



The Most Reliable Portable Printers.®

## microFlash® 2t Serial & Wireless Portable Thermal Printer

The microFlash 2t offers the most reliable performance available, printing outstanding quality 2" direct thermal receipts, proofs of delivery, labels and invoices. Whether in serial or wireless mode, the small and lightweight 2t is the printer of choice around the globe for route accounting, direct store delivery (DSD), field service, logistics, home delivery and pre-sales systems. Its reliable print mechanism offers outstanding print clarity, allowing the printing of graphics, bar codes and logos. The 2t is recognized worldwide for providing the most reliable 2" printing, shift after shift, month after month, year after year.

**Rugged and Reliable.** With uncompromising standards, the 2t is engineered throughout to withstand even the most punishing portable applications. It is the only portable 2" printer that provides the durability required in the demanding field mobile environment. Designed to take multiple 6' drops to concrete, the unbreakable double-walled polyethylene case protects your investment; taking all the bumps and knocks inherent in the mobile workplace. The 2t's rock solid print mechanism is proven to provide years of service where other printers fail. The full one year warranty, even on the printhead, offers peace of mind with our promise to stand behind every product we sell.

**Wireless Printing.** When you need wireless, count on O'Neil to offer the most reliable solution. Both our 802.11b wireless local area network (WLAN) and our Bluetooth® wireless personal area network (WPAN) modules eliminate the need for mobile workers to return to their vehicle to print receipts or tickets. O'Neil is the first portable printer manufacturer to incorporate the Bluetooth protocol in Flash memory, eliminating the need for costly software and hardware upgrades whenever the wireless specification changes.

**Power to Spare.** The 2t uses one 6V NiMH, 2150 mAh (DR10®) battery. Its automatic sleep mode saves power and the fast 3-hour recharging time, along with an optional vehicle charger, provides the ideal solution for long and intense printing applications.

**Flash Memory.** As your business changes, so might your printer needs. We pioneered the use of Flash memory many years ago allowing you to change fonts and functions simply by connecting the printer to a computer. No need to return the printer for an upgrade.

**We Speak Your Language – Any Language.** O'Neil has eliminated the font and character limitations found in other printers. In cooperation with Bitstream® fonts, any international character set can be added to the 2t with a one-time minimal setup fee.



*“Companies, some of which have discovered the hard way that standard printers are not durable in the field, are increasingly seeking ruggedized options. ‘We’ve been replacing a lot of mobile printers that weren’t cut out for the demands of the mobile workforce.’”*

Business Solutions Magazine  
August 2004

### ▶ Wireless Bluetooth® or 802.11b

Our wireless local area network (WLAN) solutions incorporate a user installable Cisco® PC card or factory installed Symbol Spectrum24® PC card (PCMCIA), which connects the 2t printer to a wireless network in ad hoc peer-to-peer or in infrastructure mode, and complies with the IEEE 802.11b interoperability standards for direct sequence wireless LANs. When the printer is configured with the integrated Bluetooth module, users can realize all of the convenience, power efficiencies and cost benefits of the WPAN.



### ▶ Magnetic Stripe Card Reader

The optional insertion magnetic stripe card reader provides route professionals the advantage of collecting payments and generating receipts while at the customer site. The insertion-style card reader provides outstanding reliability and is known for its ease-of-use.



# Standard Features at a Glance

- Optional wireless local area network (WLAN) or wireless personal area network (WPAN) networking technologies.
- Supports a wide variety of hand-held computers from leading manufacturers.
- Exceptional print quality (203 dpi resolution).
- Fonts, graphics and operating system in Flash memory.
- Supports international character sets and any Bitstream® bitmap font.
- Increased label capacity using linerless label stock (optional).
- Supports the printing of graphics, 1D and 2D bar codes and signature capture.
- Intelligent power management and programmable sleep mode for extended battery life.
- Charging options include a low cost AC adapter or 12V vehicle cigarette lighter adapter.
- Optional Magnetic Stripe and Smart Card Reader.



2t

## Specification Highlights microFlash® 2t Serial & Wireless Portable Thermal Printer

| Physical Characteristics           | microFlash® 2t                                    | microFlash® 2t, Bluetooth®                        | microFlash® 2t, 802.11b                           |
|------------------------------------|---|---|---|
| Dimensions                         | 7.375" x 4.675" x 2.42"<br>(18.8 x 11.9 x 6.2 cm) | 7.375" x 4.675" x 2.42"<br>(18.8 x 11.9 x 6.2 cm) | 7.375" x 5.52" x 2.425"<br>(18.8 x 11.9 x 6.2 cm) |
| Weight (printer only)              | 13.3 oz (0.337 kg)                                | 15.1 oz (0.428 kg)                                | 17.6 oz (0.499 kg)                                |
| Weight (with battery & paper roll) | 23.3 oz (0.660 kg)                                | 25.3 oz (0.717 kg)                                | 27.6 oz (0.782 kg)                                |
| Drop Specification                 | 6 ft (1.8 m)                                      | 6 ft (1.8 m)                                      | 6 ft (1.8 m)                                      |

### User Environment

|                       |                                    |
|-----------------------|------------------------------------|
| Operating Temperature | -4° F to 122° F (-20° C to 50° C)  |
| Storage Temperature   | -40° F to 158° F (-40° C to 70° C) |
| Charging Temperature  | 41° F to 104° F (5° C to 40° C)    |
| Relative Humidity     | 10% to 90% non-condensing          |
| ESD Protection        | 8 kV Air, 4 kV contact             |

### Communications

|   |   |
|---|---|
| <b>Serial</b>   | RS-232, up to 38.4k baud (available on all models)                                  |
| <b>IrDA (2t only – not available in radio models)</b> | IrDA compliant infrared data communications, up to 115.2k baud                      |
| <b>Wireless LAN</b>                                   | Cisco® Aironet® 350 Series PC Card (PCMCIA)<br>Symbol® Spectrum24® LA 4121 (PCMCIA) |
| Frequency Band  | 2.4 to 2.4897 GHz   |
| Data Rates Supported                                  | 1, 2, 5.5 and 11 Mbps   |
| Network Standard                                      | IEEE 802.11b  |
| Network Architecture Types                            | Infrastructure and ad hoc   |
| Wireless Medium Authentication                        | Direct Sequence Spread Spectrum (DSSS)<br>Open or Shared key                        |
| Encryption  | None, 40 bit, 128 bit WEP   |
| DHCP  | Supported   |
| DNS   | Supported   |
| <b>Wireless PAN</b>                                   | Integrated Bluetooth module   |
| Network Environment                                   | Ad hoc or piconet network environments  |
| Protocol  | Supports version 1.1 and 1.2 of the Bluetooth standard (SIG certified)              |

### Print Technology

|                |  |
|----------------|--|
| Printhead      | Direct thermal, 384 dots across, 203 dpi (8 dots/mm) |
| Printhead Life | 5,000,000 dot lines @ 25%                            |
| Print Speed    | Up to 2" per second                                  |

### Media

|          |   |
|----------|---|
| Type     | Direct thermal paper, labels, linerless labels (optional) |
| Capacity | 2" maximum roll diameter                                  |
| Width    | 2.25" (5.72 cm)   |

### Power Source

|            |   |
|------------|---|
| Battery    | 6V NiMH, 2150 mAh (DR10®)   |
| DC Input 1 | (AC Adapter) 12-15V, built-in spike and surge protection                |
| DC Input 2 | (Cigarette Lighter Adapter) 12-15V, built-in spike and surge protection |

### Battery Characteristics

|                    |   |
|--------------------|---|
| Type               | 6V NiMH, 2150 mAh (DR10)  |
| Endurance          |   |
| <b>Serial/IrDA</b> | Prints approx. 9,690 <sup>a</sup> or 1,615 – 6" receipts on a single battery charge |
| <b>Bluetooth</b>   | Prints approx. 3,678 <sup>a</sup> or 613 – 6" receipts on a single battery charge   |
| <b>802.11b</b>     | Prints approx. 1,980 <sup>a</sup> or 330 – 6" receipts on a single battery charge   |
| <b>Spectrum24</b>  | Prints approx. 2,640 <sup>a</sup> or 440 – 6" receipts on a single battery charge   |
| Battery Life       | 80% of original capacity after 300 cycles   |
| Recharging         | 2.5-3.5 hours from AC adapter or cigarette adapter                                  |

### Fonts & Languages

|                          |  |
|--------------------------|--|
| Memory Capacity          | Flash/Ram Memory <b>2t, Serial/IrDA</b> : 4/1 Mbit<br>Flash/Ram Memory <b>2t Bluetooth, 802.11b</b> : 8/4 Mbit   |
| Standard Fonts           | 5.5CPI, 7.2CPI, 10.7CPI, 18.5CPI 20.4CPI & 22.6CPI (additional fonts available)  |
| International Characters | Arab-T, Arab-S, Arab-E, Asian-A, Asian-B, shiftJIS, Greek, OCRA, OCRB, Unicode subset including Latin & Thai (additional international characters available) |
| Bar Codes                | Prints 1D and 2D bar codes   |
| Graphics                 | Supports storage of graphics/logos in Flash memory and transient "print once" graphics   |

### Agency Approvals

|                              |                           |
|------------------------------|---------------------------|
| <b>2t Serial/IrDA</b>        | FCC B, CE, C-Tick         |
| <b>2t Bluetooth, 802.11b</b> | FCC B, CE, C-Tick, E-Mark |

### Warranty

1 year (including printer case and printhead\*)

### Options / Accessories

- AC Adapter
- Battery
- Cigarette Lighter Adapter
- Cleaning Cards
- Cleaning Kit
- Data Cables for Hand-Held Devices
- DB9 F Cable (coiled)
- DC Power Extension
- Depot Charger Kit
- External Battery Charger
- Magnetic Stripe/Smart Card Reader
- Paper/Labels
- Swivel Belt Loop
- Swivel-Mount Bracket
- Swivel-Mount Shoulder Strap

\*When used with approved media grades.

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