UNITEX
The Innovator,
Computer Storage

Blu-ray/LTO Hybrid System
ODA2020 HYBRID

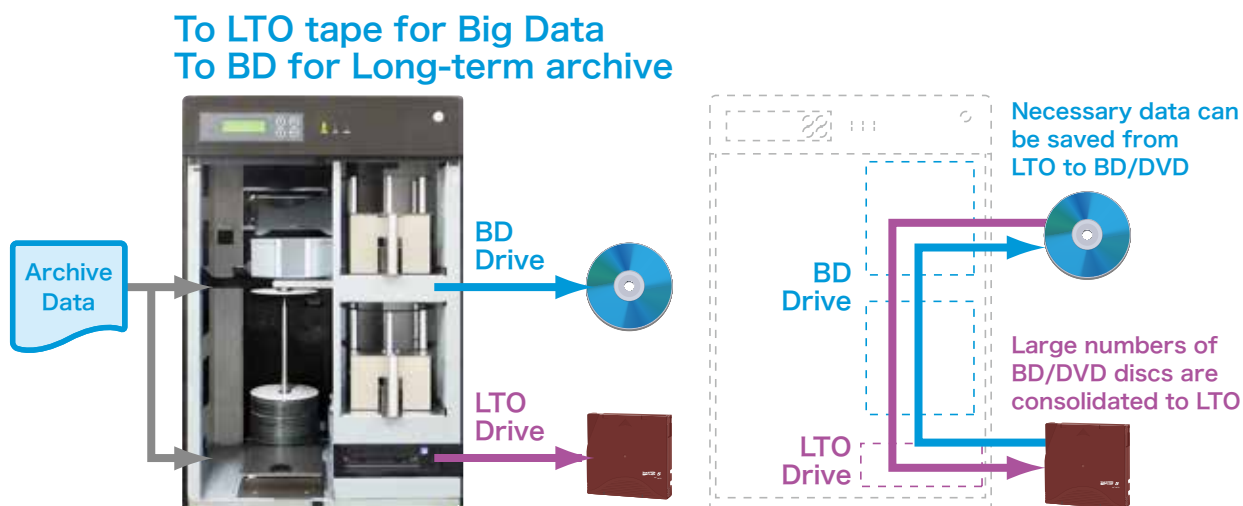## Automatic writing and label printing to maximum 200 BD/DVD/CD discs
One LTO tape drive and two optical drives are equipped

To LTO tape for Big Data
To BD for Long-term archive

Archive Data

BD Drive

LTO Drive

Necessary data can be saved from LTO to BD/DVD

BD Drive

Large numbers of BD/DVD discs are consolidated to LTO

LTO Drive

Features

Optical disc autoloader and LTO Tape drive are embedded to high performance server

- User can choose high capacity (1.5TB: native) LTO5 tape and high quality optical media which has long-term stability of over 50 years.
- Possible splitting/aggregation of data stored in between BD/DVD and LTO
- High sensitive documents can be encrypted by AES system
- The upper layer application interoperability by SDK

High-speed continuous processing of optical media

- 2 units of BD or DVD drive are equipped.
- The autoloader is capable of continuous read/write processing of up to 200 discs.

Large amounts of data can be stored to LTO tape by LTFS format

- One LTO-5 Tape drive is equipped
- Cartridge capacity 1.5TB (Native), 3.0TB (2:1 compression)
- High access speed: Max 140MB/sec
- AES256bit hardware data encryption function

Superior reliability

- MCBF(Mean Cycle Between Failure) of Unitex's own designed media transport mechanism is more than 100,000 times
- Server level high reliability controller is equipped.
- Key lock mechanism of the front door prevents illegal taking out the discs.

High quality Blu-ray drive for archiving can be equipped

- The drive is able to use a special type of Blu-ray disc that is guaranteed to ensure the data for over 50 years.

UNITEX FASTDVD Publisher is equipped as standard

■ Simple and easy to use main menu

- Data disc production function
- Writing function from image file to BD/DVD/CD
- Reading function of image file
- Media duplication
- Job management
- Display the progress of job

■ Parameter setting screen which enables detailed setting

- Selection of efficiency priority mode / first-in-first-out mode
- Automatic disconnection function of the failed drive
- Automatic display function of error / warning messages

■ A variety of standard features

- Multiple units of the publishing system can be controlled by single client PC
- Setting of the publishing system can be changed by Client PC
- Output report function which automatically save execution results of jobs
- Detailed log output function for failure investigation

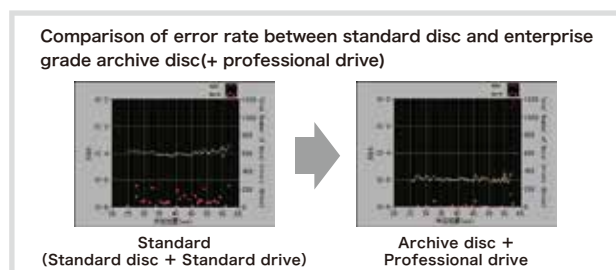#### ■ Built-in LTO drive supports LTFS (Linear Tape File System)

- The data stored in several optical discs can be aggregated to single LTO tape. In addition, it is equipped with a multi-copy function that can also copy files to optical discs from LTO tape.

UNITEX Corporation

ODA2020 HYBRID Blu-ray/LTO Hybrid System

Professional archive BD drive equipped model

Equipped with Pioneer BD drive which is suitable for digital archive. The BD drive uses a pick-up which has been specially selected, and the recording performance of the drive is pulled up to the highest level.

By using Mitsubishi Kagaku Media's enterprise grade BD-R for archive, you can write the data with high quality and can reduce the variation in the quality and can create high quality digital archive media which has long-term storage stability of more than 50 years.

Comparison of error rate between standard disc and enterprise grade archive disc(+ professional drive)

Standard
(Standard disc + Standard drive)

Archive disc +
Professional drive

The Enterprise grade media uses Mitsubishi Kagaku Media's own Metal Ablative Layer (MABL) technology.

Using the Arrhenius equation, the estimated lifetime of Enterprise Grade BD-R 50GB for Archive has been calculated at over 50 years in a 25 degrees Celsius, 80% relative humidity environment. In order to reduce the risk of data becoming unreadable earlier than anticipated, the Enterprise Grade BD-R 50GB for Archive is manufactured at a Japanese factory, and each lot is subjected to validation through accelerated aging tests. Only discs that have passed test criteria tighter than those for normal products are shipped. As advantages for durability of optical discs, the Enterprise Grade disc is possible to reproduce the data even when exposed in harsh environments (penetration into the water or salt water, high temperature and high humidity, low temperature, corrosive environment gas, chemicals, and solar) temporarily. It has been obtained by experimental results by Mitsubishi Kagaku Media.

Item of test	Test environment	Results
Resistance to seawater	·Store the disc into the sea in a week	Can reproduce
Resistance to corrosive gases	·H2S(25℃, 75% RH, 12.5ppm) ·SO2(25℃, 75% RH, 25ppm)96h exposure	Can reproduce
Chemical resistance	·Wipe off 20 times by hypochlorous acid (1%). ·Wipe off 20 times by ethanol (80%)	Can reproduce
Temperature and humidity durability	·80℃, 80% RH storage 750h ·-40℃ storage 250h	Can reproduce
Machine characteristic	·Bending test of the disc (bending angle of up to 130 degrees)	Can reproduce

※Long-term storage in those environments is not recommended.
Dirt surface of the disc attached during the tests was wiped with a soft dry cloth, and playback the data.

Long term storage at low cost and low environmental burden

Optical disc has accumulation of more than 20 years experiences as professional digital storage media which start from MO and UDO. As long term archiving storage, the optical disc has the following characteristics.

■ Low cost, Low environmental burden

Since optical drive does not need a large-scale air conditioning equipment at the time of storage, and no power consumption is required, it can reduce the operating cost. In addition, it is environment friendly media because migration frequency is suppressed in comparison to other media.

■ Mechanical characteristics

Optical disc is non-contact to pick-up, no physical degradation occurs due to repeated read/write. In addition, because the media itself does not require any dedicated electronic circuit or moving components, there is no need to worry about the failure on the disc itself.
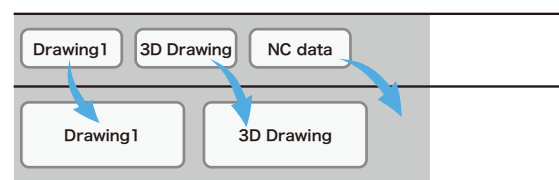
■ Data stability

Write-once optical disc is a real Write-Once media. Data tampering is impossible in principle. It is suitable for data storage of compliance.

About LTFS

LTFS makes it possible to directly access a file system that is divided into data partition and index partition LTO tape by the partition function, and save the information in the file to the index partition, and save the data itself to the data partition.

In addition, by using the LTFS, you can easily realize the data exchange of different platforms Windows / Linux / Mac to another.

Partitioning function

Drawing1 3D Drawing NC data

Drawing1 3D Drawing

Specifications

Model	ODA2020 HYBRID	ODA2020HQ HYBRID
Disc capacity	200 optical discs	
Computer for control	Controller is embedded in the main body	
Optical disc drive	DVD drive×2	Professional Archive BD drive×2
LTO drive	LTO Ultrium5×1	
Stacker	Input stacker 100×2 Output stacker 200×1 Error disc stacker: up to 20 discs×1	
Security function	Protection of media storage area with key lock	
Label printing method	Inkjet printer	
Optical drive recording speed	DVD-R x16/CD-R x40	BD-R x2, x4/ BD-R (LTH) x2, x4/ BD-R DL x2, x4/ DVD-R x16/CD-R x40
Support format	ISO9660/ISO9660 extension (joliet/RockRidge/character type extension) UDF1.02,UDF1.50,UDF2.50/UDF Bridge VIDEO (DVD-Video)	
LTO support format	LTFS	
Network client	Windows XP(x86)/Vista(x86)/7(x86,x64)/ Windows Server 2003(x86)/Windows Server 2008(x86)/ Windows Server 2008R2	
Control interface	Ethernet(1000BASE-T)	
Power	AC100～200V / 50～60Hz	
Operational temperature/humidity	Temperature：15℃～35℃ Humidity：20～80%（Non condensing)	
Dimensions(mm)	460(W) x 730(D) x 630(H)	
Weight	Around 35kg	
Standard software	UNITEX FASTDVD Publisher LTFS for Windows	

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