

Printer Specifications

H-4212X and H-4310X

Standard Features

- Thermal transfer and direct thermal printing of bar codes, text, and graphics on demand and batch printing
- Thin film printhead with IntelliSEAQ™ (Sequential Energy Adjustment for Quality)
- Die-cast aluminum frame
- Datamax Programming Language (DPL)
- 32bit multitasking 200Mhz DragonBall® Processor
- 16 MB RAM memory
- 8 MB Flash downloadable program memory (firmware)
- Serial RS-232 port, Parallel, USB, Ethernet Interfaces
- IEEE 1284 compliant bi-directional parallel port
- Gap, notch and reflective top of form media sensing
- 5 button 240 x 320 LCD Graphical back-lit LCD display
- Configuration settings via front LCD panel menu,
- No dipswitches.
- Menus in English, French, Italian, German and Spanish
- Configuration label makes set-up easy to understand
- Simple ribbon and media loading
- Rotating media hub for 3.0" supply rolls
- Clear window in media cover -- easy to view supplies.
- Media tear bar
- Fan-fold media handling from bottom or rear of printer
- AGFA font engine with CG Triumvirate™ Scalable font
- Datamax printer driver for Windows 98 and above desktop operating systems
- 2 USB front panel connectors
- SDIO support up to 2GB
- Ethernet Connectivity

Printing Specifications

- 203 dpi print resolution (8 dots/mm); *H-4212X*
300 dpi print resolution (12 dots/mm); *H4310X*
- Nominal Printhead Dot Size:
.0043" (.11mm) W x .0052" (.13mm) L; *H-4212X*
.0027" (.07mm) W x .0043" (.11mm) L; *H-4310X*
- Print Speeds:
Programmable from 2" (51mm)/sec through 12" (305mm)/sec in ½" (12mm) increments; *H-4212X*
Programmable from 2" (51mm)/sec through 10" (254mm)/sec in ½" (12mm) increments; *H-4310X*
- Print length range: .25" to 99.99" programmable

Media Specifications

- Maximum print width: 4.10" (104mm)
- Maximum label length: 99.99" (2.54m)
- Maximum media width (label plus liner): 4.65" (118mm)
- Media Width Range: 1" (25mm) to 4.65" (118mm)
- Media Core ID Range: 1.5" (38mm) - 3.0" (76.2mm)
- Minimum label length:
 - Tear off mode: .25" (6.35mm)
 - Peel mode: 1.00 (25mm)
 - Rewind mode: .25" (6.35mm)
 - Cutter mode: 1.00 (25mm)
- Media thickness (label & liner): .0025" to .010" (.06mm to .25mm)
- Maximum full-width media thickness for cutter: .010" (.25mm)
- Maximum media roll size: 8.0" (203mm)
- Fan fold media: loads through rear or bottom of printer
- Gap and notch sensing standards:
 - Gap between labels: 2mm minimum
 - Sensing notch: .20" (5.1mm) W x .12" (3mm) L
 - Sensing hole: 0.08" (2.0mm) diameter
 - Black Mark on back of label: minimum length of 2mm (0.08") long and 12mm (.047") wide.

Ribbon Specifications

- Ribbon width range: 1" (25m) to 4.5" (114mm)
- Standard ribbon lengths: 300m (984'), 450m (1476') and 600m (1969')
- Standard ribbon wound coated side in and ribbons wound coated side out.

Communications Specifications

- One EIA RS-232/DB-25 serial connector. 2400, 4800, 9600, 19.2K and 38.4K baud supported.
- One IEEE 1284 Compliant Parallel interface port
- One internal connector for use with an external media cutter and present sensor
- SNMP Internal Ethernet Adapter supporting 10/100 mbps transfer rate with 10-Base-T connector
- USB interface

Internal Font Sets

- Nine Bit-Mapped Fonts, rotatable 0, 90 180, 270 degrees
- CG-Triumvirate™ Scalable Font
- CG Triumvirate™ Condensed Bold Scalable Font

Specifications are provided for reference and are based on printer tests using Datamax brand ribbons and labels. Results may vary in actual application settings or when using other than recommended supplies. Specifications to change without notice.

Bar Code Symbologies & Specifications

- Bar Code Modulus: 5 mil to 110 mil "X" dimension in picket-fence or ladder orientations
- All printed barcodes meet the requirements of ANSI Document X3A1-3, Guideline for Barcode Print Quality, Grade A
- Supported Barcode Symbologies include Code 39 (used to produce industry standards such as AIAG, HIBC, LOGMARS), Interleaved 2 of 5, Code 128 (Subsets A,B,C), Codabar, LOGMARS, UPC-A, UPC-E, UPC2&5 digit addendums, EAN-8, EAN-13, EAN 2&5 digit addendums, UPC random weight, Code 93, Plessey, Universal Shipping Container Symbology, Code 128 MOD 43, Postnet, USS/EAN-128 random weight, Telepen, UPS MaxiCode (Mode 2 & 3), QR Code, PDF417, Datamatrix, EAN 128 support (with function character support, ITF support)

Electrical Specifications

- 90-132 or 180-264 VAC @ 47-63 Hz, auto ranging.
- Power consumption: typical operating: 90 Watts / Standby: 10 watts

Physical Specifications

- Height: 16.48" (418.6mm)
- Width: 12.64" (321.0mm)
- Depth: 19.25" (488.9mm)
- Max Weight: 46.6 lbs (20.5kg)

Environmental Specifications

- Operating Temperature: 32° - 100° F (0° to 38° C)
- Storage Temperature: 0° to 140°F (-17° to 60° C)
- Humidity: 10% - 95% non-condensing
- Dust: Non-conducting, non-corrosive
- Electromagnetic Radiation: Moderate RF fields can be tolerated.
- WEEE Compliant - EU Directive 2002/96/EC
- ROHS Compliant - EU Directive 2002/95/EC

Agency Listings

- UL 60950-1:2003, First Edition, CSA.C22.2 No. 60950-1-03, First Edition, EN60950-1:2001, GOST-R
- Complies with FCC CFR 47 Part 15 Class A
- CE Mark: EN55022 Class B, EN50024
- Meets Energy Star guidelines for energy efficiency

RFID Specifications

- EPCGlobal Spec
- UHF and HF supported
 - GEN2 compliant
 - ISO15693