

# L-50 Series

CCD - Laser - 2D Imager



## Highlights

- Sophisticated ergonomic design with an excellent price-to-performance ratio
- Ideal solution for a variety of applications in retail, warehousing, distribution, healthcare, transportation and logistics
- Available with CCD, laser or 2D Imager barcode scanner
- Rapidly scans and decodes a wide variety of 1D or 2D barcodes
- USB (HID), RS232 or keyboard wedge interfaces available
- Replaceable interface cable
- Top panel design allows for customer customization such as logos
- Durable and reliable — withstands drops of 5 feet to concrete, IP 42 rating
- Available in black or white
- Stand included for hands-free scanning
- Backed by a two year warranty

# L-50

## Product Specifications

### OPERATING INDICATORS

**CPU:** ARM-926EJ-S 400 MHz

**VISUAL:** 1 white LED

**NON-VISUAL:** Buzzer

### OPERATING KEYS

**ENTRY OPTIONS:** 1 scan key

### COMMUNICATION

**RS232:** D-SUB9 pin (with external power supply)

**KEYBOARD WEDGE:** PS /2 (with external power supply)

**USB:** Version 2.0, HID/COM, USB-A connector

### PHYSICAL

#### DIMENSIONS (W X H X D):

75.4 x 169.5 x 121.2 mm / 2.97 x 6.67 x 4.77 in

#### DIMENSIONS STAND (W X H X D):

120 x 294 x 180 mm / 4.72 x 11.57 x 7.09 in  
(excl. scanner)

**WEIGHT BODY:** Ca. 150 g / 5.3 oz (excl. cable)

**WEIGHT STAND:** Ca. 335 g / 11.8 oz

**CASE:** ABS/PC, Black or White

### POWER

**VOLTAGE REQUIREMENT:** 6V  $\pm$  5% (Keyboard Wedge and RS232)

**CURRENT CONSUMPTION:** Max. 210mAh

### DURABILITY

**DUST AND MOISTURE:** IP 42

**DROP TEST:** 1.5 m drop onto concrete surface

### L-50C

**SCAN METHOD:** CCD liner imager sensor

**LIGHT SOURCE:** Red LED (624 nm)

**SCAN RATE:** 300 scan / sec (max)

**MINIMUM RESOLUTION:** 0.1 mm (Code 39)

**MINIMUM PCS:** 0.3

**SCAN FROM LCD:** Possible

**DEPTH OF FIELD (RESOLUTION/MM) CODE 39:**

40 - 590 mm (1.0), 15 - 210 mm (0.25), 35 - 80 mm (0.127)

### SUPPORTED SYMBOLOGIES:

UPC-A, UPC-A Add-on, UPC-E, UPC-E Add-on, EAN-13, EAN-13 Add-on, EAN-8, EAN-8 Add-on, Code 39, Tri-Optic, NW-7 (Codabar), Industrial 2 of 5, Interleaved 2 of 5, Code 93, Code 128, GS1-128, S-Code, MSI/Plessey, UK/Plessey, TELEPEN, Matrix 2of5, Chinese Post Matrix 2of5, IATA, GS1 DataBar, GS1 DataBar Limited, GS1 DataBar Expanded, Code 11, Korean Postal Authority code

### L-50R

**SCAN METHOD:** Bi-directional laser scanner

**LIGHT SOURCE:** Red laser diode (650 nm)

**SCAN RATE:** 100 scans / sec

**MINIMUM RESOLUTION:** 0.127 mm (Code 39)

**MINIMUM PCS:** 0.45

**DEPTH OF FIELD (RESOLUTION/MM) CODE 39:**

40 - 500 mm (1.0), 20 - 200 mm (0.25), 30 - 70 mm (0.127)

### SUPPORTED SYMBOLOGIES:

UPC-A, UPC-A Add-on, UPC-E, UPC-E Add-on, EAN-13, EAN-13 Add-on, EAN-8, EAN-8 Add-on, Code 39, Tri-Optic, NW-7 (Codabar), Industrial 2 of 5, Interleaved 2 of 5, Code 93, Code 128, GS1-128, S-Code, MSI/Plessey, UK/Plessey, TELEPEN, Matrix 2of5, Chinese Post Matrix 2of5, IATA, GS1 DataBar, GS1 DataBar Limited, GS1 DataBar Expanded, PDF417, MicroPDF417, Code 11, Korean Postal Authority code

### L-50X

**SCAN METHOD:** CMOS area imager sensor

**LIGHT SOURCE:** Red LED (617 nm) for illumination, Green LED (528 nm) for aiming

**SCAN RATE:** 60 fps (max)

**MINIMUM RESOLUTION:** 0.1 mm (Code 39), 0.169 mm (PDF/QR Code)

**MINIMUM PCS:** 0.2

**MOTION TOLERANCE:** 2 m / sec

**SCAN FROM LCD:** Possible

**DEPTH OF FIELD (RESOLUTION/MM):**

Code 39: 35 - 235 mm (0.5)  
Code 39: 30 - 170 mm (0.25)  
Code 39: 50 - 90 mm (0.127)  
Code 128: 50 - 135 mm (0.2)  
100% UPC: 30 - 160 mm (0.33)  
PDF417: 45 - 105 mm (0.169)  
QR Code: 55 - 80 mm (0.212)  
Data Matrix: 50 - 105 mm (0.254)

### SUPPORTED SYMBOLOGIES:

**BARCODE (1D):** UPC-A, UPC-A Add-on, UPC-E, UPC-E Add-on, EAN-13, EAN-13 Add-on, EAN-8, EAN-8 Add-on, JAN-8, JAN-13, Code 39, Tri-Optic, Codabar (NW-7), Industrial 2 of 5, Interleaved 2 of 5, S-Code, IATA, Code 93, Code 128, MSI/Plessey, UK/Plessey, TELEPEN, Matrix 2 of 5, Chinese Post Matrix 2 of 5, Code 11, Korean Postal Authority code, Postal Code

**BARCODE (2D):** PDF417, MicroPDF417, Codablock F, QR Code, Micro QR Code, DataMatrix (ECC 0 - 140 / ECC 200), MaxiCode (Modes 2 to 5), Aztec Code, Chinese Sensible Code

**GS1/COMPOSITE:** GS1 DataBar, GS1 DataBar Limited, GS1 DataBar Expanded, Composite GS1-DataBar, Composite GS1-128, Composite EAN, Composite UPC

### REGULATORY & SAFETY

**PRODUCT COMPLIANCE:** CE, FCC, VCCI Class B, RoHS, IEC 62471-1:2006, EN55022, EN55024

### ENCLOSED ITEMS

Power supply 6V/2A (for RS232 and Keyboard Wedge), Stand

### MODELS

**INTERFACE VERSIONS:** RS232, Keyboard Wedge, USB



Top panel design allows for customer customization such as logos.

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**H-427+** 203 DPI 7 IPS

**H-435+** 300 DPI 5 IPS



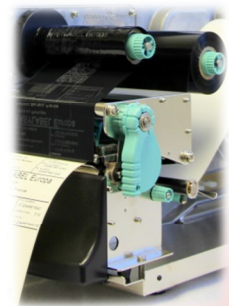
From the creators of **EASYLABEL®** the Tharo H-Plus Series is a robust industrial barcode label printer in the mid-level price range.



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MODEL		H-427+	H-435+	
Print Method		Thermal Transfer / Direct Thermal		
Resolution		203 DPI (8 dots/mm)	300 DPI (12 dots/mm)	
Print Speed		Up to 7IPS (177mm/s)	Up to 5IPS (127mm/s)	
Print Width		4.09" (104mm)	4.09" (104mm)	
Print Length		Min. 0.16"(4mm)**-Max. 100"(2540mm)	Min. 0.16"(4mm)**-Max. 45"(1143mm)	
Processor		32-bit RISC CPU		
Memory	Flash	8MB Flash (4MB for user storage)		
	SDRAM	16MB		
Sensor Type		Adjustable reflective sensor and transmissive sensor, left aligned		
Media	Types	Continuous form, gap labels, black mark sensing and punched hole. Label length set by auto-sensing or programming		
	Width	Standard: Min. 1" (25.4mm) - Max. 4.64" (118mm)		
		Cutter: Max. 4.61" (117mm)		
	Dispenser / Rewind: Max. 4.64" (118mm)			
	Thickness	Min. 0.003" (0.06mm)-Max. 0.01" (0.25mm)		
	Label Roll	Max. 8" (203.2mm) outer diameter		
Ribbon	Core	Min. 1.5" (38.1mm) diameter		
	Types	Wax, Wax/Resin, Resin		
	Length	Max. 1476' (450m)		
	Width	Min. 1.18" (30mm) - Max. 4.33" (110mm)		
		Core	1" (25.4mm) inner diameter	
Printer Language		Tharo Programming Language (TPL), Zebra Emulation*, Eltron Emulation*		
Software	Design	FREE EASYLABEL® Start		
	Driver	XP/Vista/Windows 7-10, Mac, Linux		
Resident Fonts	Bitmap	6, 8, 10, 12, 14, 18, 24, 30, 16x26 and OCR A&B		
	True Type	CG Triumvirate™ (Bold, Italic, Underline) 0°, 90°, 180°, 270° rotatable		
Downloadable Fonts	Bitmap	Bitmap fonts and single characters 90°, 180°, 270° rotatable		
	Asian Fonts	16x16, 24x24, Traditional Chinese (BIG-5), Simplified Chinese(GB2312), Japanese (S-JIS), Korean (KS-X1001), 90°, 180°, 270° rotatable, 8 times expandable		
	True Type	90°, 180°, 270° rotatable		
Bar Codes	1-D	Code 39, Code 93, EAN 8/13 (add on 2 & 5), UPC A/E (add on 2 & 5), I 2 of 5 & I 2 of 5 with Shipping Bearer Bars, Codabar, Code 128 (subset A, B, C), EAN 128, RPS 128, UCC 128, UCC/EAN-128 K-Mart, Random Weight, Post NET, ITF 14, China Postal Code, HIBC, MSI, Plessey, Telepen, FIM, GS1 DataBar, German Post Code, Planet 11 & 13 digit, Japanese Postnet, I 2 of 5 with human readable check digit, Standard 2 of 5, Industrial 2 of 5, Logmars, Code 11, Code 49, Codablock		
	2-D	PDF417, Micro PDF417, Datamatrix, Maxicode, QR code, Micro QR code and Aztec code		
Code Pages		Codepages 437, 850, 851, 852, 855, 857, 860, 861, 862, 863, 865, 866, 869, 737, Windows 1250, 1251, 1252, 1253, 1254, 1255, 1257, Unicode UTF8, UT16BE, UTF16LE		
Interfaces	USB 2.0 (B-Type)			
	Serial Port RS-232 (DB-9)			
	IEEE 802.3 10/100 Base Tx Ethernet Port (RJ-45)			
	USB Host (A Type)			
Control Panel	Color TFT LCD with navigation buttons			
	Power on/off button with dual color LED: READY/ERROR			
	Control key : FEED/PAUSE/CANCEL			
	1 Calibration button at rear panel			
Real Time Clock		Standard		
Power		Auto-switching 100V-240V AC, 50Hz - 60Hz		
Environment	Operating	41°F to 104°F (5°C to 40°C)		
	Storage	-4°F to 122°F (-20°C to 50°C)		
Humidity	Operating	30-85% non-condensing		
	Storage	10-90% non condensing		
Agency Approvals		CE (EMC), FCC Class A, CB, UL, cUL, CCC		
Dimensions		L 20.15" (512mm) x H 11.45" (291mm) x W 10.78" (274mm)		
Weight		33 lbs. (15 Kg), excluding consumables and options		
Options	Cutter			
	Parallel port adapter (Centronics female 36-pin)			
	Bluetooth			
	External label rewinder			
	Label dispenser + Internal rewinder			
*Specifications are subject to change without notice. All company and/or product names are trademarks and/or registered to their respective owners.				
**Minimum Print Length and Maximum Print Speed may vary for non-standard media types. Tharo provides free testing of all media types prior to purchase.				

# Tharo H-Plus Series Industrial Printer



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- Legacy Technology Services is a leading nationwide provider of mobile computing, barcode, printers and point of sale equipment and services.
- For over a decade, thousands of clients across North America have trusted us to provide equipment from leading manufacturers backed by the services to support them.

## Latest Hardware from top manufacturers

- Legacy handles virtually every major manufacturer of mobile computing, barcoding and point of sale equipment.

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- Legacy is one of the best repair facilities in North America

## Discontinued product sourcing

- They don't make it anymore? Our inventory also includes manufacturer close-outs and discontinued equipment to support our clients legacy infrastructure.

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- That old equipment laying around your facility may still have some value. Legacy routinely purchases equipment from our clients around the globe.
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  - Hardware disposal
  - Auditing services

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