



# MARTEL PRINTER

## Overview

The printer can receive data directly from the analyzer via IR transmission or through a data cable connected to a Downloader. The printer can be recharged from a power adapter connected to an outlet.

## Specifications

### Dimensions

Height: 64 mm  
Width: 135 mm  
Depth: 130 mm

### Weight

425 g (Approx.)

### Power

1. 4.8V Nickle Metal Hydride battery pack.
2. Power adapter for AC outlet
3. Downloader

### Communication Link

1. Infra-red
2. RJ12

### Paper

5.7 cm thermal

### Switch

On/Off

### LED Indicator Lights

POWER: Green  
STATUS: Amber

### Printing method

Thermal line printing

### Printing speed

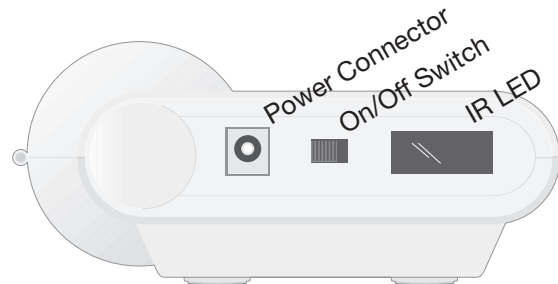
10 lines per second

### Temperature

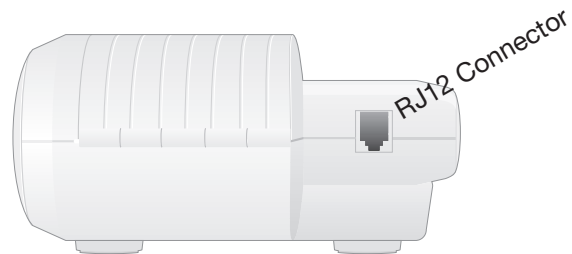
Operating: 0 °C to 50 °C (32 °F to 122 °F)  
Storage: -20 °C to 60 °C (-4 °F to 140 °F)  
Charging: 10 °C to 45 °C (50 °F to 113 °F)



Top view of Martel Printer



Side view of Martel Printer



Back view of Martel Printer

## Supplies Provided with Printer

- Adapter and power cord
- One roll of paper

## Power

The printer is turned on using the switch on its left side. When the printer is on, the Power LED will be green. The plug for the AC adaptor is also on the left side.

For printer serial numbers below 240223657, the rechargeable battery is trickle charged when the printer is turned on or off and connected to an AC outlet. Before putting these serial number printers into use, the printer should be turned off and the battery charged for 16 hours.

For printer serial numbers above 240223657, the power LED may flicker when connected to the power supply and the switch is in the OFF position. This flicker indicates that the printer is fast charging. Fast charging occurs only when the printer is turned off. Trickle charging occurs when these printers are plugged in and turned on, but not in use. Printers above serial number 240223657 indicating low battery will charge to full capacity in 9 hours, if charged from a 12V supply with the power switch off.

The battery needs to be recharged for all printer serial numbers when the Status LED lights continuously during printing. If the battery becomes exhausted, printing will become faint, erratic, or not possible at all. Should this happen, turn the printer off and allow to recharge for 1 hour before attempting printing again.

## Paper

Paper may be ordered along with other supplies for the i-STAT System or paper with the following specifications can be used:

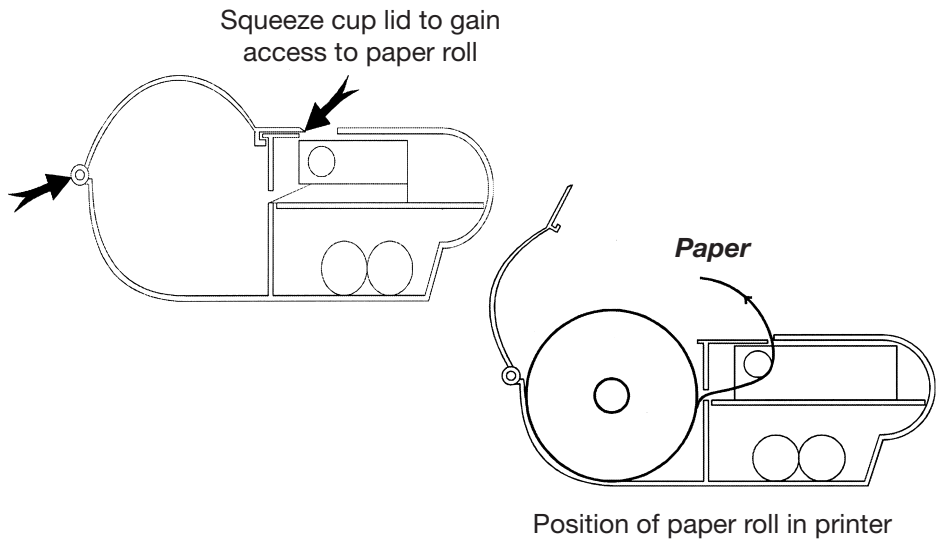
- Black print thermal paper
- 2.25 in (5.7 cm) wide by 80 ft (25 m) long
- Paper grade: TF50KS-E2C

The Status light will flash to indicate that the paper has run out.

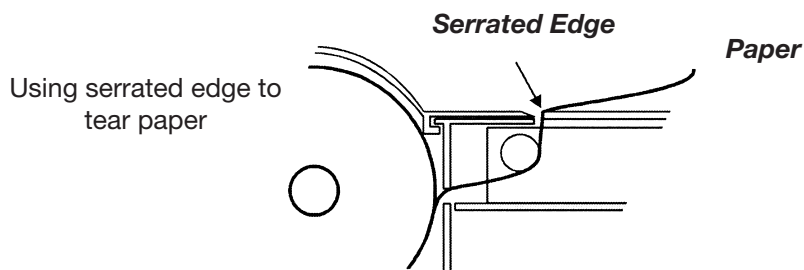
To replace the paper, open the paper cup lid by squeezing the lid as shown in the illustration and remove any remaining paper by pressing the Paper Feed button. **Do not pull paper through the printer mechanism.** Reel off a few centimeters from a new roll of paper and check that the end has a clean, straight edge. Slide the leading edge of the paper through the paper entry slot, with the leading edge of the paper feeding forward from the bottom of the roll, until you feel resistance. Press the paper feed button and feed the paper through the printer mechanism. Keep the paper feed button depressed until enough paper is fed through the printer mechanism to pass through the paper exit slot. Set the new paper roll in the paper cup and close the lid.

Should the paper become creased or out of line when feeding a new roll, cut the end off the paper roll, feed out the creased paper using the Paper Feed button, and reload, ensuring the paper has a clean, straight edge.

Before use, open the paper cup lid and ensure that the paper roll is present. Close the lid, ensuring that the paper passes through the paper exit slot. Turn the printer on. The Power indicator will light and the printer mechanism will reset.



When removing a printout from the printer, pull the printout toward the front of the printer and tear from one side to the other across the serrated edge.



### Printing Directly from the Analyzer



Before printing ensure that the printer is turned on. The printer is turned on and off using a switch on the left side of the printer. When the printer is on the Power LED will be green.

To print directly from the analyzer, point the analyzer's Infrared Communication Window at the printer's IR LED window on its left side, ensure that the results to be printed are displayed, and press the Print key on the analyzer. The printer must be within 1 to 5 in (2.5 to 12.7 cm) of the analyzer and must not be too close to the analyzer. Do not move the analyzer or printer until printing is complete.

### Printing Via a Downloader

See the Downloader Wiring and Programming section of this manual for directions to connect the printer to a Downloader or Downloader/Recharger. Before printing ensure that the printer is turned on. The printer is turned on and off using a switch on the left side of the printer. When the printer is on the Power LED will be green.

Place the analyzer between the arms of the Downloader or in the Downloader/Recharger, ensure that the results to be printed are displayed, and press the Print key. Do not move the analyzer or printer until printing is complete.

## Printing Many Results

Select **2 – Data Review** from the Administration Menu on the analyzer, then select **7 – List**. Use the arrow keys to page up and down through the pages of stored results. Press the numbered key for each test record to be printed. To deselect a record, press that numbered key again. When all test records have been selected, align the printer and analyzer according to the directions under Printing Directly from an Analyzer or place the printer in a Downloader or Downloader/Recharger according to the directions above, and press the Print key.

## What is Printed

```

-----
i-STAT EG7+
Pt : 11
Pt Name : _____
-----
37.0°C
pH          7.527
PCO2        34.3 mmHg
PO2         35 mmHg
BEeef       6 mmol/L
HCO3        28 mmol/L
TCO2        30 mmol/L
sO2         75 %
-----
Na          131 mmol/L
K           4.3 mmol/L
iCa         1.17 mmol/L
Hct         52 %PCV
Hb*         18 g/dL
          *via HCT

Sample Type : VEN
CPB : No

13:32  15AUG00

Operator ID: 11
Physician: _____

Serial: 300098
Version: JAMS104A
CLEW: A64
  
```

## Name of Test

i-STAT cartridge type

## Sample ID

Patient ID or type of quality test and lot number of solution tested

## Results

Results are printed with units as well as flags and comment codes if applicable.

## At Patient Temperature

If the patient's temperature was entered on the Chart Page, a second set of results is displayed for blood gases at the patient's temperature.

## Sample Type

Sample type selected from Chart Page when sample is patient or proficiency test

## Free Fields

Information entered into the free fields on the Chart Page when sample is patient or proficiency test

## Time and Date

Time and Date when test was performed

## Operator ID

Operator ID

## Lot Number

Lot number of cartridge

## Serial

Serial number of the analyzer

## Version

Analyzer application software

## CLEW

Standardization software

## Caution

- Use only a rechargeable battery pack purchased from Abbott Point of Care. Rechargeable battery packs not recommended by or purchased from Abbott Point of Care may be susceptible to overheating and could lead to a potential fire or burn hazard.
- Use power supply provided with printer.
- Do not operate the printer without paper.
- Do not allow the power supply to become a trip hazard.
- Do not disturb the analyzer or printer until printing is complete since this will interrupt the printout. If printing is interrupted, realign the printer and analyzer or replace the analyzer in the Downloader to resume printing. Note: If significant time has elapsed, some results may be missing from the printout. Reprint the results.
- If printed results appear inconsistent with a patient's clinical assessment, verify that the printed results match the data in the analyzer. If the results do match, the patient sample should be retested using another cartridge. If they do not match, reprint the results. If the reprint still does not match the analyzer data, the printer requires service and the printed results must not be used.

## Troubleshooting

Printer not printing. Power LED on and Status LED off:

- check that results are displayed or that results have been selected from List under Data Review.
- check that the distance between analyzer and printer, if printing directly from the analyzer, is not too short or too long.
- perform printer self test to ensure that printer is functioning. Turn the printer on while pressing the Paper Feed button, then release the Paper Feed button and ensure that the printout is clear.

Paper is feeding but nothing is printed: check that the paper is feeding from under the roll.

Printer not printing and Status light on continuously: battery needs to be recharged.

Printer Power LED does not come on when printer turned on: battery needs to be recharged. The power adapter cannot supply sufficient for printing so the battery needs to be partially charged before printing is possible.

Printer not printing and Status light flashing at rate of 0.5 seconds: printer is out of paper.

Printer not printing and Status light flashing at rate of 0.25 seconds: print head temperature too hot. Printing will be suspended until print head temperature returns to normal level.

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