



## Technical Supplement

Document #            VTS-00091, Rev. B  
Issue Date            June 4, 2012  
Printers Affected    T1000

### Printer Specifications

*Machine specifications should be used by customers and Field Service Engineers during initial phases of printer logistics planning.*

### Safety

*Please adhere to the following safety items:*

- Familiarize yourself with the EFI Printer Safety Guide, available at, <http://www.vuteksupport.com/doc.php?doc=683>.

### Modifications

Do not modify this printer from its original design without the prior written approval of EFI, Inc., or use unapproved accessories.

**Note:** Using unapproved modifications or accessories can lead to serious injury to yourself or others, and even death.

### Technical Support

Technical support for customers is available 24 hours a day.

**Note:** A factory warranty or enrollment in a service plan is required for 24 hour support.

Support:	603-677-3111, x4
24 hour Technical Support:	603-677-3111, x4
Europe Support Phone	+32 2 749 94 50
Europe Support Fax:	+32 2 749 94 65
E-mail:	<a href="mailto:support@efi-vutek.com">support@efi-vutek.com</a>
Internet (requires login):	<a href="http://www.vuteksupport.com">http://www.vuteksupport.com</a> or <a href="http://www.rasteksupport.com">http://www.rasteksupport.com</a>

## Hazardous Voltage

All EFI printers contain Hazardous Voltage. Refer to your printers' individual *Basic Operator's Guide* and labels attached to the printer components for specific hazardous voltage areas on the printer. Printer operators and technicians must conform to the following guidelines at all times during printer use and maintenance:

- Live electrical terminals can kill. Ensure that the main disconnect switch is in the **Off** position prior to connecting to facility power.
- Some EFI printers are rated as Class I equipment. Ensure that the earth grounding connections between the printer and the host system are maintained at all times.

## Size and Weight

[Table 1](#) and [Table 2](#) contain the crated and uncrated specifications for the T1000 Printer.

### Crated

Table 1: Crated T1000 Printer Specifications

	<b>Imp.</b>	<b>Metric</b>
Height	78 Inches	198 cm
Depth	86.5 Inches	220 cm
Length	182 Inches	462 cm
Weight	2500 lbs.	1134 kg

### Uncrated

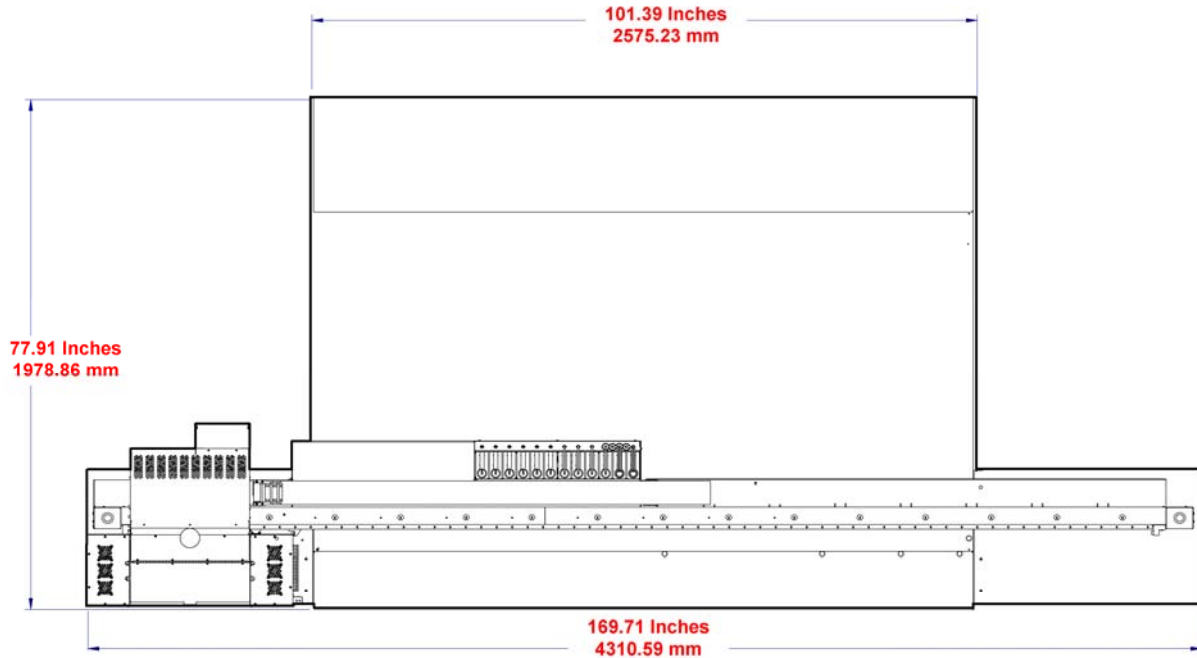
Table 2: Uncrated T1000 Printer Specifications

	<b>Imp.</b>	<b>Metric</b>
Height	54.5 Inches	138.4 cm
Depth	77.9 Inches	197.89 cm
Length	169.7 Inches	431.06 cm
Weight	1800 lbs.	816.47 kg

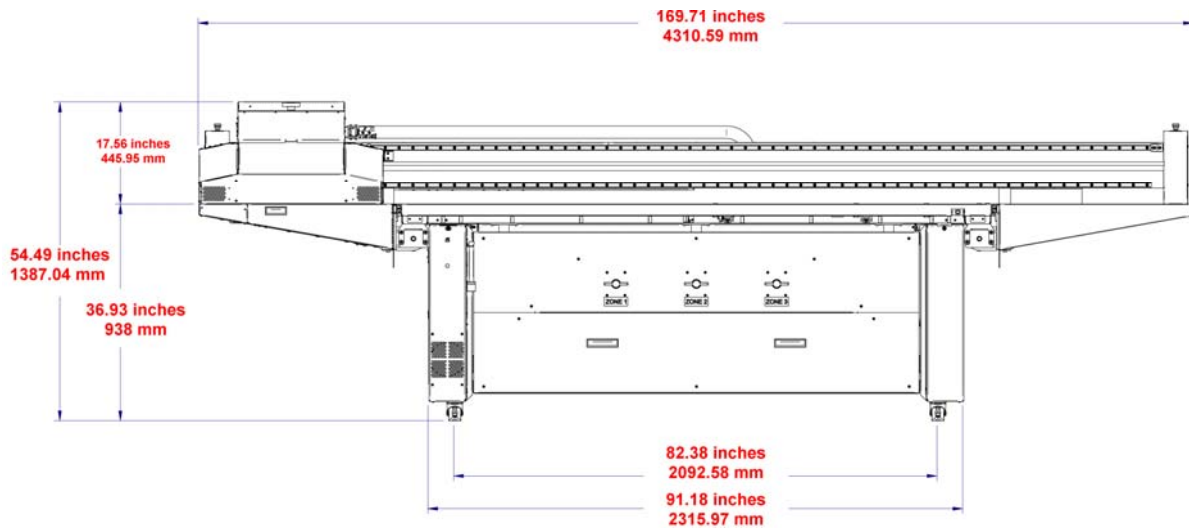
# T1000 Printer Dimensions

[Figure 1](#) and [Figure 2](#) provide an overview of the T1000 Printer dimensions.

**Figure 1: Top View**



**Figure 2: Front View**



**Table 3: T1000 Printer Dimensions**

	<b>Imp.</b>	<b>Metric</b>
Height	54.49 Inches	1387.04 mm (138.4 cm)
Length	169.71 Inches	4310.63 mm (431.06 cm)
Depth	77.91 Inches	1978.91 mm (197.89 cm)
Weight	1800 lbs.	816.47 kg

## Floor Space

The T1000 must be installed in an area large enough to allow for unencumbered operation.

EFI requires a minimum of three feet (91.44cm) clearance on all sides of the printer. Providing ample space will ensure clearance on all sides of the printer, ease of loading and unloading media, and space for performing regular maintenance procedures.

The [Working Area](#) section outlines the floor space required for proper installation including additional space requirements for moving, handling, and loading media. Refer to Figure 3 for a general overview of T1000 floor space requirements.

## Working Area

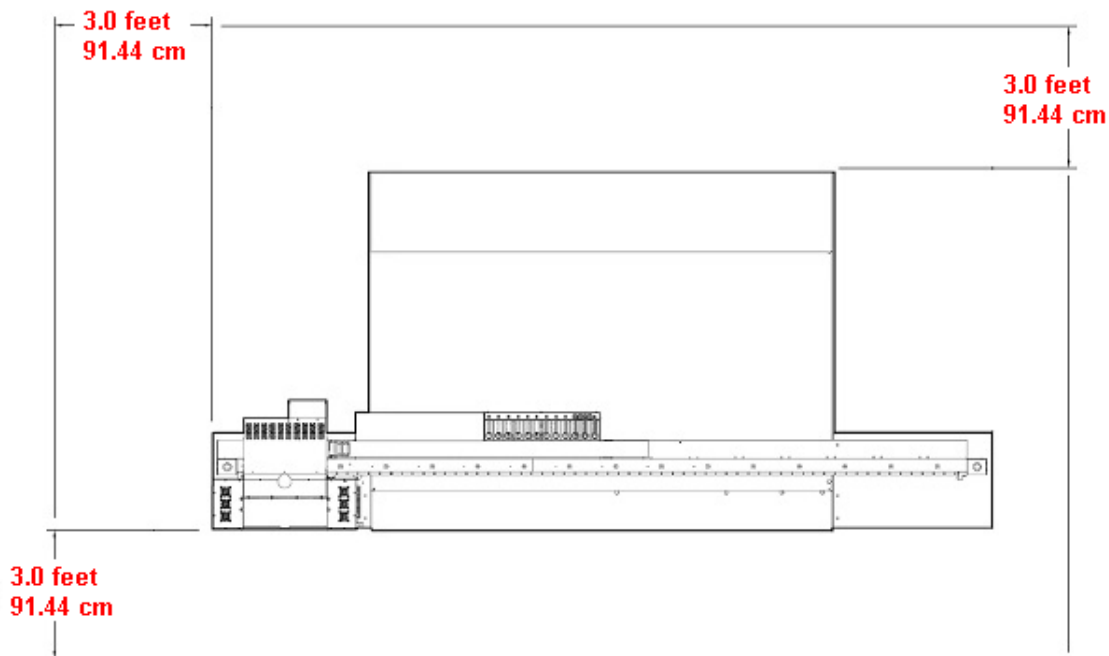
**Table 4: Footprint and Additional Space Requirements**

	<b>Imp.</b>	<b>Metric</b>
Printer Footprint	77.91 x 169.71 Inches	197.89 x 431.06 cm
Overall Working Area	113.91 x 205.71 Inches	289.33 x 522.50 cm
Minimum Clearance (Each Side)	36 Inches	91.44cm
Minimum Clearance (Front)	36 Inches	91.44cm
Minimum Clearance (Rear)	36 Inches	91.44cm

## Recommended Printer Working Clearances

[Figure 3](#) provides the floor space required for proper installation including additional space requirements for moving, handling, and loading media.

**Figure 3: T1000 Printer Working Clearances (Not to Scale)**



## AC Power Specifications

AC Power Specifications are provided in [Table 5](#).

The T1000 Printer is rated for operation on 230 VAC, Single Phase, 50/60 Hz, power drawing 40A max, but can be operated on 208 VAC, 220 VAC, 240 VAC, and 250 VAC mains. The provided non-detachable power cable is approximately 3 meters (10-feet) long and comes fitted with a UL and CSA listed 50 A, 250 VAC rated, locking 2-pole 3-wire, California Standard cord plug style connector, type CS8265. The power connector must be plugged into a compliant wall receptacle or power drop connected to a branch circuit protected with a 50 A panel breaker in most locations within North America.

For providing power to the T1000 printer, customers must contract a licensed and certified electrician to facilitate a proper power connection, following specific localized electrical codes.

**Note:** The power connector at the end of the power cord is the designated primary power disconnect and must be located within sight of the printer and easily accessible by all personnel at all times.

Table 5: T1000 Electrical Power Requirements

Value	Requirement
50/60 Hz, Single Phase, 40A draw (maximum)	230 VAC nominal, 208-250 VAC mains compatible
Peak Rated Current	40 A
Peak Power Consumption	8.28 kW
Continuous Power Consumption	6.86 kW

## Main AC Breaker

The Main AC Breaker controls power to the printer components.

The Main AC Breaker is located on the right rear printer leg. This switch allows users to remove power from the printer components. See the *Printer Safety Guide*, <http://www.vuteksupport.com/doc.php?doc=683>, for complete information.



Figure 4: Main AC Breaker - On position

## Auxiliary Power Switch

The Auxiliary Power Switch controls power to the printer components.

The Auxiliary Power Switch is located on the front left printer leg.



Figure 5: Auxiliary Power Switch – On position

## Backup Power Specifications

The T1000 ships with a power adaptor that converts AC power into 24VDC at 1 AMP maximum and connects to an auxiliary jack on the T1000 printer leg.

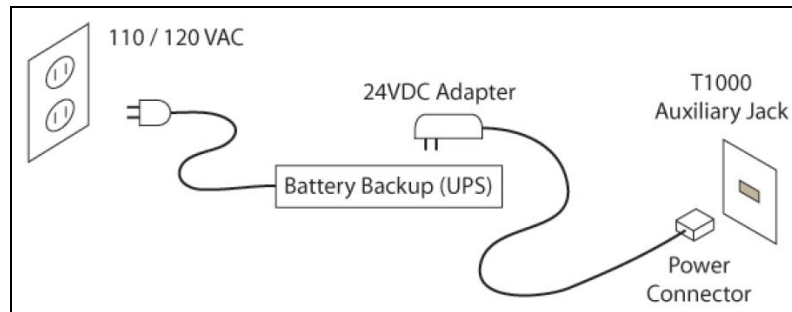
This connection provides dedicated power to the negative pressure. EFI does not provide – but highly recommends using – a battery backup or uninterruptible power supply (UPS) with the 24VDC adapter. See [Figure 6](#).

Should the power fail without a battery backup system in place, the printer will lose the negative pressure holding ink inside the print heads. A loss of negative pressure will occur when power has been out for longer than 10 minutes. Beyond 10 minutes without power, the ink will gradually begin to drip from the print heads.



**WARNING** DC Power may be present even when the main power is off or disconnected when the 24VDC adapter is connected and powered independently of the printer. To avoid personal injury, always disconnect the Battery Backup (if present) when servicing the T1000 Printer.

Figure 6: T1000 Backup Battery Configuration for Negative Pressure System



## Printer Control Computer and Display Requirements

*The T1000 Printer ships with a Windows-based desktop computer system and a variety of software programs. The PC is often referred to as the printer control computer.*

For information regarding setting up and using the printer control computer, please refer to the T1000 Printer Installation Guide.



**WARNING:** The Printer Control Computer provided with the T1000 must be set to operate on 220-230 VAC if a voltage selector switch is provided on the computer. Failure to properly set this switch to 220VAC will result in damage to the PC and could result in personal injury.

The flat panel display provided with the T1000 has an auto-sensor that will self adjust the monitor power needs. The flat panel display can be installed and used, as-is, right from the box.

- The print control computer includes 10/100 Base-T Ethernet connection for using the T1000 on a network. A data port at or near the printer work area will be necessary should the customer wish to connect the T1000 printer control computer to a network.
- EFI requires installing an Ethernet connection near the printer control computer to facilitate networking and internet connectivity. Connecting the printer control computer to the internet will allow EFI technicians to remotely log into the printer, install upgrades, and track any problems that may occur during operation.

## Environmental

*The T1000 printer must be stored indoors until it can be uncrated and moved to its final position.*

- The T1000 can only be uncrated by an EFI Field Service Engineer or by an approved dealer's service technicians. Customers are not to open or unpack the T1000 Printer.
- Temperatures in the storage area should range from 5°C to 40°C.
- Once uncrated, the crate can be either stored or discarded.

The T1000 will operate optimally in a controlled environment. Listed below are the environmental requirements for controlling ventilation, temperature, humidity, and dust for the printer work area.

**Note:** EFI does not supply a ventilation system for your digital printing system. However, EFI does strongly recommend that a ventilation system be installed for extracting ozone, ink particles, solvent fumes, and heat from the printing area.

Customers must maintain the following environmental conditions for the printer and the area where it is installed.

**Table 6: Environmental Specifications**

<b>Specification</b>	<b>Imp.</b>	<b>Metric</b>
Storage Temperature	41° to 104°F	5°C to 40°C
Operating Temperature	65° to 80°F	18.3° to 26.6°C
Operating Humidity	30% to 80% non-condensing	
Ideal Humidity	55%	

## Dust

The printer work area should be relatively free of dust and other airborne particulate matter.

Accumulation of dust on the bottom of the print heads may cause ink nozzles to temporarily stop jetting. Accumulated dust may also lead to permanent damage of the print heads. Dust may collect on the precision carriage encoder strip and cause image artifacts. It is recommended that the printer and surrounding environment be kept as dust free as possible. For example, the printer should not be located next to a router table, a cutter, or any equipment that produces dust.

## Heat

The printer generates approximately 3,500 watts of heat (11,950 BTU) for HVAC calculations.

## Overall Printer Specifications Table

**Table 7: T1000 Printer Specifications Table**

<b>Media</b>		
Media Thickness	Min	0.01" or .25 mm
	Max	2.00" or 50.8 mm
<b>Environment</b>		
Site Temperature	Min	65°
	Max	80°F
Relative Humidity	Min/Max	30% to 80% non-condensing
	Preferred	55%

## Delivery Requirements

The T1000 printer and crate together weigh approximately 2,500 lbs. The customer's site **MUST** have a fork lift available to assist in lifting and moving the T1000 printer from the delivery truck into a warehouse or into the printer production area.



**WARNING** The T1000 Printer is shipped and delivered in a very large and heavy crate. Great care must be taken when handling this crate to avoid personal injury or damage to the printer. Do not tip the crate beyond 20 degrees in any direction. The customer is required to have a fork lift available for unloading and moving the crated printer; without a proper forklift truck with a sturdy gate lift, the T1000 printer cannot be delivered.



In addition, availability of a pallet jack or powered dolly will be very helpful to balance the load. If the customer's site does not have an appropriate loading dock, a delivery truck with a very sturdy lift-gate must be used. Without a loading dock or a lift gate the T1000 cannot be delivered.