shaped bracket  
SKU: 37263-03

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