COMPUTING

ATCA-7540

Safety Notes Summary

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ARTESYN™

EMBEDDED TECHNOLOGIES

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Summary of Changes

This manual has been revised and replaces all prior editions.

Part Number	Publication Date	Description
6806871A03A	September 2018	Initial Version

Safety Notes

This section provides warnings that precede potentially dangerous procedures throughout this manual. Instructions contained in the warnings must be followed during all phases of operation, service, and repair of this equipment. You should also employ all other safety precautions necessary for the operation of the equipment in your operating environment. Failure to comply with these precautions or with specific warnings elsewhere in this manual could result in personal injury or damage to the equipment.

Artesyn intends to provide all necessary information to install and handle the product in this manual. Because of the complexity of this product and its various uses, we do not guarantee that the given information is complete. If you need additional information, ask your Artesyn representative.

The product has been designed to meet the standard industrial safety requirements. It must not be used in safety critical components, life supporting devices, or on aircraft.

Only personnel trained by Artesyn or persons qualified in electronics or electrical engineering are authorized to install, remove, or maintain the product. The information given in this manual is meant to complete the knowledge of a specialist and must not be used as replacement for qualified personnel.

Keep away from live circuits inside the equipment. Operating personnel must not remove equipment covers. Only factory authorized service personnel or other qualified service personnel may remove equipment covers for internal subassembly or component replacement or any internal adjustment.

Do not install substitute parts or perform any unauthorized modification of the equipment or the warranty may be voided. Contact your local Artesyn representative for service and repair to make sure that all safety features are maintained.

EMC

The product has been tested in a standard Artesyn system and found to comply with the limits for a Class A digital device in this system, pursuant to part 15 of the FCC Rules, EN 55032 Class A respectively. These limits are designed to provide reasonable protection against harmful interference when the system is operated in a commercial, business or industrial environment.

The product conducts, radiates and uses radio frequency energy and, if not installed properly and used in accordance with this user documentation, may cause harmful interference to radio communications. Operating the product in a residential area is likely to cause harmful interference. If this occurs, the user will be required to correct the interference at the user's expense.

Changes or modifications not expressly approved by Artesyn could void the user's regulatory compliance. Board products are tested in a representative system to show compliance with the above mentioned requirements. A proper installation in a compliant system will maintain the required performance.

Use only shielded cables when connecting peripherals to assure that appropriate radio frequency emissions compliance is maintained. For proper EMC shielding, only operate the system with faceplates installed and all vacant slots covered or populated with filler cards.

The front panel USB and Console ports are considered debug/maintenance ports. During normal operation no cables must be connected to these ports. Cables attached to these ports during maintenance must not exceed a length of 10 feet (3 meters).

This is a Class A product based on the standard of the Voluntary Control Council for Interference (VCCI) by Information Technology Interference. If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective actions.

Installation

Damage of Circuits

Electrostatic discharge and incorrect blade installation and removal can damage circuits or shorten their life.

Before touching the product, make sure that you are working in an ESD-safe environment or are wearing an ESD wrist strap or ESD shoes. Hold the product by its edges and do not touch any components or circuits.

Data Loss

Wait until the blue LED is permanently illuminated, before removing the blade.

Removing the blade with the blue LED still blinking causes data loss.

Restricted Access Area

This board is only to be installed in a restricted access area.

Damage of Blade and Additional Devices and Modules

Before installing or removing an additional device or module, read the respective documentation.

Incorrect installation of additional devices or modules may damage the blade or the additional devices or modules.

System Damage

WARNING: The intra-building port (s) of the equipment or subassembly is suitable for connection to intra-building or unexposed wiring or cabling only. The intra-building port (s) of the equipment or subassembly MUST NOT be metallically connected to interfaces that connect to the outside plant (OSP) or its wiring. These interfaces are designed for use as intra-building interfaces only (Type 2 or Type 4 ports as described in GR-1089) and require isolation from the exposed OSP cabling. The addition of primary protectors is not sufficient protection in order to connect these interfaces metallically to OSP wiring.

The intra-building port (s) of the equipment or subassembly must use shielded intra-building cabling/wiring that is grounded at both ends.

Operation

Make sure that the display devices that are permanently connected to the VGA interface provide a fire enclosure according to the IEC/EN/UL/CSA 60950-1 requirements.

All other devices that are only connected to the VGA interface for service purposes need supervision during operation and must be disconnected after maintenance.

Product Damage – Product Surface

High humidity and condensation on the blade surface causes short circuits.

Do not operate the blade outside the specified environmental limits. Make sure the product is completely dry and there is no moisture on any surface before applying power.

Overheating and Product Damage

When operating the product, make sure that forced air cooling is available in the shelf or enclosure.

Operating the product without forced air cooling may lead to blade overheating and blade damage.

When operating the product in areas of electromagnetic radiation, secure the product in the system using the faceplate screws. Make sure the product is fully shielded by the enclosure.

Data Corruption

If power to the unit is removed while a firmware update is in progress to the product's flash memory, the changes will not be saved or the flash memory may be corrupted. In such case, the product is likely to remain in non-operable state and will require reconditioning by qualified repair services.

Injuries or Short Circuits – Blade or Power Supply

In case the O-Ring diodes of the blade fail, the blade may trigger a short circuit between input line A and input line B so that line A remains powered even if it is disconnected from the power supply circuit (and vice versa).

To avoid damage or injuries, always check that there is no more voltage on the line that has been disconnected before continuing your work.

The EMI radiation compliancy of the product has been qualified in a reference system with the Spread Spectrum feature disabled. Please note that the integrator needs to verify the EMI radiation compliancy of other configurations/settings (for example, Spread Spectrum enabled).

Switch Settings

Blade Malfunction

Do not change settings of switches marked **Reserved**. Switches marked **Reserved** might carry production-related functions and can cause the blade to malfunction if setting is changed.

Check and change the setting of any switch not marked **Reserved** before installing the blade.

Blade Damage

Check and change switch settings before you install the blade. Setting/resetting the switches during operation can cause blade damage.

Battery

Blade Damage

Wrong battery installation may result in hazardous explosion and blade damage.

Always use the same type of Lithium battery as is installed and make sure the battery is installed as described in the manual.

Environment

Improperly disposing of used products may harm the environment. Always dispose of used products according to your country's legislation and manufacturer's instructions.

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