



# Five9NS T3105K1 Workstation

## Installation Manual

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## **T3105K1**

### **3U Rack Mount / Workstation**

#### **1.0 General Information**

##### **1.1 Introduction**

This manual contains information for the proper installation of the Five9 Network Systems, LLC. Workstation, Model No: T3105K1. Also included are physical and electrical characteristics of the unit.

##### **1.2 Purpose of the Equipment**

1.2.1 Five9NS' T3105K1 is a tower workstation designed specifically for Entry-level server and workstation applications. It supports a large range of Intel Xeon x86 processors from dual-core to quad-core, which are carried as a part of the Intel Embedded IA Extended Life Cycle Support. In the recommended installation, the unit receives power from an AC power source and is placed in a cabinet in a workstation-like position.

1.2.2 It supports Solaris which is the most scalable and secure operating system. With Solaris, the T3105K1 server provides fast performance, near-continual uptime, and the security and reliability required from a controller.

#### **2.0 Application**

##### **2.1 Introduction**

The T3105K1 is a 100-240 VAC product that can serve as either a workstation or a cabinet-enclosed unit. If the unit is used as a workstation, it will be in a restricted access location away from the general public. The unit contains an Intel motherboard and CPU. Included also in the unit is a 1TB hard drive storage device.

### 3.0 Installation

#### 3.1 Prior to Installation

The T3105K1 is a simple module to install. Before installation, the following items should be considered:

3.1.1 Careful consideration of the location of the T3105K1 is necessary. Some of the items to consider include:

- Space to allow adequate airflow
- Length of cable runs
- Environmental conditions
- Access for service repair (if applicable)

3.1.2 The T3105K1 shall be installed to conform to the standards designated by the customer and manufacturer specifications as to the unit location and type of installation.

3.1.3 The following installation instructions should be followed

A) Elevated Operating Ambient - If installed in a closed assembly, the operating ambient temperature of the assembly environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (T<sub>ma</sub>) specified by the manufacturer.

B) Reduced Air Flow - Installation of the equipment in a closed assembly should be such that the amount of air flow required for safe operation of the equipment is not compromised.

C) Mechanical Loading - Mounting of the equipment in the closed assembly should be such that a hazardous condition is not achieved due to uneven mechanical loading.

D) Circuit Overloading - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of

the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

E) Reliable Earthing - Reliable earthing of enclosed equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips)."

F) System Maintenance - Maintenance and servicing of this product is to be performed only by trained service personnel who are knowledgeable on the procedures and hazards associated with this product.

G) Cautions and Warnings – All caution and warning instructions noted on the product and in the manual should be followed (see Section 3.3 below for details).

### **3.2 Unpacking and Inspection**

3.2.1 Carefully open the packaging and remove the T3105K1. Verify that all components have been included in the package per the packing list. Inspect the unit for shipping damage.

3.2.2 If damage has occurred during shipping, a claim should be filed with Five9NS and an RMA shall be obtained from Five9NS.

### **3.3 Cautions and Warnings**

3.3.1 Do not remove any factory-installed screws

3.3.2 Do not install near heat sources

3.3.3 ESD (Electro Static Discharge) guidelines shall be followed when installing the optional equipment.



- 3.3.4 CAUTION: Risk of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

### 3.4 Wiring Requirements

- 3.4.1 The length and routing of external cables should be carefully studied and planned before attempting installation of the equipment. Allow adequate space for installation of cable and connectors. Avoid sharp bends.

### 3.5 Physical Characteristics

- 3.5.1 The T3105K1 shall be located away from heat sources, magnetic fields and areas with excessive dust.
- 3.5.2 When sitting on a table top, avoid uneven or unstable work surfaces

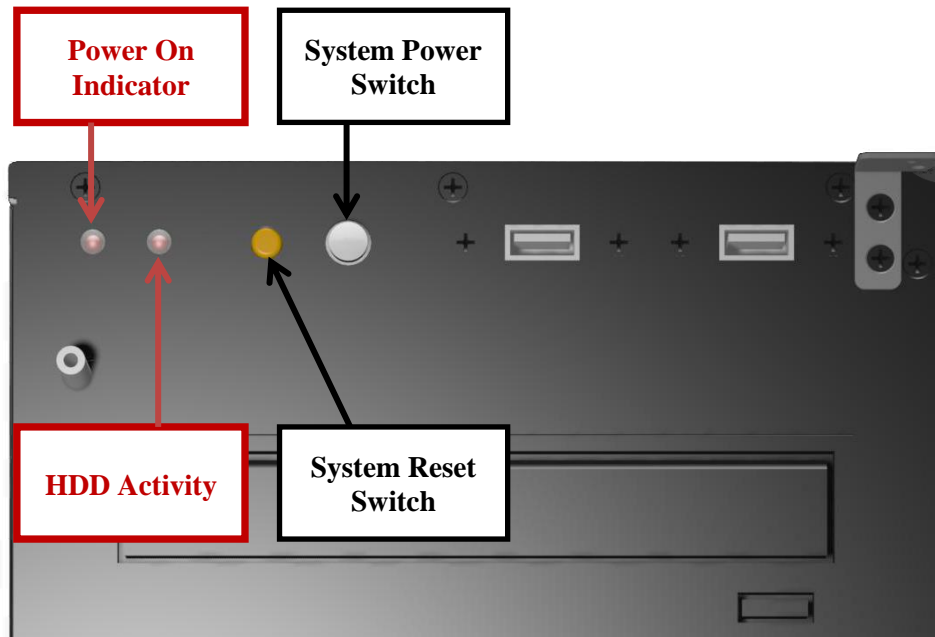
### 3.6 Electrical Characteristics

#### 3.6.1 Electrical Specifications

Electrical	Input Voltage	100-240 Vac
	Input Current	5-2.5 Amps max
	Input Frequency	60-50 Hz

### 3.6.2 Power Switches

The T3105K1 has 3 power switches: a System Power Switch and a System Reset Switch in the front as well as a general On/Off switch on the power supply from the back. The following diagram shows the front power switches (bottom right)



The System reset switch will soft reset the system; the PSU will not cycle the power ON / OFF.

The System power switch will power ON / OFF the system power supply according to Motherboard BIOS setting, (if you press power switch over 4 seconds the system will power off)

The power switch on the back is a general On/Off switch providing the ability to hard turn off the system

### 3.7 Post-Installation Test

Once the T3105K1 is properly installed, turn the system on and verify using a monitor that the motherboard is booting up. To test with Solaris 10, use the following guidelines:

Login as root -> Open a shell window and type in the following commands:

```
cd /usr/sunvts/bin
```

```
./startsunvts
```

You will have to choose between different interfaces to run SUNvts with. Choose the command line option and enter the following commands:

```
./vts_cmd list_tests
```

This command lists all the tests to be performed. Make sure all test are enabled.

To enable a certain test use the following: `./vts_cmd enable_test testname`

```
./vts_cmd set_global_options [Duration of  
Testing:60,Verbose:Enable]
```

This will run the tests for 60 minutes.

```
./vts_cmd start
```

This will start the testing. You can stop the tests anytime using: `./vts_cmd stop`. Please refer to the SUNvts user guide for more information.



## 4.0 Safety Information

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4.1 Typical Application. The T3105K1 will only be used in printing applications as part of the end-product printing system or in other embedded applications. For printing applications, the monitor connected to the server on the production floor will act as an indicator to be used only for starting a printing job.

4.1.1 This product is not intended for use in the immediate/direct visual field of the display work place. To avoid disturbing reflections on the display work place, this product shall not be placed in the immediate/direct field of vision.

4.1.2 The unit is only for use in IT server rooms, production floors, and other restricted access locations away from the general workplace environment.

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## 4.2 Cautions and Warning

4.2.1 **WARNING:** Caution should be used when working inside the server due to the exposed nature of the system fans.



## 5.0 Sicherheit

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5.1 Das T3105K1 sollte nur in den Druckanwendungen als Teil des Endprodukt Drucksystems oder in anderen Embedded-Anwendungen verwendet werden. Für Druckanwendungen, wird der Monitor, der mit dem Server in der Produktion verbunden ist, nur als Indikator für den Start eines Druckauftrags verwendet funktionieren.

5.1.1 Dieses Gerät ist nicht für den Einsatz im unmittelbaren / direkten Sichtfeld des Displays am Arbeitsplatz bestimmt. Um störende Reflexionen auf dem Display am Arbeitsplatz zu vermeiden, darf dieses Produkt nicht in der unmittelbaren / direkten Sichtfeld platziert werden.

5.1.2 Das Gerät ist nur für den Einsatz in IT-Serverräumen, Produktionshallen und anderen Orten mit eingeschränktem Zugang abseits der allgemeinen Arbeitsplatzumgebung gedacht.

5.1.3 Gehen Sie wie folgt vor, um das Gerat für die Verwendung einzurichten.

A) Erhöhte Betriebsumgebungstemperatur - Wenn das Gerät in einer geschlossenen Baugruppe installiert ist, kann die Betriebsumgebungstemperatur der Montageumgebung größer sein als die Raumtemperatur. Deshalb sollte bei der Installation der Geräte darauf geachtet werden, dass die Temperatur in der Umgebung mit der vom Hersteller angegebenen maximalen Umgebungstemperatur (TMA) kompatibel ist.

B) Reduzierte Luftzirkulation- Lassen Sie genügend Abstand zu allen belüfteten Seiten des Geräts, um die erforderliche Luftzirkulation für die Lüftung zu gewährleisten. Ohne Luftzirkulation können die Geräte Schaden nehmen und es könnte sogar ein Brand entstehen.

C) Mechanische Belastung - Montieren Sie das Gerät nicht in der geschlossenen Einheit so, dass sich eine gefährliche Situation durch

ungleichmäßige mechanische Belastung ergeben kann.

D) Überlastung des Stromkreises – Eine besondere Beachtung sollte dem Anschluss an den Versorgungsstromkreis und einer möglichen Auswirkung einer Überlastung der Überstromschiutzeinrichtung bzw. Verkabelung gewidmet werden. Die technischen Leistungsdaten auf dem Typenschild des Produktes sollten hierbei berücksichtigt werden.

E) Zuverlässige Erdung– Um Stromschläge zu vermeiden, schließen Sie das Gerät ordnungsgemäß an geerdete Schutzkontaktsteckdosen an. Beachten Sie bei der Verwendung von Verlängerungskabeln oder Steckerleisten die Einhaltung der elektrischen Spezifikationen.

F) System Wartung – Versuchen Sie nicht, die Wartung Ihres Geräts selbst durchzuführen. Wartung und Pflege des Produktes ist nur durch geschultes Servicepersonal, das Wissen über die Verfahren und Gefahren, die mit diesem Produkt verbunden sind, besitzt, auszuführen.

G) Vorsichtshinweise und Warnungen - Alle Vorsichts- und Warnhinweise auf dem Produkt und in der Bedienungsanleitung müssen beachtet und befolgt werden.

#### 5.1.4 Vorsicht und Warnungen

A) Keine vorinstallierten Schrauben nicht entfernen.

B) Halten Sie das Gerät von Wärmequellen fern.

C) Schutz vor elektrostatischer Entladung. Die Elektrostatische Entladung (ESD) Leitlinien müssen bei der Installation von Zusatzausstattung befolgt werden.



5.1.5 **VORSICHT:** Bei Einsetzen eines falschen Akkus oder Verwendung eines ungeeigneten Akkus besteht Feuer- oder Explosionsgefahr. Ersetzen Sie den Akku nur durch denselben oder einen gleichwertigen vom Hersteller empfohlenen Typ und befolgen Sie sorgfältig die Installationsanweisungen. Entsorgen Sie verbrauchte Akkus ordnungsgemäß.

## 5.2 **Vorsicht**

5.2.1 **Warnung:** Bei Arbeiten im Inneren des Servers aufgrund der exponierten Art der Systemlüfter ist Vorsicht geboten.

