



### features at a glance ■ ■ ■

- Rugged and Reliable** - With uncompromising standards, the RL4 endures even the most punishing environments, and passes the MIL-STD 810F drop testing requirements. The RL4 is so rugged it continues to print after 26 consecutive drops to concrete from 6ft (1.8m) even when tested at extreme temperature conditions.
- Complete Line of Accessories** - The versatile RL4 comes with a wide selection of charging and mounting accessories that allow it to be worn on the hip, mounted in a truck or even mounted and powered from a forklift.
- Easy to Integrate** - The RL4 comes with popular language emulations that allow you to easily replace existing printers in the workplace. The printer is also compatible with most popular WMS packages and offers optional wireless 802.11 and Bluetooth connectivity.
- Great Battery Power** - The long lasting lithium-ion battery offers maximum power capacity for a full 8-hour shift, even under the toughest conditions.
- Easy to Use** - Nobody likes to change the paper roll, but we've made it so easy you can do it with one hand. We've also included an easy to read LCD screen with simple user interface buttons and a peel-and-present mechanism for quicker label application.
- Complete Line of Media & Supplies** - Our Certified Label Supply Program ensures optimum, trouble-free performance from the RL4 and guarantees the highest quality print output and image stability.
- Two Year Warranty** - Comes with the industry's only two-year standard warranty - twice that of the competition!

Datamax-O'Neil built its reputation on rugged and reliable portable receipt printers and has now used this expertise to design the industry's most rugged portable label printer. The RL4 is a durable 4-inch (102mm) direct thermal printer with a rugged design and reliable performance that will continue to operate long after other printers have failed. We're so confident in the quality and long term reliability of these printers that we include a 2-year warranty free of charge. That's double what the competition offers.

Anybody who's ever been in a warehouse knows that when shipments are processed more quickly and effectively, productivity is increased and errors are reduced. The RL4 improves efficiency and productivity by allowing workers to print and apply barcode labels directly at the point of application. Using an RL4 to print on-demand labels also eliminates the danger of mixing up batch printed labels and saving thousands of dollars in potential shipping errors. The printer can even be mounted on fork trucks for added convenience and versatility.

We've made integration easy. Replace existing printers using Datamax-O'Neil's language emulations. The RL4 is compatible with most popular warehouse management software programs, independent label design programs and remote management packages.

### popular applications ■ ■ ■



#### Logistics and Distribution

- Inventory Labels
- Content ID Labels
- Receiving and Location Labels
- Shipping Labels



#### Parcel

- Shipping Labels
- Cross Docking Labels
- Bin Labeling
- Stop Location Labels



#### Manufacturing

- Work in Process Labels
- Receiving and Location Labels
- Content ID Labels
- Shipping Labels



#### Cold Storage

- Receiving and Location Labels
- Content ID Labels
- Shipping Labels

### your benefits ■ ■ ■

#### Increase Efficiency & Reduce Errors -

In many warehouses, workers travel to and from a central location to pick up "batch printed" labels. While this method works, it also creates wasted movement and potential labeling errors. The RL4 eliminates the danger of "label mix up" by printing labels at the point of application. And, since workers aren't wasting time traveling to a central location, warehouse operations are far more efficient and productive.

**Increase Productivity** - The RL4 is built to keep pace in a busy warehouse. Labels print quickly and accurately every time, even in cold environments. Downtime is reduced thanks to a large media roll capacity and a battery that stays charged for a full shift.

**Enjoy Higher ROI** - In today's tough economic times, you can't afford to buy printers that fail. The RL4 comes with Datamax-O'Neil's legendary reliability and is backed by the industry's only standard two-year warranty.



#### Did you know?

Using quality labels and paper can significantly prolong the life of your printhead. Datamax-O'Neil offers a wide variety of high quality media for its printers including custom and stock labels and receipts, ticketing media, 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.



## ROI of Ultra-Rugged

Ultra rugged products are often overlooked because of the purchase price, but many studies have shown that the cost of implementing lower cost hardware for professional use, especially in applications where products may be dropped or bumped frequently, is much greater than the cost of purchasing ultra-rugged equipment. RL4 printers embrace abuse. They take the punishment outlined in the MIL-STD 810F standards, and continue to operate flawlessly even after being dropped multiple times from a height of 6 ft (1.8m) onto concrete.

- 1** Dual wall construction and rubber bumpers protect critical printhead and platen roller alignment by absorbing and displacing energy when the printer is dropped or bumped.
- 2** Die-cast magnesium bracket, large stainless steel hinge pin and large gears further protect the platen roller.
- 3** Unlike plastic or thin metal that break/bend easily when dropped, die-cast magnesium latches provide the perfect weight to strength ratio. Latches are lightweight yet rugged enough to endure repeated use and repeated six foot (1.8m) drops to concrete.
- 4** Robust media arms are constructed using thick media posts that won't jam or snap off easily. Large screws and durable glides ensure that this moving part will continue to operate trouble-free for the life of the printer.
- 5** Arched design with rubber housing protects the recessed LCD screen and buttons. Internal anti-shock and anti-dampening foam further protects the LCD device.



- 6** Port covers are made of a durable, rubberized material to protect against external environmental agents when ports are not in use.

We've leveraged our historic knowledge of rugged portable printers to ensure that the printer's circuit boards are well protected by the RL4's outer shell and isolated sub-structure.

**Testing** One of the reasons we are able to include the **industry's only 2-year warranty** is because of our extensive engineering experience and rigorous testing.

**Dropped again and again...**The RL4 was tested using military MIL-STD 810F testing procedures which require that the printer operate after being dropped on all corners, edges and faces for a total of 26 consecutive times. The RL4 passed MIL-STD 810F testing from a height of 6 feet (1.8m) onto solid concrete!

**Wear & Tear** - Recessed latch and port covers were opened and closed 30,000 times during testing to ensure their integrity and long term reliability.

**Environmental Temperature Testing** - The RL4 was put through exhaustive testing to ensure its flawless performance at extreme temperatures including the freezing environments common in cold storage applications.

# product specifications ■ ■ ■

## physical characteristics ■ ■ ■

- Dimensions:
  - 6.52" w x 7.87" h x 3.18" d  
(166 x 200 x 81 mm)
- Weight (printer only):
  - 2.16 lbs. (0.98 kg)
- Drop specifications:
  - 6 ft. (1.8 m)
- User interface:
  - 128x64 LCD display with white LED backlighting
  - Four (4) button user interface

## user environment ■ ■ ■

- Operating temperature:
  - 4° to 122°F (-20° to 50°C)
- Storage temperatures:
  - 40° to 140°F (-40° to 60°C)
- Charging temperatures:
  - 41° to 104°F (5° to 40°C)
- Relative humidity range:
  - 10% RH to 90% RH non-condensing
- ESD protection:
  - 8kV Air/ 6kV Contact

## print technology ■ ■ ■

- Printhead:
  - Direct thermal
  - 203 dots per inch (8 dots per mm)
- Print width:
  - 4.125" (105 mm)
- Print mechanism speed:
  - 4" per second (102 mm per second)

## memory ■ ■ ■

- 32 MB RAM / 64 MB Flash

## media ■ ■ ■

- Media type:
  - 2.00"– 4.12" (76 – 105 mm) lined and linerless\* labels with black mark or gap sensing
  - External fanfold or roll supply
- Maximum roll capacity:
  - 2.65" (67 mm) O.D.
  - 0.75" (19 mm) I.D. core
- Media thickness:
  - 2 mil to 6.5 mil
- For optimum print quality and printer performance, use Certified Datamax-O'Neil supplies.

\* for use in RL4 printers equipped with linerless option only

## communication ■ ■ ■

- Serial:
  - RS232, up to 460.8 kbps
- USB:
  - 2.0 (full speed)
- Bluetooth:
  - Supported versions: Version 2.1, Class 2
  - Serial port profile
- 802.11 a/b/g:
  - Network standard: IEEE 802.11 a/b/g
  - Wireless access modes: Infrastructure and ad-hoc
  - Security Protocols:

	WEP	WPA	WPA2
Modes		PSK/Enterprise	
Security/Encryption	64/128	TKIP/RC4	CCMP/AES
Authentication	LEAP, EAP-PEAP, EAP-FAST, EAP-TTLS, EAP-LEAP		

- Network support: DHCP, TCP, UDP, DNS, BOOTP

## power source ■ ■ ■

- Battery:
  - 14.8V Lithium-ion, 2200 mAh (33 W-h)
- DC inputs:
  - External DC jack, 11-15V, built-in spike and surge protection
  - External charge contacts, 11-15V, built-in spike and surge protection
- Recharging: 4 - 6 hours
- Endurance: Prints over 320 4"x6" (100x150mm) labels when operating 16 continuous hours on an 802.11 network

## agency approvals ■ ■ ■

- Contact sales manager for the most current approval list

## warranty ■ ■ ■

- 2 years (including platen roller, printhead and installed options) when used with approved supplies
- Contact sales representative for extended warranty options

## barcodes/fonts/graphics ■ ■ ■

- Scalable Fonts:
  - CG Triumvirate™ Bold Condensed, CG Triumvirate & CG Times with Cyrillic, Greek, Arabic and Hebrew character support from Monotype Imaging
- Standard fonts:
  - 5.5CPI, 7.2CPI, 10.2 CPI, 10.7CPI, 18.5CPI, 20.4CPI, 22.6CPI, 34.0CPI, OCR-A, OCR-B (additional fonts available)
- Downloadable font types:
  - True Type, Bitmap
- Character Sets:
  - Unicode/UTF8 support; 50 international symbol sets, Big 5, JIS and Shift JIS and more
- Optional characters:
  - Arabic, Greek, Hebrew, Unicode subset including Latin
  - Asian (including Big 5, Simplified Chinese, Kanji, Hangul and Shift JIS); additional international characters available
- Barcodes:
  - Linear: Codabar, Code 3 of 9, Code 93, Code 128, EAN-8, EAN13, Interleaved 2 of 5, HIBC, PLESSEY, MSI/Plessey, UCC/EAN-128, UPC-A, UPC-E, UPC 2 and 5 digit addendums, Postnet, Telepen, UPS MaxiCode, FIM, USD-8
  - 2D Symbolologies: PDF417, Aztec, QR Code, GS1, Datamatrix, TLC39, MicroPDF417
- Graphics:
  - Supports storage of graphics/logos in Flash memory and transient "print once" graphic

## software/firmware ■ ■ ■

- NETira Configuration Tool - complete printer set-up utility
- Control Language Compatibility:
  - DPL, ZPL II®, CPCL, IPL™, XML
- Device management compatibility:
  - Wavelink® Avalanche™ MC, Motorola MSP 3.0 and later
- Network Compatibility
  - TCP-IP based networks
  - AS/400 (LPD) based networks
- Drivers:
  - Windows® CE, Windows® Desktop, USB
- Label design software compatibility:
  - BarTender®, Niceware/NiceLabel and others
- ERP Systems:
  - SAP, Oracle
- Software development kit:
  - C++, Visual Basic

## options ■ ■ ■

- 802.11 a/b/g
- Bluetooth communication v2.1
- Linerless



### Did you know?

Datamax-O'Neil **Extended Warranties** provide the coverage you've been seeking for the worry-free operation of your printer long after the original warranty period has expired. Extended Warranties include quick response times, a variety of comprehensive options and a broad choice of contract duration options. *(not available in all countries)*





RAM Mount Compatible Adapter



Voltage Converter



Multiple Unit Charging Adapter



Double Bay Battery Charger



Fuse Box Power Cable Kit



IP54 Case

**Included with each RL4 printer:** (1) battery, (1) full roll of 4'x6" labels, and (1) swivel belt clip

**required** ■ ■ ■

<b>AC Adapter</b>	AC Adapter (standard or high-capacity*) available with US, UK, Australian, Swiss or Euro plugs
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*\*High Capacity AC Adapters only available with US, UK or Euro plugs*

**recommended** ■ ■ ■

<b>Serial Cables</b>	DB9 F cables for connecting to a laptop or desktop computer
<b>USB Cable</b>	USB download cable (mini B to USB-A)
<b>Cleaning Cards &amp; Kits</b>	Use of cleaning cards is recommended to extend the life of the printhead (visit <a href="http://www.datamax-oneil.com/supplies">www.datamax-oneil.com/supplies</a> for more information)

**optional** ■ ■ ■

<b>RAM Mount™ Compatible Adaptor</b>	Keeps the printer secure yet easily accessible on a forklift. Includes adapter plate and 1 1/2" ball. Other parts are available from RAM Mount.
<b>Voltage Converter</b>	12-60V DC/DC power adapter
<b>Multiple Unit Charging Adapter</b>	Allows you to charge (4) RL4 printer or (4) 2 bay battery chargers at once, requires a high capacity AC Adapter (sold separately)
<b>Spare Battery</b>	Lithium-Ion, 14.8V, 2200 mAh
<b>Double Bay Battery Charger</b>	2-bay battery charger keeps additional batteries charged and ready for use
<b>Fuse Box Power Cable Kit, 10'</b>	Charge your printer from a vehicle's fuse box Extension cables available in 3', 6', and 10' lengths for existing installations
<b>IP54 Soft Case</b>	Protects your printer from environmental elements such as dust and moisture; meets IP54 test standards
<b>Cigarette Lighter Adapter</b>	Allows you to charge the printer from the vehicle cigarette lighter
<b>Swivel Mount Belt Loop</b>	Velcro loop fastens comfortably and securely around the belt; keeps the printer secure yet swivels for comfort while bending over or getting in and out of vehicles
<b>Hand Strap &amp; Shoulder Strap</b>	Choose either a hand or shoulder strap for maximum comfort and flexibility



**Looking for a desktop label printer?**

Datamax-O'Neil manufactures an extensive selection of desktop label printers that are ideal for manufacturing, warehouse, healthcare, ticketing, postal services and RFID labeling requirements. Competitive custom and standard media products are also available for all your label, receipt and ticketing needs.



**to learn more, visit [www.datamax-oneil.com](http://www.datamax-oneil.com)**

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