

# IFT-6300

SCSI-to-IDE and Fibre-to-IDE  
Rackmount Disk Array Subsystems

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User's Manual

Revision: 1.1





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## **Warnings and Certifications**

### **FCC** (applies in the U.S. and Canada)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this user's guide, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

This device complies with Part 15 of FCC Rules. Operation is subjected to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

#### **Warning:**

Use only shielded cables to connect I/O devices to this equipment.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.



This device is in conformity with the EMC

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## About This Manual

This manual provides the necessary information for an experienced computer user, with little or no RAID knowledge to install, use, and maintain an IFT-6300 SCSI-to-IDE or Fibre-to-IDE disk array subsystem.

The manual will be updated so as to be compatible with the latest product versions.

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Date: 15 Apr 2001

**Chapter 1** provides a brief introduction to the product, its features, options, and some information on RAID technologies and concepts.

**Chapter 2** describes how to install, configure and begin using the product.

**Chapter 3** explains how to use and maintain the subsystem.

**Chapter 4** is an overview of the RAID controller component.

**Chapter 5** gives some guidance regarding what steps to take in the event that problems are encountered.

**Chapter 6** describes how the Fibre-to-IDE models differ – in firmware, software, and hardware – from SCSI models.

**Appendix A** details the hardware specifications.

**Appendix B** is a glossary of technology terms used in this document and more generally in discussions of RAID.

**Appendix C** explains how to receive firmware and software upgrades, and other kinds of support.

### Revision History

15 Apr 2001 version 1.1 initial release



## Product Overview

Thank you for purchasing the IFT-6300.

The IFT-6300 RAID subsystem is a SCSI-to-IDE or Fibre-to-IDE RAID controller in a customized rackmount enclosure with drive bay space for eight EIDE hard drives. The subsystem comes without hard drives so that users can select the drive size, speed, and other considerations that they prefer. The controller itself is completely independent of the host.

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**IMPORTANT:**

The IFT-6300 is only designed to use IDE hard drives. It is not compatible with SCSI or other types of hard drives for installation and storage purposes.

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RAID provides both increased drive access speed and fault tolerance (i.e., one drive in an array can fail but data integrity and operations are maintained). The IFT-6300 provides additional fault tolerance with dual, redundant, hot-swappable fans and power supplies. All RAID functions are performed by a PowerPC® RISC CPU with high-speed SDRAM and firmware in flash memory.

The controller has sophisticated drive failure management capabilities that allow automatic reassignment of reserved blocks when a bad sector is encountered during a write. Hot swapping is supported through automatic disconnection of a failed drive and detection of a reserved drive, followed by background rebuilding of data. The controller also supports spare drive operation. What is particularly remarkable is all these failure recovery procedures are transparent to the host system.

Another particularly remarkable feature of the product is that it can be installed, configured, and used by users who know very little about RAID. Infortrend's Auto RAID Setup allows users to install what drives they have and then the controller handles all setup, ID assignment, and configuration.

### Standard Package Contents

- IFT-6300 RAID Subsystem
- Eight (8) drive trays
- RAID Management Software CD
- User's Manual
- One (1) null modem port adapter
- One (1) Power Cord

#### *SCSI Models Only:*

- One (1) SCSI Cable
- One (1) SCSI Bus Terminator (installed)

### Products Covered

Model Number	Description
IFT-6300-8U2	8-tray, Ultra2 SCSI
IFT-6300-8U3	8-tray, Ultra160 SCSI
IFT-6300-8F1	8-tray, FC-AL Fibre (1 channel)
IFT-6300-8F1D	8-tray, FC-AL Fibre (2 channels)