



## High-Performance Industrial Printers



### features at a glance



- **Connectivity:** H-Class printers come standard with Ethernet, Parallel, Serial, and USB/SDIO interfaces for extra capacity models giving users flexibility in integration
- **Rugged construction** features a gear-driven design and durable die-cast aluminum frame
- **Wide range offering** includes 203, 300, 406, and 600 dpi resolution models
- **Multi-language menu** available in English, Spanish, German, Italian, and French
- **Large 240x320 graphical LCD display** for ease in navigating menus as well as data collection ("X" models only)
- **Field installable options** such as cutters, peel & present sensors, and thermal transfer option can be added easily to upgrade a base printer
- **Versatile media compatibility** supports coated side in or coated side out ribbons without reconfiguring the printer or purchasing additional options resulting in easier ribbon inventory management
- **IntelliSEQ™ printhead:** proactive diagnostic tools allow easy access to printhead performance and history
- **Software:** The H-Class utilizes widely used DPL and supports MCL designer and 123 Print. With the PL-Z and PL-I printer language emulations, users can easily integrate the printer to existing solutions

The H-Class is a rugged and versatile printer that offers one of the most feature rich solutions for dynamic enterprise applications and is twice as fast as other printers in its class. The H-Class is ideal for high-volume label printing in manufacturing, warehouse, transportation, and high resolution labeling.

H-Class reduces the total cost of ownership with its gear driven design to provide rugged and reliable performance for 24 x 7 mission critical services. H-Class offers a broad range of connectivity to meet diverse application requirements and easily integrates into any network. Modular construction increases up-time for the highest levels of user productivity. H-Class has the industry's largest graphical display and provides an easy-to-read view for quick navigation and printer notifications. Support of UHF and HF RFID configurations for current or future requirements protect your printer investments. The high quality features, performance, and rugged reliability make the H-Class the best value of any premium printer on the market.

### popular applications



#### Manufacturing

- Asset Tracking
- Finished Goods Marking
- Agency Labels
- Case Labels



#### Transportation and Logistics

- Cross Docking
- Sorting Centers
- Shipping Labels
- Pallet Tracking



#### Food and Beverage

- High Resolution Labeling
- Expiration Dates and Time Stamps
- Product Identification
- Shipping Labels



#### Pharmaceuticals

- Compliance Labels
- Product Identification
- Track and Trace
- Pick Lists

### your benefits



**One printer does it all –** The H-Class printer can be used in a wide variety of industrial applications with a range of media compatibility, connectivity, emulation support, and options including RFID support. H-Class offers a complete range of 12 printer models with the best value proposition for premium industrial class printers.

**Increased productivity –** The H-Class decreases downtime with its easy to maintain modular features such as the lower roller which improves peeling performance, split design of the label supply hub which allows lower torque on narrow media, and field-installable options including a full 8" internal self powered rewind.



**Integration Tools** Datamax-O'Neil provides tools that gives you maximum flexibility in integration:

Integrate easily into existing applications. Our language emulation programs allow users to seamlessly replace Zebra and Intermec printers.

Reduce set-up time:  
 DMXconfig - Set-up utility  
 DMXNetmanager - Remote management  
 IntelliSEQ™ - Built-in print head reporting Firmware

Connectivity for all environments  
 Ethernet-wired LAN 10/100, USB host, or optional wireless 802.11 b/g



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 right by our customers.



**4" H-Class**

The H-Class is a family of high performance stationary label printers that thrive in a 24x7 work environment. Versatile and durable, the H-Class offers models that meet the requirements for even the most complex applications. The gear driven design and die-cast aluminum frame ensures you years of reliable service and a strong ROI.

The H-Class 4-inch series generates labels up to 4.16 inches wide with outstanding print quality from 203 dpi to 600 dpi and high speeds of 6 to 12 ips.



**4" H-Class "X"**

The H-Class 4 inch extra capacity ("X") series offers the same durability and versatility of standard 4-inch series but with a full roll internal rewinder and expanded front panel display. The user-friendly LCD graphical backlit display is nine times larger for easy to read label

configuration and set-up. The 4X series is also 3.4 inches taller to accommodate the full roll internal label rewinder.

**Model**

H-4212	H-4408	H-4310	H-4606	H-4212X	H-4310X	H-4606X
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**Resolution**

203 dpi (8 dpmm)	406 dpi (16 dpmm)	300 dpi (12 dpmm)	600 dpi (24 dpmm)	203 dpi (8 dpmm)	300 dpi (12 dpmm)	600 dpi (24 dpmm)
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**Max Print Speed**

12 ips (304 mm/s)	8 ips (203 mm/s)	10 ips (254 mm/s)	6 ips (152 mm/s)	12 ips (304 mm/s)	10 ips (254 mm/s)	6 ips (152 mm/s)
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**Max Print Width**

4.09 in (103.9 mm)	4.09 in (103.9 mm)	4.16 in (105.7 mm)	4.16 in (105.7 mm)	4.09 in (103.9 mm)	4.16 in (105.7 mm)	4.16 in (105.7 mm)
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**Front Panel Display Size**

128 x 64				240 x 320		
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**6" H-Class**

The H-Class 6-inch series are high performance printers perfect for printing midsize labels used in the automotive industry, manufacturing and pallet labels. The H-Class

6-inch series generates labels up to 6.61 inches wide with outstanding print quality from 203 dpi to 300 dpi and high speeds of 8 to 10 ips.



**6" H-Class "X"**

The H-Class 6-inch extra capacity ("X") series offers a larger internal rewinder and expanded front panel display than the standard 6-inch models. The LCD graphical backlit display is nine times larger for easy to read

configuration and set-up. The 6X series is also 3.4 inches taller to accommodate the full roll internal label rewinder.



**8" H-Class "X"**

Features a full roll internal rewinder and expanded front panel display.

**Model**

H-6210	H-6308	H-6212X	H-6310X	H-8308X
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**Resolution**

203 dpi (8 dpmm)	300 dpi (12 dpmm)	203 dpi (8 dpmm)	300 dpi (12 dpmm)	300 dpi (12 dpmm)
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**Max Print Speed**

10 ips (254 mm/s)	8 ips (203 mm/s)	12 ips (304 mm/s)	10 ips (254 mm/s)	8 ips (203 mm/s)
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**Max Print Width**

6.61 in (167.9 mm)	6.40 in (162.6 mm)	6.61 in (167.9 mm)	6.40 in (162.6 mm)	8.52 in (216.4 mm)
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**Front Panel Display Size**

128 x 64	240 x 320		240 x 320	
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# H-Class advantage ■ ■ ■



## Reduced total cost of ownership:

- Modular design can be upgraded on-site
- No need to send your printer in for service or upgrades
- Remote printer monitoring and management with DMXNet Manager allows leverage of scarce IT resources
- IntelliSEQ™ printhead provides longer printhead life



## Configurable for a wide range of applications:

- 203, 300, 400, 600 dpi for diverse applications
- Ethernet, parallel, serial and USB are standard
- WiFi 802.11b wireless LAN option with WPA, LEAP and other security protocols
- Easy-to-install thermal transfer option can be installed with only a screwdriver
- GPIO option for factory floor device interface
- USB Host interfaces support keyboards, scanners and weigh scales

## Integration tools

### RFID

H-Class printers meet the diverse demands of today's constantly advancing RFID implementations. No matter the requirements, H-Class printers delivers power, performance and reliability and complies with EPC G2 standards. The H-Class offers a full array of printer sized and supports both UHF and HF frequencies.

### IntelliSEQ™

The IntelliSEQ™ printhead combines advanced thermal control with full performance history to provide the most sophisticated diagnostics available today. The diagnostics stored in the printhead allow you to quickly assess the operation of the printhead and proactively service the printer without compromising the productivity of the enterprise.



## SUPPORTED BAND TAGS:

### UHF

- Class 1, GEN1
- Class 1, GEN2
- EPC 1.19 Ucode
- EM422/4223
- Power ID BAP

### HF

- ISO 15693
- TI
- Philips
- ST LR1512
- ST LR164



### DMX NetManager

DMX NetManager provides a graphical user interface allowing you to manage your entire network connected D-O printers. Whether you are deploying or managing your printers, you can proactively configure or implement changes to your entire enterprise. This can significantly reduce operations down time and related loss of productivity costs.

### Software

All H-Class printers are shipped out of the box with software to ensure optimum performance and quality printing. The intuitive menu system gives users easy access to the configuration and advance features built into the printer. The emulation capabilities offers quick replacements of competitive printers such as Zebra, Intermec or Boca and the resident and expanded fonts offer global access. Regardless of your requirements, Datamax-O'Neil will support your specific needs with specialty firmware.



### Looking for a portable receipt or label printer?

Mobile workers will appreciate the reliable performance, rugged design and outstanding print quality that Datamax-O'Neil portable printers are known for around the world. Our line of portable receipt and label printers are perfect for the most challenging route accounting, field service and retail applications.



# physical dimensions

## print technology

- Printer type:
  - Direct thermal
  - Optional thermal transfer
- Print length range:  
0.25" –99.99" (6mm - 2539.75mm); values vary with printer configuration

## physical characteristics

- Dimensions and weights:
  - 4" standard: 40 lbs. (18.2 kg)  
13.0"h x 12.6"w x 18.9"d (330 x 321 x 480mm)
  - 4" X series: 47 lbs. (21.4 kg)  
16.4"h x 12.6"w x 19.3"d (415 x 321 x 489mm)
  - 6" standard: 47 lbs. (21.4 kg)  
13.0"h x 15.0"w x 18.9"d (330 x 381 x 480mm)
  - 6" X series: 53 lbs. (24.1 kg)  
16.4"h x 15.0"w x 19.3"d (415 x 381 x 489mm)
  - 8" X series: 59 lbs. (26.8 kg)  
16.4"h x 17.0"w x 19.3"d (415 x 433 x 489mm)
- Operating temperature:  
32°F to 100°F (0°C to 38°C)
- Storage temperature:  
0°F to 40°F (-17°C to 60°C)
- Humidity:  
10% - 95% non-condensing
- Power source:
  - Auto-sensing 90-132 or 180-264 VAC @ 47-63Hz
- On-board real time clock
- LCD backlit graphics display
- Construction:
  - Metal cabinet, clear side window to easily monitor media supply levels

## integration

- Communication ports:
  - Standard (all models): Serial RS232, Parallel Bi-Directional, Ethernet-Wired LAN 10/100, USB 2.0 Compatible
  - Standard ("X" models only): USB-Host, SDIO Memory Slot (optional for non-"X" models)
  - Optional (all models): Wireless 802.11b/g, GPIO Applicator Card
- Software
  - DMX Config: Complete printer setup utility
  - DMX NetManager
  - Embedded Network Web Pages
  - Windows® Drivers - NT, XP, Vista
- Firmware
  - Updates: available online
  - Universal printer command language: PL-Z (Zebra), PL-I (Intermec), PL-B (Boca)

## barcodes/fonts/graphics

- Memory:  
16MB SDRAM / 8MB Flash
- Barcodes:  
Linear: Code 3 of 9, UPC-A, UPC-E, Interleaved 2 of 5, Industrial 2 of 5, Std 2 of 5, Code 11, Code 93, Code 128, EAN-8, EAN-13, HIBC, Codabar, Plessey, UPC 2 and 5 digit addendums, Postnet, UCC/EAN Code 128, Telepen, Planetcode, FIM, USPS-4 State 2D Symbolologies: MaxiCode, PDF417, USD-8, Datamatrix, QR Code, Codeablock, Code 16k, Aztec, TLC 39, Micro PDF417, GS1 Databar
- Resident fonts:
  - Ten alphanumeric fonts from 2.5 to 23 point size, including OCR-A, OCR-B, CG Triumvirate™ smooth font from AGFA®
  - Scalable Fonts: CG Triumvirate Bold Condensed, CG Triumvirate & CG Times with Cyrillic, Greek Arabic and Hebrew character support
- Downloadable font types:
  - True-Type, Bitmap
- Character set:
  - Over 50 resident character sets; Unicode/UTF8 support
- Font expansion/rotation:
  - All fonts expandable vertically and horizontally up to 24x; fonts and graphics can be printed in four directions: 0°, 90°, 180° and 270°s
- Graphics supported:
  - .PCX, .BMP, .IMG and ASCII format files
- Reversible field/mirror image
  - Any font or graphic field can be printed as a normal or reverse image

## accessories

- External rewinder
- Serial adapter cable

## agency approval

Contact sales for the most current list

## warranty

- Printer\*: 1 year (including platen roller and installed options)
- Printhead\*: 1 year or 1,000,000 inches whichever comes first
- Contact sales representative for extended warranty options

\* when used with approved supplies

## media

- Media type:
  - Roll-fed: 8.0" (203.2mm) max O.D. on a 3.0" (76.2mm) core
  - Fan-fold stock: accepted from rear and bottom of printer
  - Die-cut or continuous labels
  - Perforated or continuous tag/ticket stock
- Media width range:
  - 4" models: 1.0" - 4.65" (25.4mm - 118.1mm)
  - 6" models: 1.0" - 6.7" (25.4mm - 170.2mm)
  - 8" models: 1.0" - 9.0" (25.4mm - 228.9mm)
- Minimum media length:
  - Tear-off and rewind modes: 0.25" (6.35mm)
  - Peel and cutter modes: 1.0" (25.4mm)
- Media thickness range:  
0.0025" - 0.01" (0.0635mm - 0.254mm)
- Media sensing:
  - "See through" for liner-backed die-cut labels and tags
  - Reflective sensor for black mark label media
- Label backfeed:
  - For use with optional cutter and peel & present
- Ribbon:
  - Ribbon-width range:
    - 4" models: 1.0" - 4.5" (25.4mm - 114.3mm)
    - 6" models: 2.0" - 6.7" (50.8mm - 170.2mm)
    - 8" models: 3.0" - 9.0" (76.2mm - 228.9mm)
  - Core: 1.0" (25.4mm)
  - Length: 1968' (600m)
  - Coated side in and coated side out

## options

- Thermal transfer (field or factory installed)
- Label present sensor
- Peel & present (1.5"/ 38mm min. label length) - basic or heavy-duty
- Internal rewinder (non-"X" models only)
- Powered internal rewinder ("X" models only)
- Standard cutter
- Large 240 x 320 display (non-"X" models only)
- Linear scanner
- RFID - UHF & HF
- GPIO interface
- Wireless 802.11b/g
- SDIO /USB host interface (non-"X" models only)
- MCL enabled
- ILPC (Hangul, Simplified Chinese, and Kanji) font support



**Did you know?** Using quality labels and ribbons can significantly prolong the life of your printhead. Datamax-O'Neil offers a wide variety of high quality media for its printers including custom labels, stock labels, ticketing media, ribbons and cleaning products. When you choose Datamax-O'Neil, you receive a proven commitment to superior quality. Quality that results in performance and compatibility... Guaranteed.



ISO 9001: 2008  
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