

PC-3000 – the ultimate standard for all areas of data recovery:



Top Data Recovery Solutions

Product Catalogue



SATA/PATA HDD



SAS/SCSI HDD



SATA/PCIe SSD



RAID



NAND Flash devices



Mobile devices

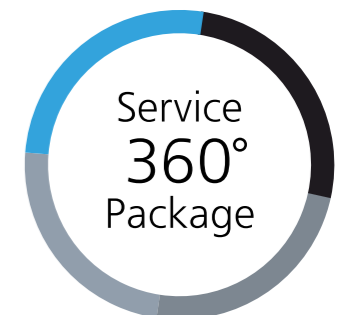
Every serious data recovery engineer uses PC-3000!

ACE Lab, being the leader of the industry, is always the first to apply all of the latest innovations. The PC-3000 Tools deliver breakthrough technologies, up-to-date methods, and techniques for data recovery and drive repair. Only with ACE Lab universal data recovery solutions you can recover maximum data from ALL storage devices, solving a variety of cases from simple to the most comprehensive ones. For the convenience of our users, the software is available in four languages: English, Japanese, Chinese, and Korean.

PC-3000 is more than just a set of essential tools:

You may be certain that with the PC-3000 you'll get the 360-degree approach to your needs:

- ▶ Constant development and perfection of the hardware,
- ▶ Regular software updates with many useful features,
- ▶ Comprehensive technical support to help you with especially difficult cases,
- ▶ A variety of training opportunities to master your skills in data recovery.



Find PC-3000 that will suit your needs

Product name	Storage media type							
	SATA/IDE HDD	SATA SSD	PCIe SSD	SAS/SCSI HDD	RAID	NAND Flash devices	NAND Flash devices + Monoliths	Mobile devices
PC-3000 Portable III System	✓					✓ <i>for logical issues</i>	✓ <i>for logical issues</i>	
PC-3000 Portable III SSD System	✓	✓	✓			✓ <i>for logical issues</i>	✓ <i>for logical issues</i>	
PC-3000 Portable III RAID System	✓				✓	✓ <i>for logical issues</i>	✓ <i>for logical issues</i>	
PC-3000 Portable III All-In-One System	✓	✓	✓			✓ <i>for logical issues</i>	✓ <i>for logical issues</i>	
PC-3000 Express System	✓							
PC-3000 Express RAID System	✓				✓			
PC-3000 Express Ultimate System	✓	✓			✓			
PC-3000 UDMA System	✓							
PC-3000 UDMA SSD System	✓	✓						
PC-3000 UDMA Ultimate System	✓	✓			✓			
PC-3000 SAS System				✓				
PC-3000 SAS RAID System				✓	✓			
PC-3000 RAID Hybrid System	✓			✓	✓			
PC-3000 Flash Basic Package						✓		
PC-3000 Flash All-in-One Package						✓	✓	
PC-3000 Mobile PRO <i>only for LEA</i>								✓
PC-3000 Complete Bundle	✓	✓	✓		✓	✓	✓	
PC-3000 Standard Forensic System <i>only for LEA</i>	✓	✓	✓		✓	✓ <i>for logical issues</i>	✓ <i>for logical issues</i>	✓
PC-3000 Ultimate Forensic System <i>only for LEA</i>	✓	✓	✓		✓	✓	✓	✓



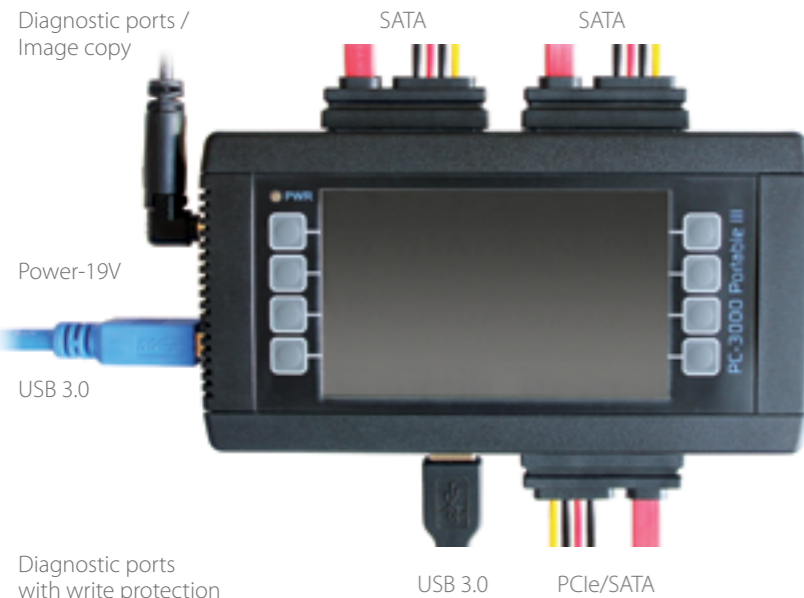
PC-3000 Portable III Systems

The world's only tool for extracting all-device data whatever the damage is



Universal solution to recover data from the widest range of storage media

Years of research and development in Data Recovery tools production help ACE Lab engineers to accumulate all knowledge and TOP data recovery technologies in one universal device – the PC-3000 Portable III, the only tool that can recover data from practically ALL types of physically and logically damaged storage devices.



PC-3000 Portable III allows recovering data and digital evidence from:

- ▶ SATA HDD
- ▶ PATA HDD
- ▶ SAS HDD
- ▶ USB HDD
- ▶ RAID
- ▶ PCIe/NVMe SSD
- ▶ Apple MacBook
- ▶ SATA SSD
- ▶ USB Flash
- ▶ mSD / SD cards.

You can work with 3 drives at a time

Plug storage media directly to the PC-3000 Portable diagnostic ports: SATA, SAS*, PATA**, USB, PCIe NVMe. Reach a maximum speed up to 490 Mb/s.

*Via SAS adapter
**Via PATA adapter (supplied optionally)

All ports can be used separately or together at a time.

With the PC-3000 Portable III you can make a real workstation out of your laptop! Recover data directly in the field fast and safely.

The PC-3000 Portable III Kit:



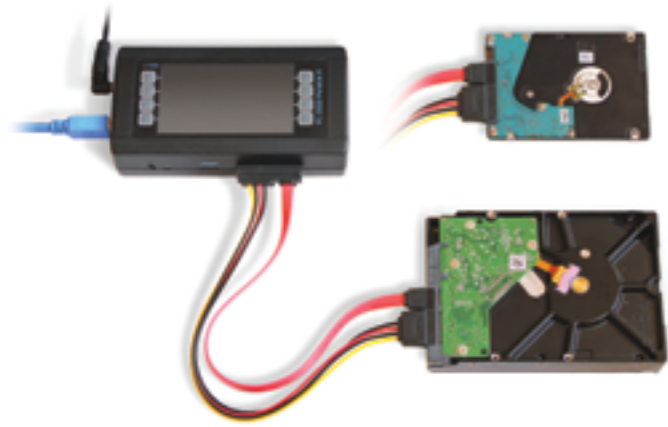
1.	PC-3000 Portable III controller	- 1 pc.	11.	ATCS, ATDA probe unlock	- 1 pc.
2.	PC USB TERMINAL 3 adapter	- 1 pc.	12.	M.2 PCIe NVMe/AHCI SSD & M.2 SATA SSD adapter	- 1 pc.
3.	SATA-micro SATA adapter	- 1 pc.	13.	2-in-1 SD/microSD Card Reader Adapter	- 1 pc.
4.	PC-FUJ.SATA adapter	- 1 pc.	14.	USB 2.0 cable	- 1 pc.
5.	PC-SAMSUNG adapter	- 1 pc.	15.	USB 3.0 cable	- 1 pc.
6.	PC-SEAG.SATA adapter	- 1 pc.	16.	SATA/POWER cable	- 3 pc.
7.	PC-SEAGATE adapter	- 1 pc.	17.	Power supply unit	- 1 pc.
8.	PC-TOSH.SATA adapter	- 1 pc.	18.	IDC10 (30 cm) cable	- 1 pc.
9.	PC-WD 3.5" adapter	- 1 pc.	19.	PC-3000 Portable III software, resource database*	- 1 pc.
10.	PC-WD 2.5" adapter	- 1 pc.	20.	User manual	- 1 pc.

Be equipped for any type of storage media in your lab using just one tool!

* Available in the Technical Support Portal.



With PC-3000 Portable III You Can Deal with All Storage Media Types!



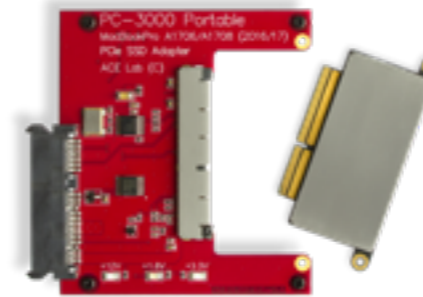
Recover most data from practically all today's HDDs

Among all storage devices, HDDs store the highest volume of information than any other storage media. So it is important for a data recovery professional and digital forensics investigator to be able to extract data from various HDDs. With the PC-3000 Portable III you can recover data from practically all types of HDD: SATA/PATA/SAS.



The WORLD'S ONLY TOOL supporting SSD M.2 PCIe NVMe in a techno mode

Recover data from various brands of M.2 NVMe and M.2 SATA no matter what capacity they are.



MacBook Pro A1706/A1708 (2016/2017) PCIe SSD adapter

Full support of all MacBook Pro 13 types with functional keys.



SSD PCIe U.2 adapter

to recover data from the most cutting-edge SSDs of server type.



Recover PCI-E x16 with SSD PCIe x16 Adapter

For server-type PCI-E x16 full size Solid State Drives.



PCIe NVMe/AHCI Adapter for Apple Macbook SSD

For damaged Macbook and iMac 2013-2017 Apple Solid State Drives.



Recover data from SAS with SAS adapter

For connecting server-type HDD and SSD based on SAS interface.



Support of USB HDD/SSD/Flash

Direct connection with native USB devices in a techno mode.



With PC-3000 Portable III You Can Deal with All Storage Media Types!

Data Recovery is Easier and Faster Now



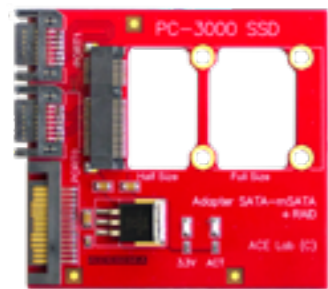
PC-SATA-PATA Adapter

Ability to work with old PATA (IDE) Drives.



Support of mSD/SD cards via USB

The PC-3000 Portable III kit includes a special Card Reader adapter for mSD/SD card in case of logical damages. No limitations in mSD/SD card capacity.



Sata-mSata RAID adapter – a universal adapter for both types of mSATA drives:

- ▶ Classic models of mSATA SSD,
- ▶ RAID models when a single mSATA SSD has two drives on both sides of PCB.



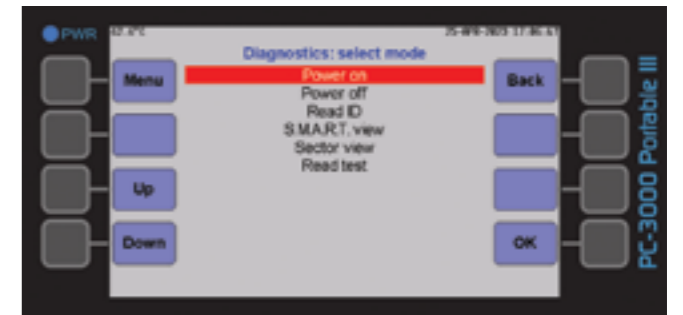
You can recover data from RAID

Semi-Automatic RAID config recovery from various types of storage servers.

Independent STANDALONE MODE

To diagnose a drive quickly without a host PC and create an image.

- ▶ Hash-sum calculation at reading or copying data.
- ▶ S.M.A.R.T. View for connected storage media.
- ▶ Sector View for visual data analysis stored on a plugged drive.

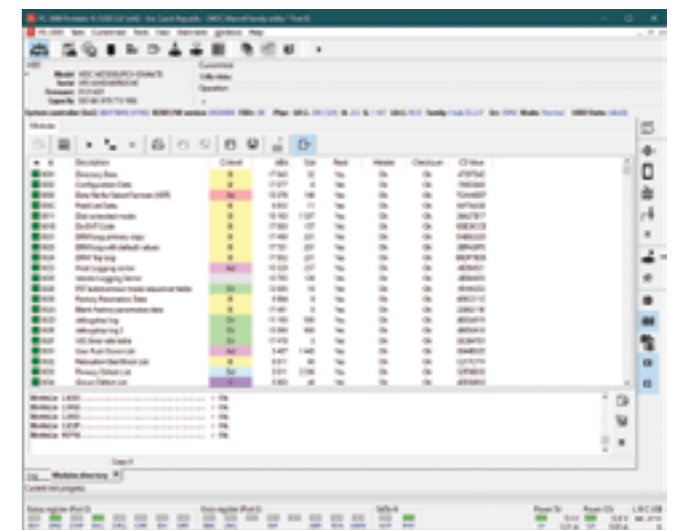


Convenient EASY MODE

To solve simple cases in a few clicks.

High-end FULL-FEATURED MODE

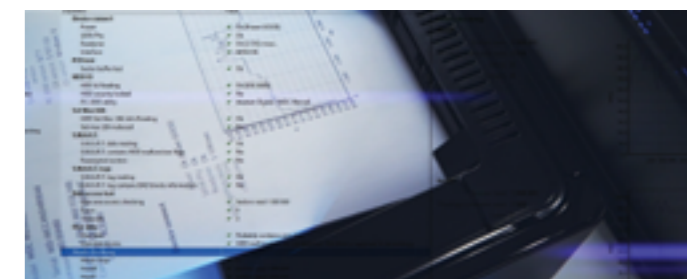
for recovering as many cases of various complexity as possible.



Hardware Write Protection

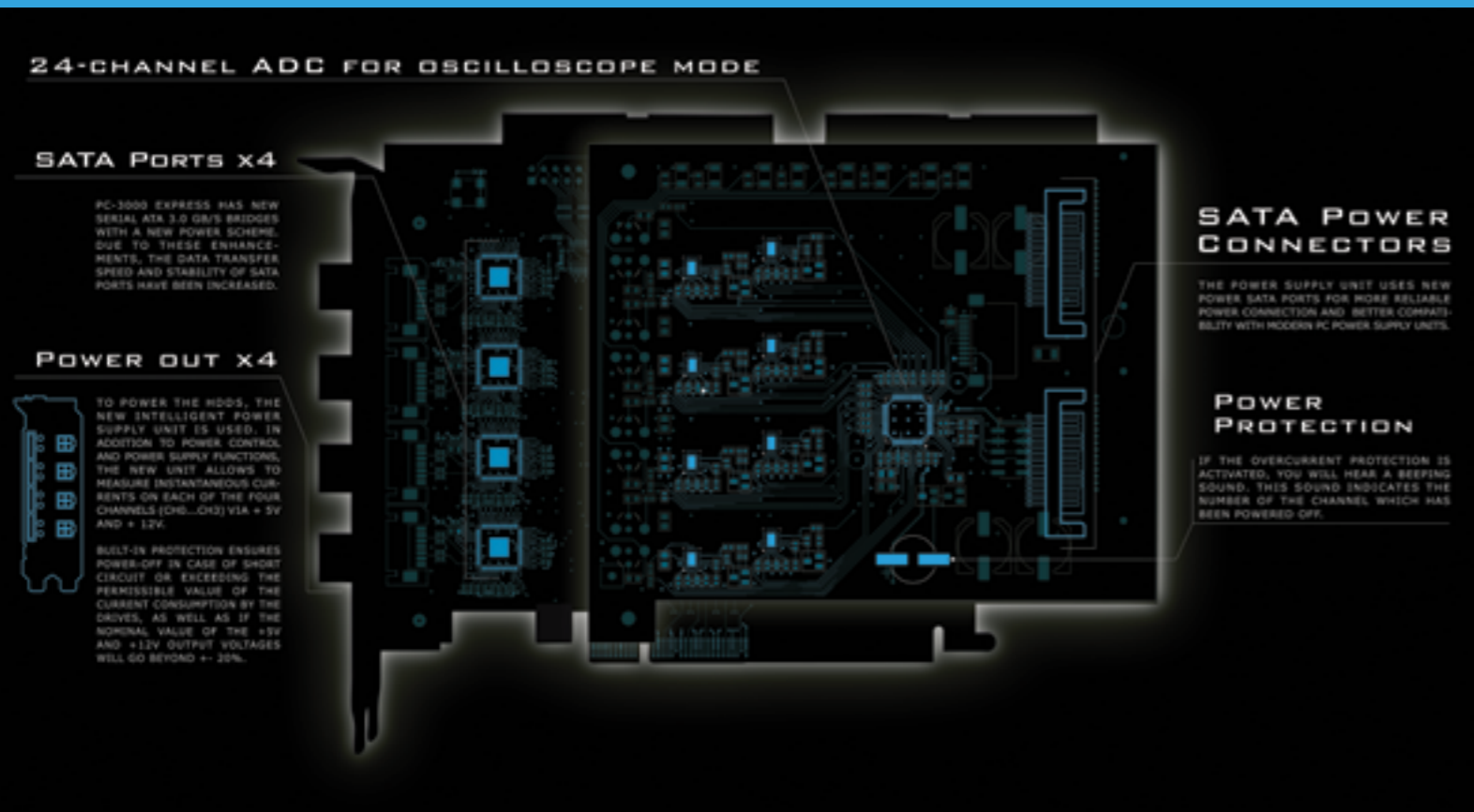


A diagnostic report of the drive status





PC-3000 Express Systems



The PC-3000 Express Kit:



Professional data recovery solutions for the labs with a big flow of cases

6-port* tester-board + **4 SATA** ports with speed up to **150 MB/s** + **2 PATA** ports with speed up to **133 MB/s**

The PC-3000 Express as part of various PC-3000 Express Systems allows recovering data and digital evidence from SATA HDD, PATA HDD, SATA SSD, RAID.

Work with 4 damaged HDD/SSD simultaneously.

Key Features:

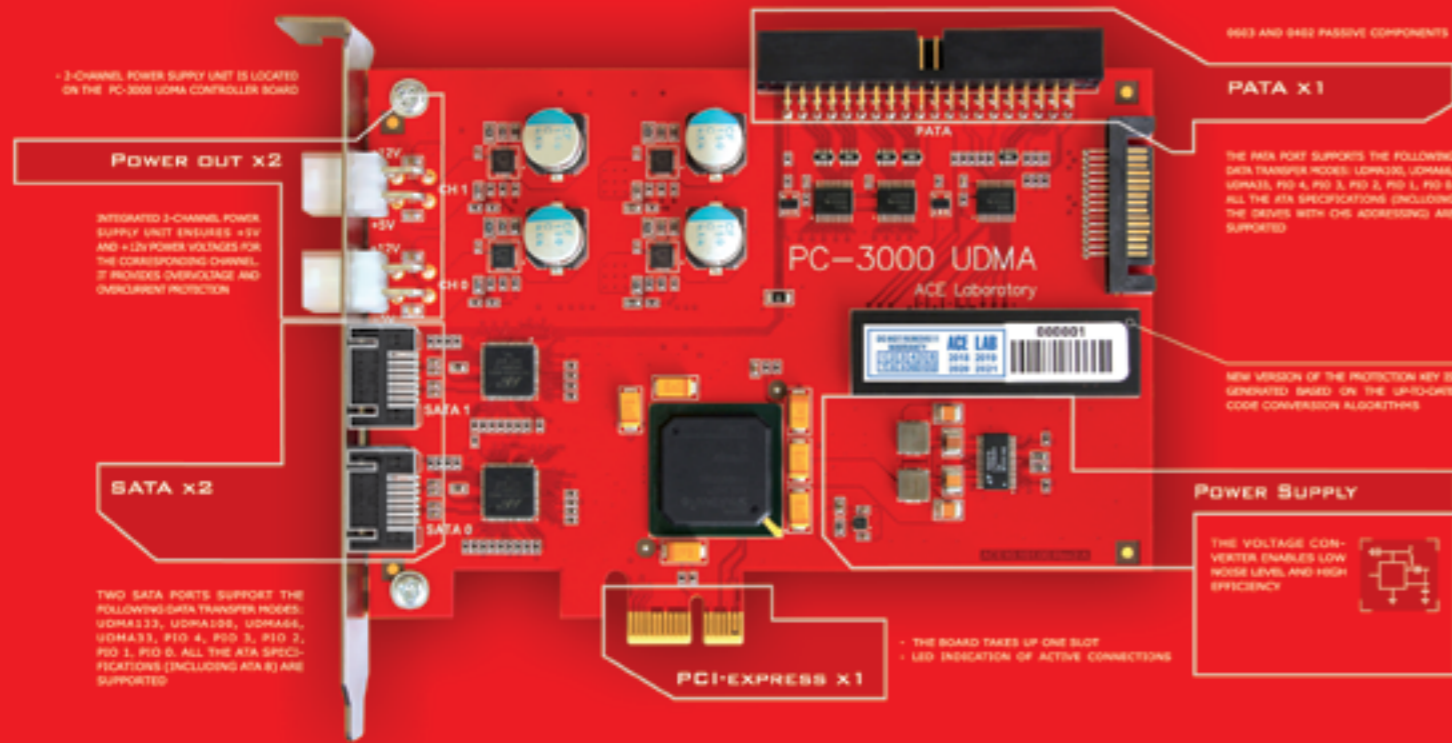
- ▶ If you specialize in the HDD data recovery, the PC-3000 Express Systems are the world's best, time-trusted tools for any types of HDD recovery.
- ▶ Of all the PC-3000 systems, the PC-3000 Express based systems are the best for SATA RAID recovery. You can work with 4 damaged HDDs in a RAID at the same time and any number of drives in a RAID connected in a standard way.
- ▶ The PC-3000 Hybrid System is the best ACE Lab solution for intensive flow of RAID cases. You have extra 8 diagnostic ports and you can handle both damaged SATA and SAS drives in a RAID. With the PC-3000 Hybrid System you save much instead of buying the PC-3000 Express RAID System + the PC-3000 SAS System or the PC-3000 Express System + the PC-3000 SAS RAID System.
- ▶ Efficient HDD diagnostics due to the oscilloscope functions of the Intelligent Power Supply Unit.
- ▶ Any HDDs with any capacity are fully supported in a techno mode for deep HDD firmware recovery!

1. PC-3000 Express controller	- 1 pc.	14. PC-WD 3.5" adapter	- 1 pc.
2. PC-USB PWR adapter	- 1 pc.	15. PC-WD 2.5" adapter	- 1 pc.
3. PC USB TERMINAL 3 adapter	- 2 pc.	16. ATCS, ATDA probe unlock	- 1 pc.
4. PC-2" adapter	- 1 pc.	17. USB 2.0 cable	- 2 pc.
5. SATA-micro SATA adapter	- 1 pc.	18. SATA RAID edition (100 cm) cable	- 4 pc.
6. MX-SAFE adapter	- 1 pc.	19. UDMA80 (80 cm) flat cable	- 2 pc.
7. PATA-SATA (15 cm) power adapter	- 2 pc.	20. IDC10 (30 cm) cable	- 2 pc.
8. PC-FUJ.SATA adapter	- 1 pc.	21. MX-SAFE power cable	- 1 pc.
9. PC-QUANTUM adapter	- 1 pc.	22. SATA HDD (100 cm) power cable	- 2 pc.
10. PC-SAMSUNG adapter	- 2 pc.	23. PATA HDD (85 cm) power cable	- 2 pc.
11. PC-SEAG.SATA adapter	- 2 pc.	24. PC-3000 Express software, resource database**	- 1 pc.
12. PC-SEAGATE adapter	- 2 pc.	25. User manual	- 1 pc.
13. PC-TOSH.SATA adapter	- 2 pc.		

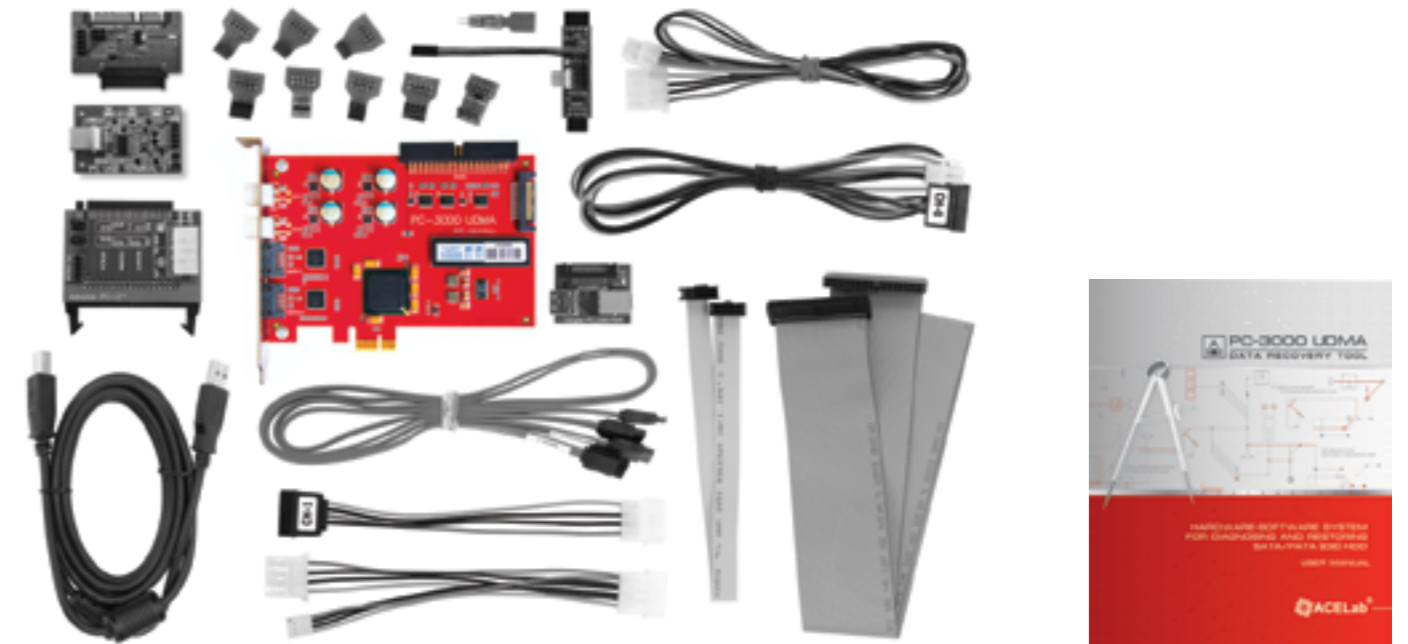
* SATA0 and SATA1 are the primary ports, SATA2 and SATA3 ports are switchable with the PATA ports (PATA0 and PATA1).

** Available in the Technical Support Portal.

PC-3000 UDMA Systems



The PC-3000 UDMA Kit:



The optimal choice for data recovery start-ups or daily tasks in a data recovery facility

**3-port*
tester-board** + **2 SATA** ports with speed up to **150 MB/s** + **1 PATA** ports with speed up to **133 MB/s**

The PC-3000 UDMA as part of various PC-3000 UDMA Systems allows recovering data and digital evidence from SATA HDD, PATA HDD, SATA SSD, RAID.

Work with 2 damaged HDD/SSD simultaneously.

Key Features:

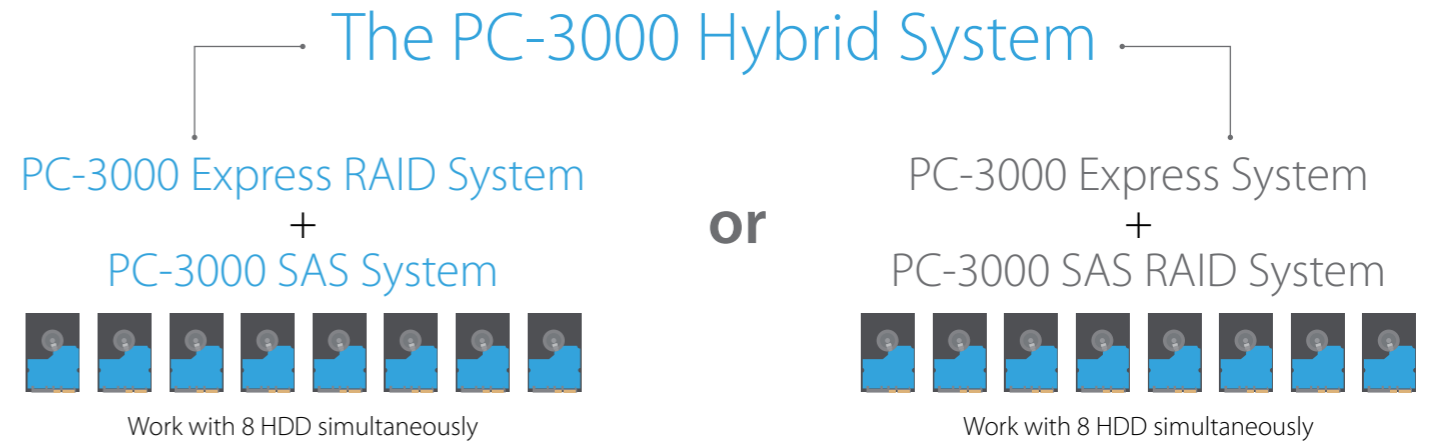
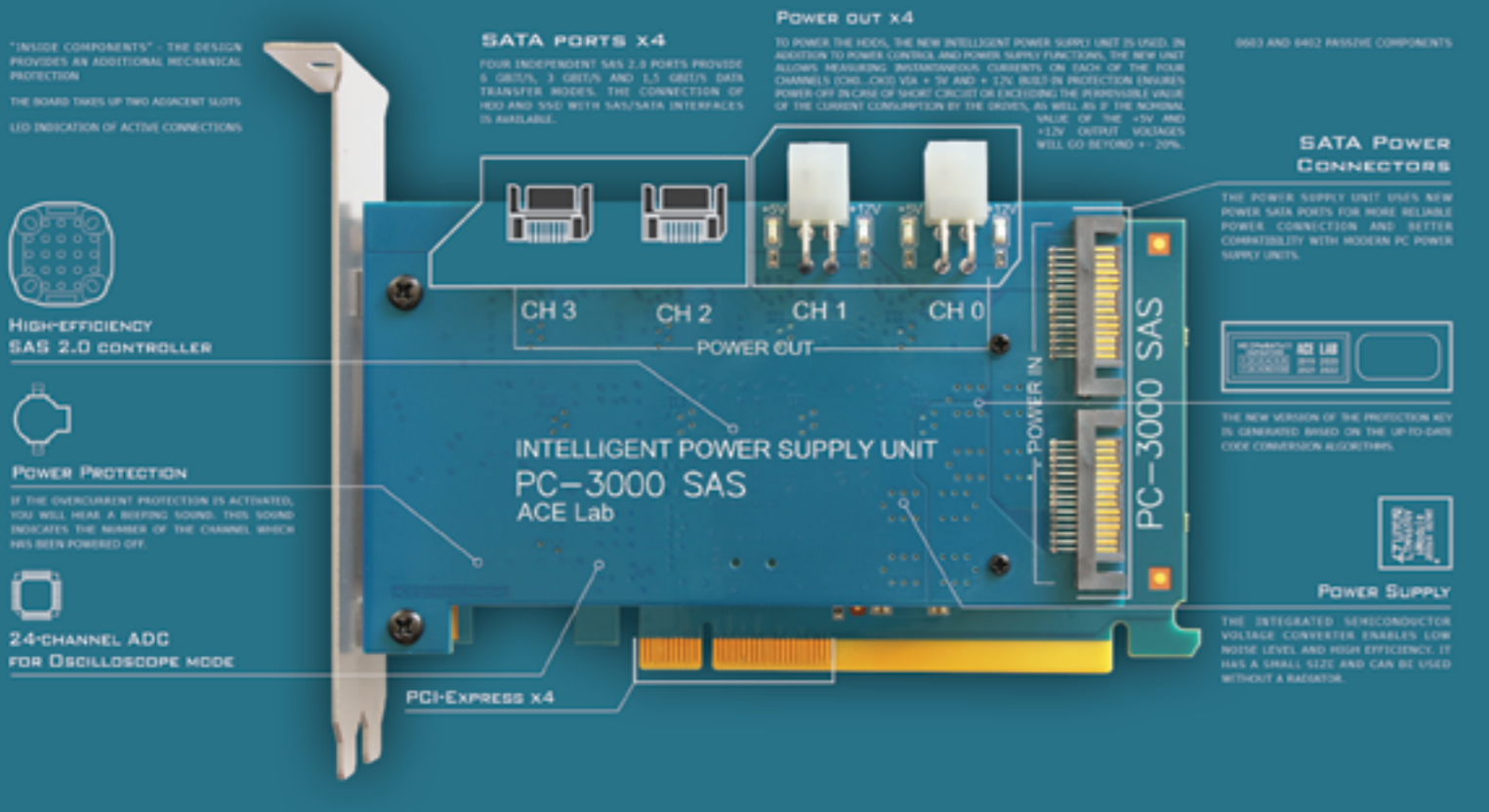
- ▶ The best cost-effective way to get started with the PC-3000 technology, having the full PC-3000 techno mode functionality.
- ▶ You can upgrade your basic PC-3000 UDMA workstation with SSD and RAID add-ons later.
- ▶ The "main workhorse" for data recovery companies, as it combines high efficiency and reasonable price.
- ▶ The PC-3000 UDMA systems perfectly fit for standard, non-urgent day-to-day tasks.
- ▶ Any HDDs with any capacity are fully supported in a techno mode for deep HDD firmware recovery!

1. PC-3000 UDMA controller	- 1 pc.	14. PC-WD 3.5" adapter	- 1 pc.
2. PC-USB PWR adapter	- 1 pc.	15. PC-WD 2.5" adapter	- 1 pc.
3. PC USB TERMINAL 3 adapter	- 1 pc.	16. ATCS, ATDA probe unlock	- 1 pc.
4. PC-2" adapter	- 1 pc.	17. USB 2.0 cable	- 2 pc.
5. SATA-micro SATA adapter	- 1 pc.	18. SATA RAID edition (100 cm) cable	- 1 pc.
6. MX-SAFE adapter	- 1 pc.	19. UDMA80 (80 cm) flat cable	- 1 pc.
7. PATA-SATA (15 cm) power adapter	- 1 pc.	20. IDC10 (30 cm) cable	- 1 pc.
8. PC-FUJ.SATA adapter	- 1 pc.	21. MX-SAFE power cable	- 1 pc.
9. PC-QUANTUM adapter	- 1 pc.	22. SATA HDD (100 cm) power cable	- 1 pc.
10. PC-SAMSUNG adapter	- 2 pc.	23. PATA HDD (85 cm) power cable	- 1 pc.
11. PC-SEAG.SATA adapter	- 2 pc.	24. PC-3000 Express software, resource database**	- 1 pc.
12. PC-SEAGATE adapter	- 2 pc.	25. User manual	- 1 pc.
13. PC-TOSH.SATA adapter	- 2 pc.		

* SATA0 is the primary port, SATA1 is switchable with the PATA port (PATA0).

** Available in the Technical Support Portal.

PC-3000 SAS 6 Gbit/s Systems



The PC-3000 Hybrid System is the best ACE Lab solution for intensive flow of RAID cases. You have extra 8 diagnostic ports and you can handle both damaged SATA and SAS drives in a RAID. With the PC-3000 Hybrid System you save much instead of buying the PC-3000 Express RAID System + the PC-3000 SAS System or the PC-3000 Express System + the PC-3000 SAS RAID System.

The most sophisticated products to recover data from SAS drives

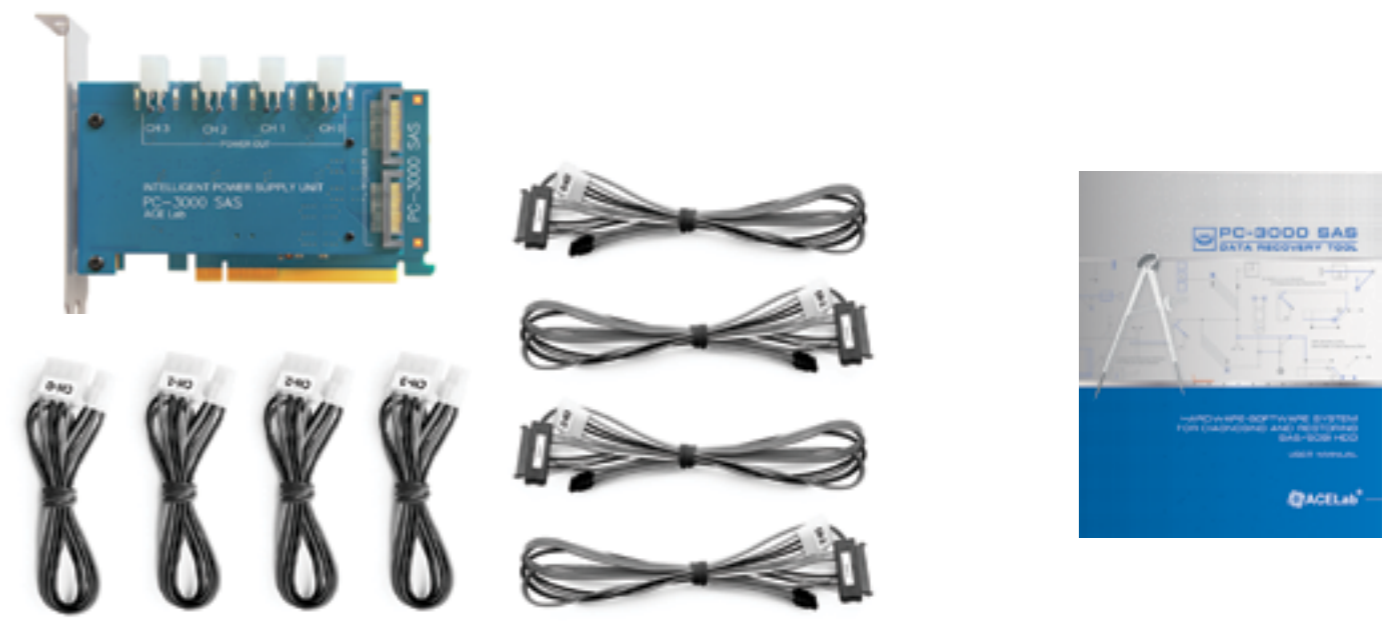
4-port tester-board + **4 SAS ports** with speed up to **600 MB/s** + **Fast imaging** of healthy **SAS/SCSI & SATA HDD/SSD drives**

The PC-3000 SAS as part of various PC-3000 SAS Systems allows recovering data and digital evidence from SAS HDD, SCSI HDD, RAID.
Work with 4 damaged HDD simultaneously.

Key Features:

- ▶ Unique solution to work with firmware on SAS/SCSI drives.
- ▶ More efficient diagnostics and analysis of the drives due to the oscilloscope functions of the new Intelligent Power Supply Unit.
- ▶ The ability for solving issues with servers and storage systems based on SAS drives.
- ▶ The PC-3000 SAS 6 Gbit/s is a must-have solution for companies that recover data from SAS and SCSI and want to do it with the most sophisticated tools and techniques available in the shortest time possible.

The PC-3000 SAS Kit:



1.	PC-3000 SAS 6Gbit/s controller	- 1 pc.
2.	SAS SFF-8482/SATA/Molex (100 cm) cable	- 4 pc.
3.	HDD SCSI (50 cm) power cable	- 4 pc.
4.	PC-3000 SAS software, resource database*	- 1 pc.
5.	User manual	- 1 pc.

* Available in the Technical Support Portal.



Data Recovery from HDD



The only tool to get maximum data at:

Physical Damages

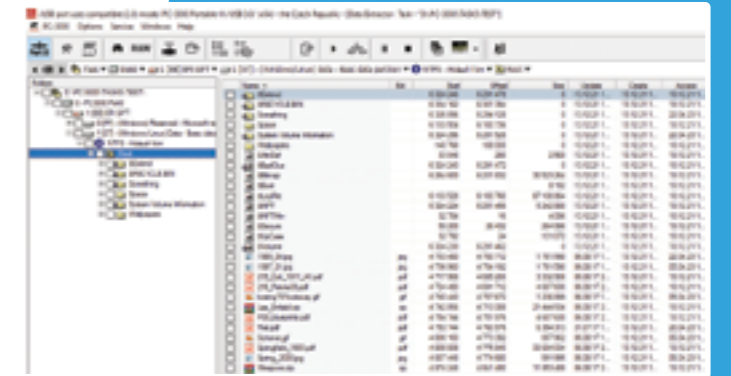
- ▶ Not detected in the OS/BIOS
- ▶ Damaged HDD heads
- ▶ Firmware corruption of HDD/SSD
- ▶ BSY state of HDD/SSD
- ▶ HDD/SSD password protection
- ▶ Damaged PCB

Logical Damages

- ▶ Deleted Files/Folders
- ▶ Formatted partitions
- ▶ Encrypted partitions
- ▶ Damaged File System
- ▶ Unknown RAID configuration
- ▶ Unstable reading of bad sectors

Firmware Issues

- ▶ Corrupted Translator
- ▶ SMART Issues
- ▶ Password Locked Issues
- ▶ Self Encrypting Drives
- ▶ ROM Issues
- ▶ MC corruption (Seagate)
- ▶ 2nd level Translator damage on (WD SMR)

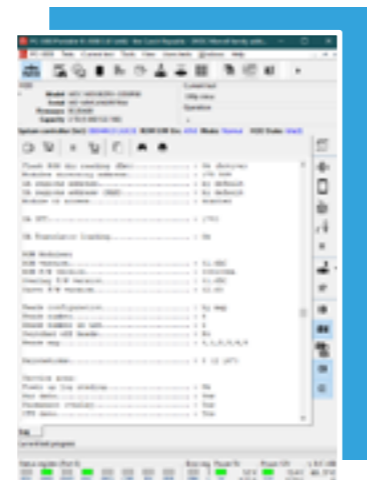
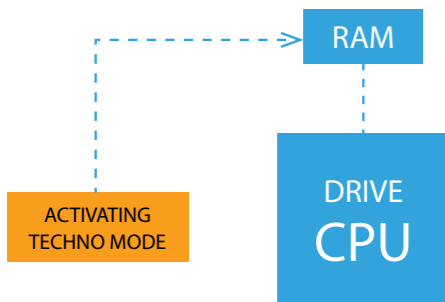


Recover most data from HDD with the PC-3000 Systems

Within all types of the PC-3000 Portable III/Express/UDMA/SAS Systems there are unique science-based proprietary technologies known as the Data Extractor software that allow to recover data from practically all types of physically and logically HDD issues.

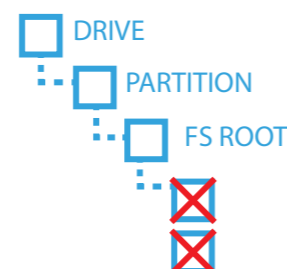
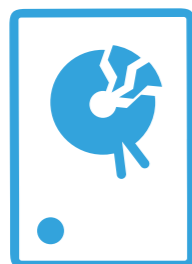
Unique PC-3000 technology of low-level access to storage media

Recover evidence when all imagers and other tools fail!



Recover data from physically and logically damaged storage devices

Recover evidence when all imagers and other tools fail!



Extended functionality for working with damaged HDD

- ▶ Reading HDD in technological mode.
- ▶ Reading by head map.
- ▶ Work with both old and new HDD including the latest modifications WD and Seagate SMR drives.
- ▶ HDD/SSD Trim bypassing.
- ▶ Possibility to manage Seagate Media Cache.
- ▶ Full support of the latest Seagate and WD families.
- ▶ Reading mode selection (UDMA 133/100/66/33, PIO 4/3/2/1/0).
- ▶ Read forward and backward.
- ▶ Read ahead (cache function) disabling.
- ▶ Autorelocation disabling.
- ▶ Reading with hardware and software retries.
- ▶ Reading with ignoring ECC.
- ▶ Power supply control.
- ▶ Software and hardware resets.
- ▶ Virtual translator mode for recovering data from HDDs with corrupted dynamic translators.
- ▶ Flexible map operation functionality (separate map building for heads).

Wide range of supported File Systems

FAT, exFAT, NTFS, ReFS, HFS+, APFS, EXT2/3/4, XFS, F2FS, ReiserFS, BtrFS, VMFS, UFS1/2, ZFS, DHF4.1, WFS0.x (Digital Video Recorder).

Data recovery from virtual drives

flat, vmdk, vhd, vhdx, dmg.

Data recovery from encrypted partitions

FileVault, BitLocker, TrueCrypt.



Data Recovery from RAID



The easiest, fastest and smartest systems to recover data from RAID

Coming with the PC-3000 Portable III/Express/UDMA/SAS systems, the RAID Add-on enables you to recover data from all types of RAID from the easiest cases to the most complex ones.

Assemble most of RAID configurations that are possible

Frequently it is not possible to use the original RAID controller, it means you need to emulate it. The PC-3000 RAID Systems help you to assemble all popular RAID configurations:

- ▶ 0 (Stripe), 1 (Mirror), 1E Offset and Adjacent, JBOD, 4, 5, 5E, 5EE, 6 and 6-Adaptec, 10, 50, 60, WSS (Windows Storage Spaces), ZFS RAID-Z, Btrfs RAID, Apple Fusion Drive (HFS+, APFS),
- ▶ custom RAID configurations based on graphical representation.

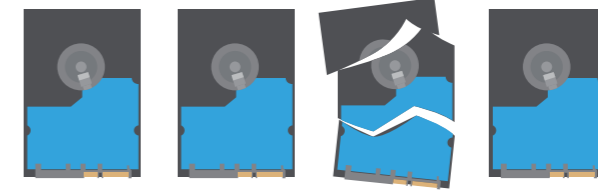
0	1	XOR	2	3	XOR
5	XOR	4	7	XOR	6
XOR	8	9	XOR	10	11

Assemble a RAID with no restrictions on the types of members:

- ▶ damaged drives connected to diagnostic ports,
- ▶ storage devices connected to your PC,
- ▶ image files,
- ▶ previously created virtual RAID.

UNIQUE! Recover data even from RAID with physically damaged HDDs

Experience unparalleled data recovery potential through the seamless integration of the PC-3000 technology and RAID functionality, allowing you to retrieve the maximum amount of data.



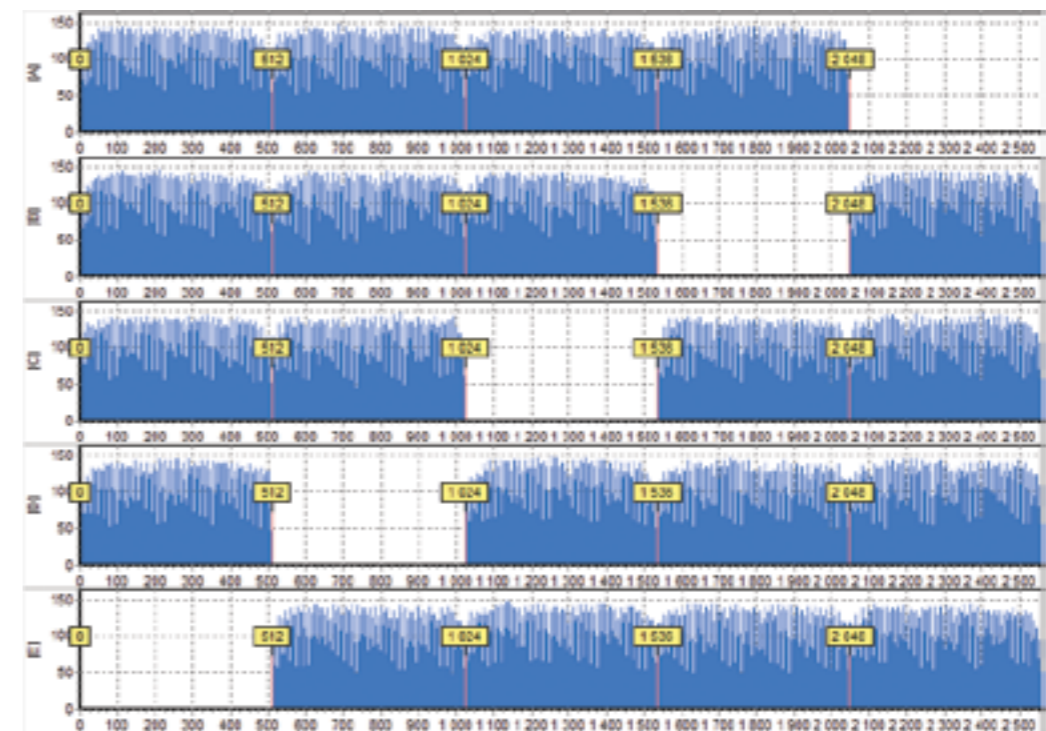
Recovering Data from RAID with Logical Problems

When working with the PC-3000 RAID Systems, you'll successfully overcome logical issues on RAID such as lost partitions, deleted files, damaged file systems, encrypted storage and more. The PC-3000 RAID systems are equipped with a comprehensive suite of logical data recovery features to ensure that you can recover most of the most valuable data.

Detect the RAID configuration easily

Detecting RAID configurations can be a serious challenge, especially when the RAID parameters are hard to reach. That's where our RAID System excels:

- ▶ Automatic configuration detection via RAID metadata for popular NAS storages and software arrays.
- ▶ Automatic configuration detection via user data.
- ▶ Semiautomatic RAID configuration detection modes to efficiently solve a variety of RAID cases, from the simplest to the most complex.



Robust modes to check the RAID configuration

Ensure your RAID configuration is correct:

- ▶ RAID parity validation,
- ▶ file system and user data validation,
- ▶ reliable techniques for detection of outdated RAID members.

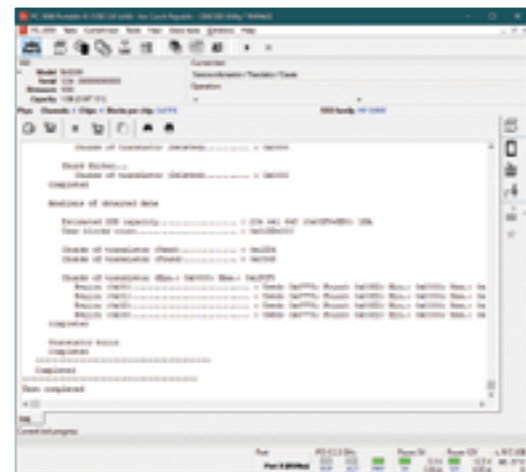


Data Recovery from SSD



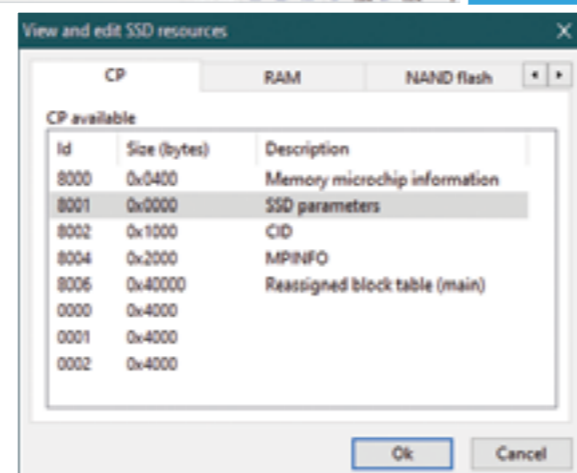
The leading-edge unique solution for recovering SSD in the technological mode

The PC-3000 SSD Software is a professional product intended for restoring SSD and recovering data from them. You can use the PC-3000 SSD together with the systems based on the PC-3000 Portable III/Express/UDMA products.



The only product to work with damaged NVMe

- ▶ Diagnose SATA/NVMe SSD in the technological mode.
- ▶ View the logs of hidden defects (P-page, G-page).
- ▶ Reset the logs and S.M.A.R.T. parameters.
- ▶ Search for the damaged memory chips.
- ▶ Provide direct access to the content of memory chips so that you do not need to unsolder the chips.
- ▶ Emulate the translator operation in order to get an access to user data.
- ▶ Load the microcode into the drives RAM.
- ▶ Verify and restore the SSD service information.
- ▶ View the password and reset the password that was earlier set on the SSD.
- ▶ Turn off background processes in the SSD to prevent data damage.
- ▶ Handle logical issues.



PC-3000 SSD Add-on Options:

	PC-3000 SSD	PC-3000 SSD Extended
Compatibility with the PC-3000 hardware-software systems	PC-3000 Express, PC-3000 UDMA	PC-3000 Portable III
Supported manufacturers:	ADATA, AMD, Apacer, Corsair, Crucial, DEXP, Gigabyte, GOODRAM, HP, INDILINX, Intel, KingDian, KingSpec, Kingston, Lenovo, Lexar, Lite-On, Micron, OCZ, Patriot, Plextor, PNY, QUMO, RevuAhn, Samsung, SanDisk, Seagate, Silicon Power, Smartbuy, Transcend, Western Digital, etc. More manufacturers are added with the updates.	
Supported interfaces:		
SATA	✓	✓
M.2 SATA*	✓	✓
mSATA*	✓	✓
AHCI*		✓
NVMe*		✓
M.2 PCIe*		✓
PCIe x16*		✓
Apple Macbook*		✓

*Appropriate adapter from ACE Lab is required.

Breakthrough: PCIe SSD Support in the PC-3000 Portable III



M.2 PCIe NVMe/AHCI SSD & M.2 SATA SSD adapter



PCIe NVMe/AHCI Adapter for Apple Macbook SSD



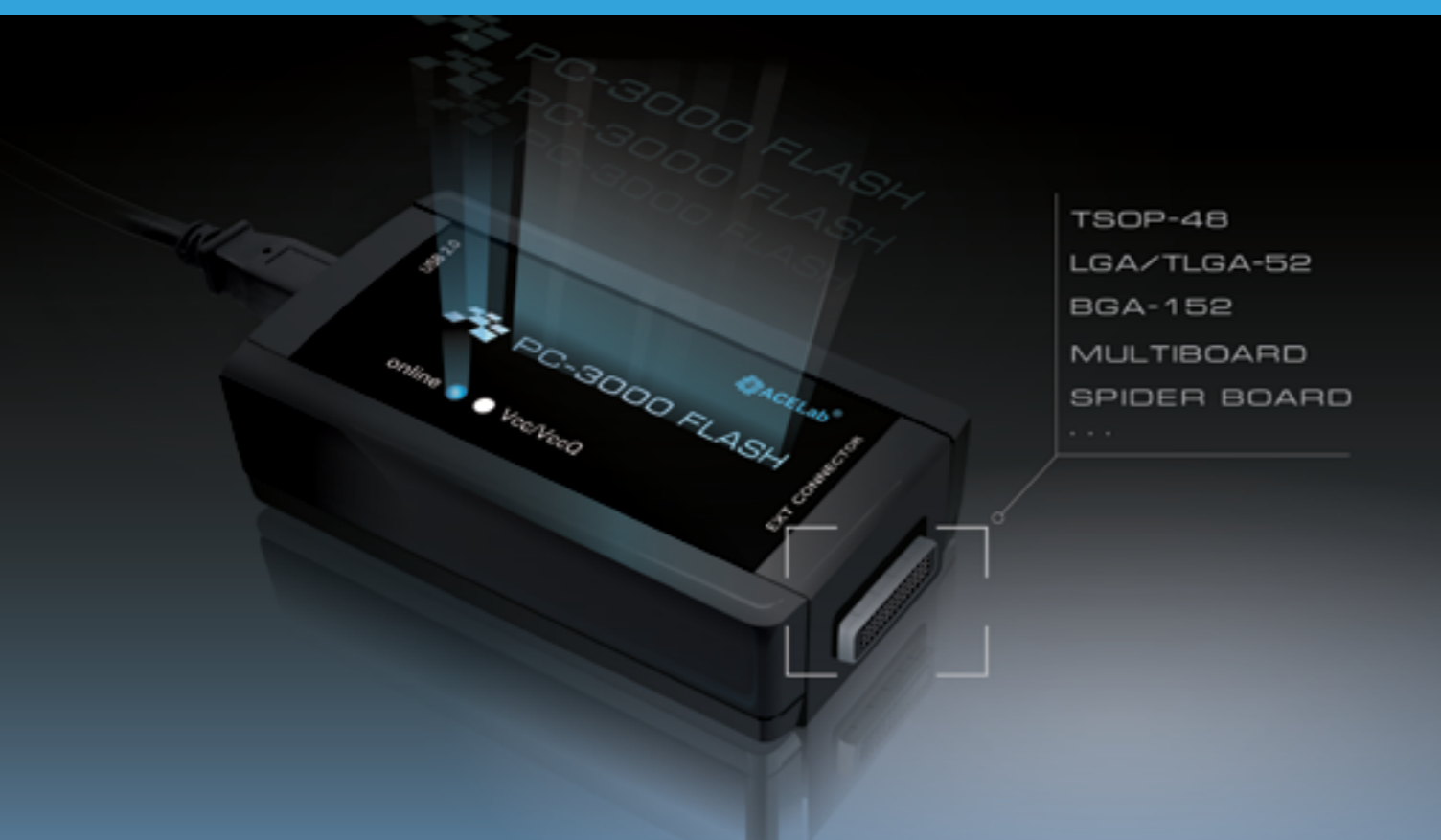
PCIe x16 SSD Adapter



Macbook Pro A1706/A1708 adapter



PC-3000 Flash



PC-3000 Flash Basic Package



1.	PC-3000 Flash Reader	- 1 pc.	7.	LGA-52/TSOP-48 Module	- 1 pc.
2.	TSOP-48 adapter	- 1 pc.	8.	BGA-152/VBGA-100 Module	- 1 pc.
3.	LGA/TLGA-52/60 (14x18) adapter	- 1 pc.	9.	USB 2.0 Cable	- 1 pc.
4.	BGA-152/132 adapter	- 1 pc.	10.	PC-3000 Flash software, resource database*	- 1 pc.
5.	Multiboard Adapter	- 1 pc.	11.	User manual	- 1 pc.
6.	Monolith Module	- 2 pc.			

Multifunctional self-sufficient solution for any type of NAND-based storage media damage

Using advanced chip-off methods, the PC-3000 Flash perfectly fits for successful data recovery and forensics investigations even with damaged NAND-based devices.

A combination of reliable hardware and fast and efficient software along with a regularly updated resource database makes the PC-3000 Flash highly-demanded among data recovery engineers and digital forensics experts and helps to solve NAND data recovery cases of various complexity.

Supported storage devices: USB, mSD/SD, Memory Stick (MS), xD, MMC, CF, Voice Recorder including Monolithic Drives

Key Features:

- ▶ Over 8200 «one-click» solutions in the PC-3000 Flash Solution center to recover data in 5 minutes.
- ▶ The most effective methods to fix the bit errors in NAND flash memory chips, including the various types of hardware retries.
- ▶ Weekly updated Online Databases (XOR, Dynamic XOR, ECC, Page Format, ReadRetry Tables) to get the latest resources for the present-day flash drives.
- ▶ Personal help to extract unsupported XOR, ECC and unknown chip ID.
- ▶ The most universal and affordable technologies and an extensive Monolith Database to recover data from a great variety of monoliths.
- ▶ The biggest team of highly qualified Technical Support engineers ready to help with any Flash recovery case.
- ▶ A huge number of articles at blog.ancelab.eu.com and a separate section at forum.ancelab.eu.com to find the solutions to your specific cases.

PC-3000 Flash All-in-One Package



1.	PC-3000 Flash Reader	- 1 pc.	9.	LGA-52/TSOP-48 Module	- 1 pc.
2.	Spider Board adapter	- 1 pc.	10.	BGA-152/VBGA-100 Module	- 1 pc.
3.	TSOP-48 adapter	- 1 pc.	11.	BGA-152/132 adapter	- 1 pc.
4.	TSOP-48 W (wide) adapter	- 1 pc.	12.	TSSOP-56 adapter	- 1 pc.
5.	LGA/TLGA-52/60 (14x18) adapter	- 1 pc.	13.	USB 2.0 Cable	- 1 pc.
6.	LGA/TLGA-52/60 (12x17) adapter	- 1 pc.	14.	PC-3000 Flash software, resource database*	- 1 pc.
7.	Multiboard Adapter	- 1 pc.	15.	User manual	- 1 pc.
8.	Monolith Module	- 2 pcs.			

* Available in the Technical Support Portal.

PC-3000 Flash Solution Center

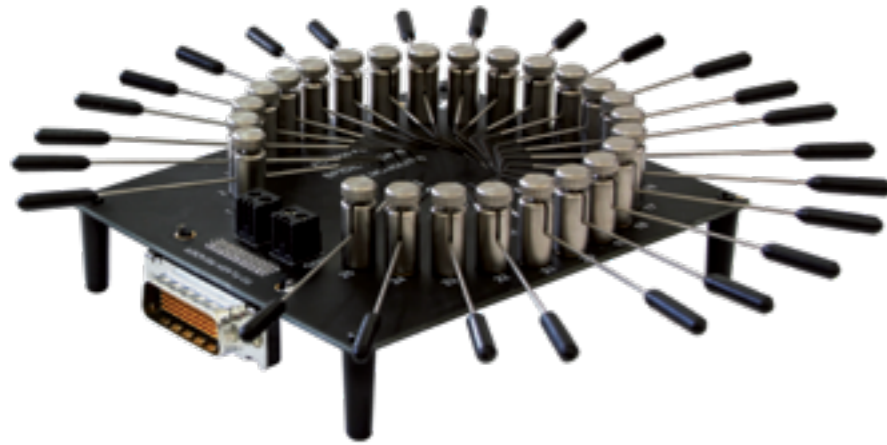
An online resource containing over 8200 scripts for "one-click" data recovery.

Use the experience of already solved cases to get a quick success at your current data recovery task. Ideal for beginners who are just starting Flash Data recovery.

In case none of the scripts help to solve the problem, ACE Lab Technical Support will always assist you and lead to a successful solution.



Spider Board Adapter



Change-maker in monolith recovery.
Minimal Soldering & minimal risk.

The Spider Board Adapter is a universal all-in-one solution for safe data recovery from monoliths.

It is designed for connection to internal contacts of NAND-based Flash drives manufactured as single-package chips (monoliths). The adapter consists of 25 universal contacts that support software configuration of their association with NAND interface signals in a corresponding task.

Using it you will forget about tedious soldering and searching for specific adapters to each monolith you deal with!

— Key Features to Recover Data from Monoliths

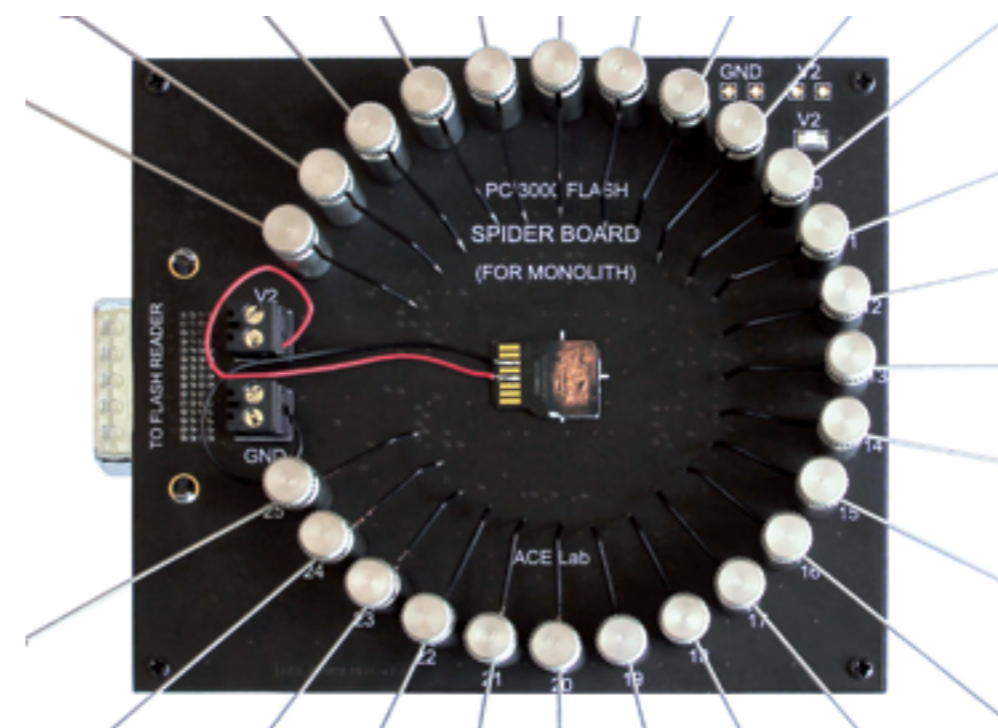
- ▶ Universal solution that doesn't require soldering to the technological pinouts. It saves time, reduces the risks and makes monolith recovery process much easier.
- ▶ 25 specialized needles that help you connecting to pinouts, no matter how they are located.
- ▶ GND and VCC pins are fixed by screw connectors for convenient usage.
- ▶ The adapter is developed specifically for using with microscope.

— With the Spider Board Adapter it is possible to



- ▶ Fine-tune the connectors on the software level.
- ▶ Save the previous pinout settings in a file to use on similar cases.
- ▶ Constant 5V or controlled by VCC (1.8V-3.6V) power supplies.
- ▶ Control the adapter power supply via software.
- ▶ Recover data from partially damaged SD and MicroSD cards as a fully functional Card Adapter.

NAND-based devices supported: **MicroSD, SecureDigital, UFD, MemoryStick.**



Minimal soldering is required to power up the monolith.

Pinout connection is performed via 25 needles.



PC-3000 Mobile PRO **NEW!**

PC-3000 MOBILE PRO



New Approach
in Mobile Forensics

Extract the evidence you couldn't get until now

The PC-3000 Mobile PRO is a hardware-software solution intended for recovering evidence from Android mobile devices such as smartphones and tablets. Using the power of the PC-3000 low-level access technology, digital forensics experts can solve the most actual challenges like physical mobile device corruption or when the data cannot be accessed by standard ways, for example, when a password is lost. The modern platforms with file-based encryption and full disk encryption are supported.



Sometimes digital forensics experts cannot handle mobile phone cases with their conventional tools because:

- ▶ a mobile phone is locked
- ▶ a mobile phone is not booting
- ▶ a PCB/display is damaged
- ▶ a phone is protected by modern protection methods.

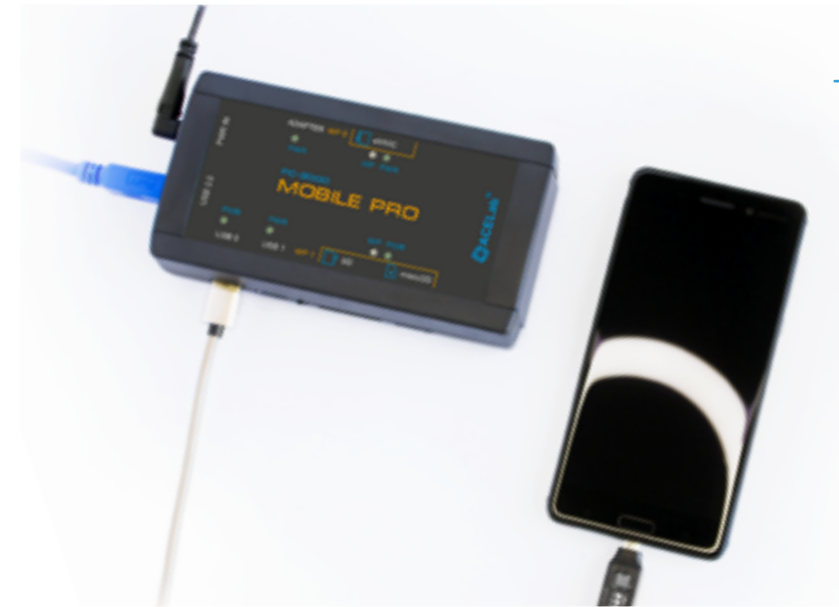
And the existing solutions like chip-off, rooting, finding exploits or JTAG do not help anymore...

PC-3000 Low-Level Access Technology tackles these challenges!



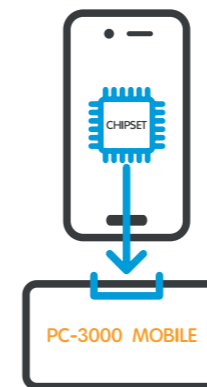
No matter if a phone is working or not

Digital forensics investigators can solve serious problems which are an easy task with the PC-3000 Mobile PRO!



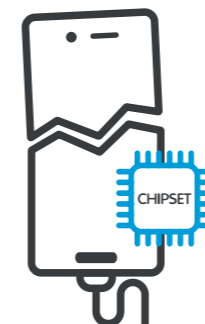
Supplementing well-known mobile forensic data recovery tools with new possibilities for data access

Extract the locked or damaged phone content via the PC-3000 Mobile PRO into a convenient transport format for further analysis and parsing with the help of third-party tools.



The power of the PC-3000 technology for low-level access to mobile devices

After years of ACE Lab experience in data recovery from physically damaged drives, it becomes possible to implement existing solutions from HDD/SSD to mobile devices as well. Time-trusted technology now helps to recover data from Android-based smartphones!



Get data access even if mobile device access is locked or damaged

"Hot state" or bootable state of the phone aren't important for complete smartphone internal memory access. While using direct phone chipset communication, the only thing needed is working CPU and Memory of the phone.



PC-3000 Mobile PRO ver. 2.5

ACE Lab engineers are constantly working on the enhancement of the PC-3000 Mobile PRO and adding new phones to the support list. Currently the following phones are supported:

Supported CPU platforms:



Supported phone vendors:

- ▶ ASUS
- ▶ Alcatel
- ▶ Ark
- ▶ BQ
- ▶ Blackfox
- ▶ Blackview
- ▶ Caterpillar
- ▶ CUBOT
- ▶ DIGMA
- ▶ FLY
- ▶ Ginzzu
- ▶ INFINIX
- ▶ Itel
- ▶ Hammer
- ▶ Highscreen
- ▶ HTC
- ▶ HONOR
- ▶ Huawei
- ▶ Lenovo
- ▶ LG
- ▶ Meizu
- ▶ Motorola
- ▶ Nokia
- ▶ OPPO
- ▶ Philips
- ▶ POCO
- ▶ Prestigio
- ▶ Realme
- ▶ Redmi
- ▶ Samsung
- ▶ Sony
- ▶ Sony Ericsson
- ▶ TP-LINK
- ▶ TCL
- ▶ Tecno
- ▶ Vivo
- ▶ Xiaomi
- ▶ ZTE

If your phone is based on the supported CPU platform but not listed above, please contact technical support. We will most likely be able to add your phone to support within a few days!

— PC-3000 Mobile PRO Kit:



1. PC-3000 Mobile PRO controller	- 1 pc.	7. USB-USB Type C cable	- 1 pc.
2. PC-3000 Mobile PRO power supply unit	- 1 pc.	8. USB-micro USB cable	- 1 pc.
3. SD/MMC adapter + 7 size constraint frames	- 1 pc.	9. Universal download cable	- 1 pc.
5. USB 3.0 - USB Type-C adapter	- 1 pc.	10. PC-3000 Mobile PRO software, resource database*	- 1 pc.
6. MicroUSB - USB Type-C adapter	- 1 pc.	11. User manual	- 1 pc.
7. USB 3.0 cable			

— Customer-oriented

- ▶ intensively adding more phones and mobile chipsets into a support
- ▶ adding your case upon your request within several days
- ▶ monthly software updates
- ▶ license is not limited in time
- ▶ 2 years of free Updates and Technical support when buying till the end of 2023

CONTACT US FOR A FREE ONLINE DEMO!



* Available in the Technical Support Portal.



PC-3000 for Digital Forensics



Irreplaceable tool for forensics data recovery

Digital forensics experts face obstacles when a suspect's storage device is physically damaged, logically damaged or/and locked. It is necessary to extract data before parsing it and analyzing information to get important evidence.

Instead of outsourcing the case or getting just a small percentage of evidence with imaging tools, digital forensics experts can really recover practically all data themselves using the **PC-3000** – the world's only comprehensive technology providing access to all-device data regardless of the extent of damages.

Digital Forensics Investigators can solve their cases which have not been solved yet

You never know which storage device you will get as a suspect's storage media: SATA /PATA HDD, SAS HDD, USB HDD, RAID, PCIe/NVMe SSD, SATA SSD, USB Flash, mSD/SD cards, Mobile phones etc.

With the **PC-3000 Forensics Systems** by ACE Lab, you can extract data from all these types of storage devices!



Key features for Digital Forensics:

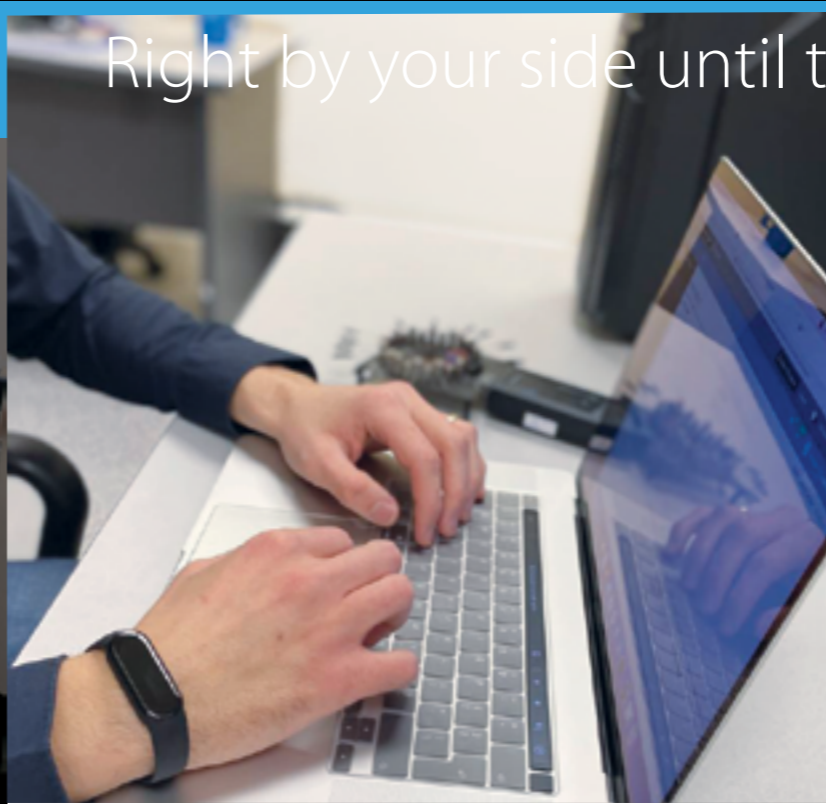
- ▶ The world's unique advanced technologies to get data from damaged and locked storage media.
- ▶ Storage device decryption.
- ▶ Standalone mode for quick diagnostics and imaging on-site.
- ▶ Export data to the forensics formats.
- ▶ All devices connected to the diagnostic ports are isolated from OS influence.
- ▶ Hardware write protection.
- ▶ Hash sum calculation.
- ▶ A diagnostic report of the drive status.
- ▶ Mounting storage devices to the OS in the Read-Only mode.



PC-3000 Forensics Systems:

System	PC-3000 Standard Forensic System	PC-3000 Ultimate Forensic System
Contents	PC-3000 Portable III All-In-One*  PC-3000 Mobile PRO* 	PC-3000 Portable III All-In-One*  PC-3000 Mobile PRO*  PC-3000 Flash All-In-One* 
	*The Kit adapters and all additional adapters are included	*The Kit adapters and all additional adapters are included
Types of supported storage devices	SATA/PATA/SAS/USB HDD, RAID, PCIe/NVMe/SATA SSD, USB Flash/mSD/SD cards (logical issues only), Mobile devices	SATA/PATA/SAS/USB HDD, RAID, PCIe/NVMe/SATA SSD, USB Flash/mSD/SD cards (both logical and physical issues), Mobile devices

ACE Lab Professional Technical Support



Right by your side until the case is solved!

Access the technology being supported by the professionals

Taking your first steps in data recovery?
Stuck with an especially difficult case?
Want to consult the professionals?

The biggest team of technical support engineers will help you

12 hours
a day

- ▶ Professional consulting by ACE Lab engineers via the CRM Ticket System.
- ▶ TeamViewer assistance with the most complex issues.
- ▶ Regular software updates containing new unique features that no other tools have.

Data recovery is easy with ACE Lab Technical Support!

Don't know what next step to take? No worries – our technical support will get you covered! Our engineers are ready to:

- ▶ help you in learning,
- ▶ even solve the case instead of you.



If you need assistance with your case, just contact ACE Lab Technical Support! Our engineers will help you remotely with data recovery. If the Internet connection is not possible on the computer where you are dealing with the case, we can provide you with an instruction on which actions to perform to solve the case. Thus, you can be sure that our support will assist you safely, and that you will not be left alone with your case.

FREE helpful online resources

- ▶ blog.ancelab.eu.com – ACE Lab Blog with much-needed video tutorials and interesting articles
- ▶ forum.ancelab.eu.com – ACE Lab Forum, where you can share your knowledge and opinions with experienced PC-3000 users and with ACE Lab engineers
- ▶ www.youtube.com/user/PC3000datarecovery – ACE Lab YouTube channel with useful video tutorials

More information at www.ancelab.eu.com & ts.ancelab.eu.com



Professional data recovery training



A rapid way to data recovery mastership

PC-3000 Offline Data Recovery Training:

Training Type	Expert level	Advanced level
PC-3000 HDD Data Recovery Training	📊	
PC-3000 Seagate HDD Data Recovery Training		📊
PC-3000 Western Digital HDD Data Recovery Training <i>Coming soon!</i>		📊
PC-3000 RAID Data Recovery Training		📊
PC-3000 SSD Data Recovery Training	📊	
PC-3000 Flash Data Recovery Training	📊	📊
PC-3000 Monolith Data Recovery Training	📊	
PC-3000 Mobile Forensics Data Recovery Training <i>Coming soon!</i>	📊	

Training Locations

Czech Republic	at ACE Lab Training Center 	Germany	together with
USA	together with 	Canada	together with
South Korea	together with 	Japan	together with
Turkey	together with 	France	together with

Get trained online:

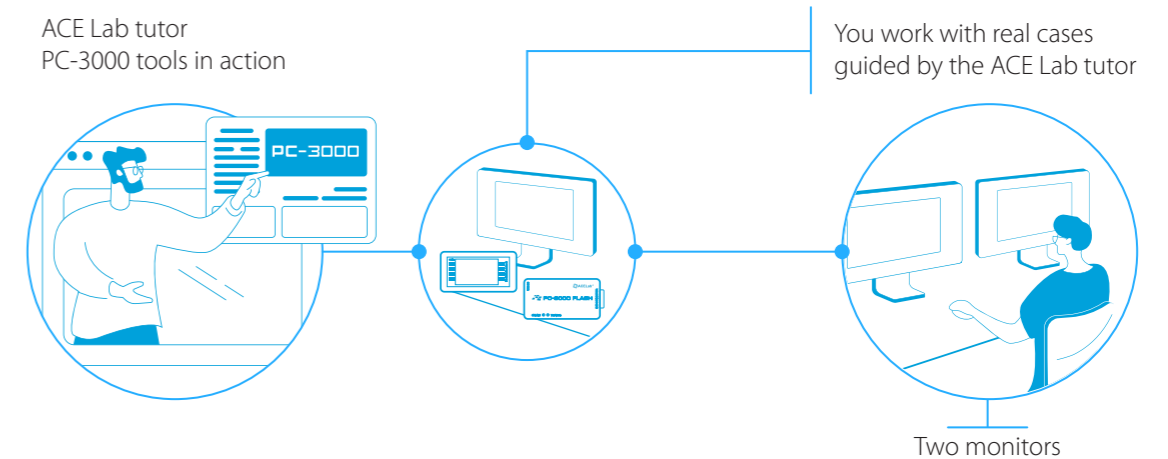
Basic Training

Training Type	Duration	Basic level
PC-3000 HDD Data Recovery Online Training	1 day	📊
PC-3000 Flash Data Recovery Online Training	1 day	📊
PC-3000 RAID Data Recovery Online Training	1 day	📊

Forensic Expert Training **Only for LEA**

Training Type	Duration	Basic level
PC-3000 HDD Forensic Expert Online Training	3 days	📊
PC-3000 Flash Forensic Expert Online Training	3 days	📊
PC-3000 Mobile Forensics Data Recovery Training <i>Coming soon!</i>	2 days	📊

Unique Format of Online Training



WHY TRAIN WITH US?

- ▶ The widest range of data recovery practical tasks that you won't find anywhere else
- ▶ A short training course can substitute for several months of persistent self-learning
- ▶ Acquire troubleshooting skills to solve various data recovery cases
- ▶ Ask your questions directly to ACE Lab engineers
- ▶ Noticeable increase of your data recovery success rate straight after training
- ▶ ACE Lab training completion certificates show the expertise to your clients

Professional Offline and Online Events

Join the world's PC-3000 professional community.

You are always welcome to our **Conferences, Meetups, and Webinars!**

- ▶ The latest and advanced techniques shared directly by the ACE Lab developers and top engineers.
- ▶ Numerous tips and tricks and even ready-to-use solutions.
- ▶ Asking questions directly to the ACE Lab top engineers.
- ▶ Networking with data recovery peers.
- ▶ Sharing experience in the data recovery community.

Also, ACE Lab regularly participates in almost all of the numerous digital forensics conferences and exhibitions worldwide and showcases the PC-3000 solutions to meet the needs of digital forensics investigators.



About us

31+
years

129+
countries

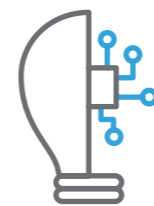
19 500+
customers

ACE Lab is internationally recognized as a pacesetter in the development of the solutions for recovering data and evidence from the widest range of storage devices. For 31 years we have been setting the benchmark and remaining the proven leader in the field by constantly perfecting our products and services. Through the PC-3000 product line we provide customers with the most comprehensive and reliable professional data recovery tools on the market. Upward of 19 500 professionals from over 129 countries award their trust to ACE Lab and get profit from the PC-3000 solutions.

Our company has been certified with ISO 9001:2016 and ISO/IEC 27001:2014. Thus, our customers can be sure that ACE Lab fully conforms to the quality management and the strictest information security requirements.

The world's leader in developing the smartest data recovery solutions for all types of damaged storage devices

Core competencies



Professional data recovery R&D



Products manufacturing



Application of data recovery techniques in digital forensics



Full-scale technical support service



Training in all areas of data recovery

ACE Lab certificates

As a market leader in the development of data recovery technologies, we continually review and improve our Quality Management and Information Security Systems which comply with the ISO 9001:2016 and ISO/IEC 27001:2014 to ensure that we not only meet but exceed our customers' expectations.



EKO-KOM Certificate for PC-3000



ISO 9001:2016 certification (English)



ISO/IEC 27001:2014 certification (English)



Electrical Safety Certificate for PC-3000 Express, UDMA, UDMA-E, Portable, SAS



ISO 9001:2016 certification (Czech)



ISO/IEC 27001:2014 certification (Czech)



Electrical Safety Certificate for PC-3000 Flash, Mobile

Hear what our customers are saying

Not only does ACE Lab have the best hardware/software solutions for data recovery, but they have unmatched technical support. Their data recovery tools are priced competitively, but the usability, documentation, and support cannot be matched by the competition. We use PC-3000 tools for HDD, SSD, and Flash recovery every day at Blizzard Data Recovery

David Blizzard | [Blizzard Data Recovery](#)
UNITED STATES OF AMERICA

I have been using PC-3000 for a number of years to analyse and recover malfunctioning Hard Disk Drives. As an Academic and a Digital Forensics Practitioner, I believe the training offered by ACE Lab are of great value to the Data Recovery Industry and can provide the Digital Forensics Practitioner with a deeper understanding of hard disk technologies and possible methods for recovery.

Gareth Davies | [UNIVERSITY OF GLAMORGAN](#)
UNITED KINGDOM

Simply super, the leader in the field of data recovery of all types of drives, diagnostics and hard drive repair. For 8 years we have been offering the data recovery service with its tools and we have more and more satisfied customers. I suggest all services and products of ACE Lab. In addition, its technical support is very efficient and useful to solve queries and problems.

Juan Carlos Carbajal Gomez | [DNP CORP](#)
PERU

I must admit that from the moment we invested in ACE Lab products our success rates and delivery times have really increased. Nowadays I believe that no data recovery lab can be successful without ACE lab products and support. I can not compare the functions of PC-3000 complex with any other tool.

Mike Mingos | [TICTAC DATA RECOVERY LABORATORIES](#)
GREECE

Before getting into the data recovery field I spent a lot of time researching the available tools that would be needed to startup such a business. The PC-3000 suite was a big financial outlay, but in the first few months the product has already allowed me to almost recover that cost.

The product supports all the drives that I have had to deal with, and the support team is always ready to help when in need of a solution. I would recommend this product to anyone who is thinking seriously about data recovery.

Nick Parsons | [SOUTHBIT DATA RECOVERY](#)
SOUTH AFRICA

... We would not be where we are today in data recovery if we were not for your tools and help.

Walmart Data Recovery Team | [Walmart](#)
UNITED STATES OF AMERICA

The best tools we ever use in data recovery with hard disk or SSD drive or flash. It's just like Ferrari cars keep up, regards from Egypt

Tawfeek Mokhtar | [Alsafwa data recovery Egypt](#)
EGYPT

Excellent support of all drive brands, including not popular ones like Hitachi and Toshiba. Decryption of WD passport WITHOUT password (I did not believe it was possible). Smooth operation across all models. (We have tried other data recovery equipment but they don't work reliably across all models). Ability to quickly determine Seagate F3 headmap using the zone-head deactivation feature. Ability to solve WD slow responding issue in RAM. And of course great technical support! For non-standard issues, only ACE Lab technical support engineers know how to solve them.

Kevin Xiao | [Data Pro](#)
CANADA

Our company has been using the PC-3000 for several years now, and it has made our job of data recovery so much easier. We are now able to recover more data in less time, and our clients are even happier. The online support from ACELab has assisted us on numerous occasions and we have enjoyed working with their engineers. This product has undoubtedly become an essential tool in our business, and we are grateful to have it!

Hugo Adrián Francisconi | [Recupero Datos](#)
ARGENTINA

The detailed testimonials are provided on the ACE Lab website.

Contact us

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Karlin, Prague 8
the Czech Republic, 186 00

Phone:

▶ +420 212 277 277

E-mail:

info@acelab.eu.com

Support:

Support time frame:

For Europe, Asia, Africa and Australia
08:00 – 17:00 GMT +01:00
For North and South Americas
09:00 - 17:00 EDT

Ticket System:

ts.acelab.eu.com

E-mail:

ts@acelab.eu.com

Update Box:

ts.acelab.eu.com

Blog:

blog.acelab.eu.com

Forum:

forum.acelab.eu.com



www.acelab.eu.com



ISO 9001:2016 | CERTIFIED
ISO/IEC 27001:2014 | COMPANY

ACE Lab Europe s.r.o.
www.acelab.eu.com