

WISENET

СЕТЕВОЙ ВИДЕОРЕГИСТРАТОР

Спецификации устройства

PRN-4011

CE

Сетевой Видеорегистратор

Спецификации устройства

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- ❖ Конструкция и характеристики устройства могут быть изменены без предварительного уведомления.
Последнюю версию можно загрузить с веб-сайта Hanwha Techwin. (www.hanwha-security.com)

- ❖ Первоначальный идентификатор администратора - "admin", а пароль следует задать при первом входе в систему.
Для того чтобы надежно защитить личную информацию и предотвратить ущерб от ее кражи, меняйте пароль каждые три месяца.
Имейте в виду, что ответственность за безопасность и какие-либо проблемы, вызванные ненадлежащим обращением с паролем, несет пользователь.

ВАЖНЫЕ ИНСТРУКЦИИ ПО ТЕХНИКЕ БЕЗОПАСНОСТИ

Перед использованием изделия внимательно прочтите Инструкцию по эксплуатации. Выполняйте все перечисленные ниже инструкции по технике безопасности. Держите Инструкцию под рукой для обращения к ней в последующем.

- 1) Прочтите данные инструкции.
- 2) Сохраните данные инструкции.
- 3) Принимайте во внимание все предупреждения.
- 4) Следуйте всем инструкциям.
- 5) Не пользуйтесь данным изделием вблизи воды.
- 6) Очищайте загрязненные места на поверхности изделия мягкой, сухой или влажной тряпкой. (Не используйте моющие средства либо косметические продукты, содержащие спирт, растворители, либо ПАВ, либо смазочные материалы, поскольку они могут привести к деформации или повреждению продукта.)
- 7) Не загромождайте никакие вентиляционные отверстия. Выполните установку изделия в соответствии с инструкциями изготовителя.
- 8) Не устанавливайте изделие рядом с источниками тепла, такими, как радиаторы, решетки системы отопления, или другими устройствами, которые генерируют тепло (включая, усилители).
- 9) В целях безопасности не отказывайтесь от использования вилок поляризованного или заземляющего типа. Вилка поляризованного типа имеет два ножевых контакта, один из которых шире другого. Вилка заземляющего типа имеет два ножевых контакта и третий заземляющий контакт. Широкое лезвие третьего заземляющего контакта предусмотрено для вашей безопасности. Если поставляемая вместе с аппаратом вилка не подходит для вашей розетки, попросите квалифицированного электрика заменить старую розетку.
- 10) Чтобы защитить шнур питания от повреждений, проложите его так, чтобы не ходить по нему. Защитите шнур питания в местах соединения со штепсельной вилкой, электрической розеткой и в том месте, где он выходит из изделия.
- 11) Пользуйтесь только теми приспособлениями/принадлежностями, которые рекомендованы изготовителем.
- 12) Используйте изделие только с такой тележкой, стойкой, штативом, кронштейном или столом, которые рекомендованы изготовителем, или которые продаются вместе с изделием. Соблюдайте осторожность во время перемещения изделия, установленного на тележке, чтобы избежать травм в результате опрокидывания изделия /тележки.
- 13) Отсоединяйте изделие от сети во время грозы или если вы не будете пользоваться им длительное время.
- 14) Все работы, связанные с техническим обслуживанием изделия, должны выполняться квалифицированными специалистами по техническому обслуживанию. Обслуживание изделия требуется выполнять, когда изделие получило какое-либо повреждение, например, был поврежден его шнур питания или вилка шнура питания, внутрь изделия попала жидкость или посторонние предметы, изделие подверглось воздействию дождя или влаги, изделие не работает должным образом, а также после падения изделия.



ПЕРЕД НАЧАЛОМ РАБОТЫ

В данном руководстве содержится информация об эксплуатации устройства, описание всех его компонентов и их функций, а также информация о меню и сетевых настройках. Необходимо помнить следующее:

- Компания Hanwha Techwin обладает авторским правом на данное руководство пользователя.
- Запрещается копировать данное руководство пользователя без письменного разрешения компании Hanwha Techwin.
- Мы не несем ответственности за повреждения изделия, возникшие вследствие его неправильного использования, или несоблюдения инструкций, представленных в руководстве пользователя.
- Если вы хотите открыть крышку изделия для обеспечения доступа к его внутренним частям, пожалуйста, проконсультируйтесь со специалистом, работающим в торговом предприятии, продавшем вам данное изделие.
- Перед установкой дополнительного жесткого диска или внешнего устройства хранения (памяти USB, жесткого диска USB и т.д.) убедитесь в его совместимости с данным устройством. Для получения списка совместимых устройств обращайтесь к продавцу.

Предупреждение

Батарея

Неправильная замена батареи в изделии может привести к взрыву. Поэтому необходимо использовать батарею того же типа, как установленная в изделие при его поставке.

Ниже представлены технические характеристики батареи, использующейся в изделии.

- Номинальное напряжение: 3 В
- Номинальная емкость: 210 мАч
- Номинальный непрерывный ток нагрузки: 0,4 мА
- Рабочая температура: -20°C ~ +60°C (-4°F ~ +140°F)

Внимание

- Подключите кабель питания к заземленной розетке.
- Сетевая вилка позволяет отключить питание, поэтому она должна все время находиться в легкодоступном месте.
- Не подвергайте батареи чрезмерному нагреванию под воздействием солнечных лучей, огня и т.д.
- При установке батареи неправильного типа существует опасность взрыва. Утилизация использованных батарей должна выполняться в соответствии с инструкциями.
- Когда достигается конец срока службы HDD, хранящиеся видеоданные могут быть повреждены, и их восстановление невозможно.
- Светодиод состояния HDD на передней стенке системы постоянно мигает, указывая на нормальное подключение системы к HDD. Регулярно контролируйте светодиод состояния HDD, постоянно ли он мигает. Запись может быть невозможна при отказе HDD. Периодически проверяйте статус записи и регулярность резервного копирования.

Завершение работы системы

Выключение питания цифрового видеорежистратора во время его работы или выполнение неразрешенных операций может привести к повреждению жесткого диска или самого изделия.

Для того чтобы обеспечить безопасное отключение, нажмите <OK> во всплывающем окне остановки системы, а затем удалите питающий кабель.

Чтобы предотвратить повреждения, вызванные неожиданным нарушением энергоснабжения, рекомендуется установить источник бесперебойного питания (ИБП). (с вопросами по ИБП обращайтесь в магазин, торгующий ИБП).



- При неправильном отключении питания перезапуск может занять больше времени для восстановления данных с жесткого диска и нормальной работы.

Рабочая температура

Работа этого изделия гарантируется в диапазон от 0°C ~ 40°C (32°F ~ 104°F).
Это изделие может не работать надлежащим образом при его включении сразу же после продолжительного хранения при температуре ниже гарантируемой.
При использовании изделия после продолжительного хранения при низкой температуре, дайте изделию постоять некоторое время при комнатной температуре перед тем, как включить его.
Встроенный в это изделие жесткий диск имеет гарантированный диапазон рабочих температур от 5°C ~ 55°C (41°F ~ 131°F).
Аналогичным образом, он может не работать при температуре ниже гарантируемой.

Порт Ethernet

Данное оборудование предназначено для использования в помещении, и все провода для связи должны находиться внутри здания.

Меры предосторожности

Первоначальный идентификатор администратора - "admin", а пароль следует задать при первом входе в систему.
Для того чтобы надежно защитить личную информацию и предотвратить ущерб от ее кражи, меняйте пароль каждые три месяца.
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Использование графических символов

Если имеются графические символы, нанесенные на оборудование, независимо от того, требуются ли они по стандарту, данные символы должны соответствовать 60417, ISO 3864-2 или ISO 7000.
При отсутствии подходящих символов производитель может разработать специальные графические символы.
Символы, нанесенные на оборудование, должны разъясняться в руководстве пользователя.

Символ	Публикация	Описание
	IEC60417, No.5032	Переменный ток

Функции устройств NVR

Функция	Устройства
Вентилятор	PRN-4011
RAID	PRN-4011
iSCSI	PRN-4011
Джойстик	PRN-4011
Расширенный монитор	PRN-4011
Резервный источник питания	PRN-4011
Failover (аварийное переключение)	PRN-4011

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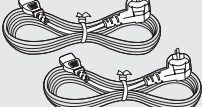
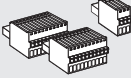
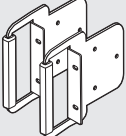
ФУНКЦИИ

Устройство выполняет запись видео и звука с сетевых камер на жесткий диск и обеспечивает возможность воспроизведения с жесткого диска. Оно также обеспечивает среду для выполнения удаленного мониторинга видео и аудио по сети с использованием удаленного компьютера.

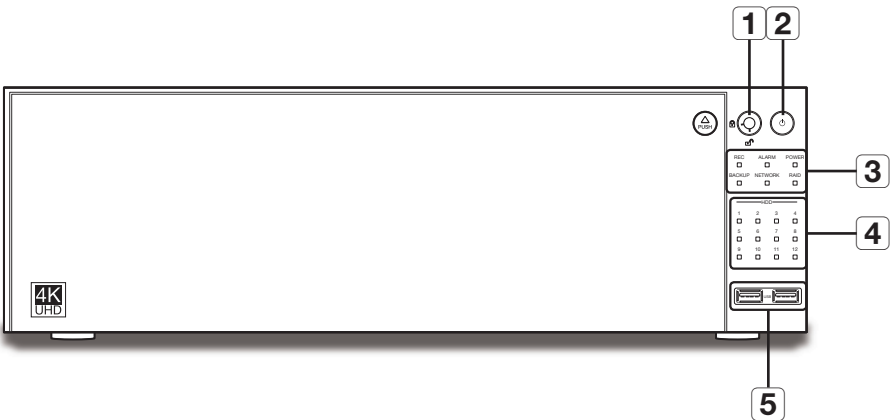
- Простой и понятный интерфейс пользователя
- Поддерживается диапазон разрешений камеры 4K. (3840X2160, 4096X2160, 4000X3000)
- Выводится изображение с высоким разрешением 4В по спецификации HDMI.
- Декодирование разделения на 64 экрана
- Поддерживается выход двойного монитора (расширение, дублирование)
- Поддерживается несколько паролей
- Запись и воспроизведение видео
- Запись и воспроизведение аудио
- Поддержка протоколов стандарта ONVIF Profile S и протоколов RTP/RTSP
- Отображение рабочего состояния жесткого диска с помощью функции HDD SMART
- Перезапись жесткого диска
- Резервное копирование с помощью протоколов USB 2.0 и внешнего жесткого диска
- Одновременное воспроизведение 16 каналов
- Различные режимы поиска (Время, событие, Умный, текст, архивация, ARB.)
- Различные режимы записи (обычная запись, запись события и запланированная запись)
- Порты входа/выхода сигнала тревоги
- Удаленный мониторинг через Windows Network Viewer
- Мониторинг в реальном времени сетевой камеры
- Функция мастера установки (простая)
- Поддерживается несколько профилей программы удаленного просмотра
- Поддерживается ARB
- Поддерживается Failover
- Функция, используемая для задания периода хранения по каждому каналу.

Комплект поставки

Распакуйте устройство и поместите его на плоскую поверхность или туда, где оно будет установлено. Проверьте, входят ли в комплект поставки, кроме основного устройства, следующие компоненты.

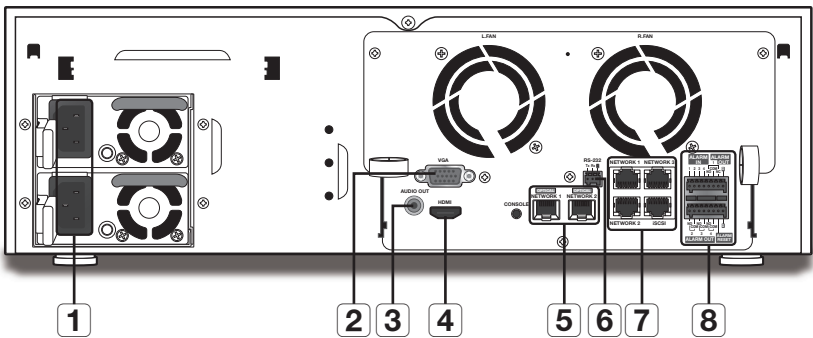
		
NVR	Мышь	Кабель Питания
		
Краткое руководство	Клеммный блок	Монтажная стойка
		
Винты монтажной стойки	Винт крепления жесткого диска	Дверца отсека жестких дисков, запираемая ключом

НАЗВАНИЯ И ФУНКЦИИ КОМПОНЕНТОВ (ВИД СПЕРЕДИ)



Названия компонентов		Функции
1	Дверца отсека жестких дисков, запираемая ключом	Это устройство с запирающим, препятствующее доступу к жесткому диску. Используйте ключ продукта, предоставленный при покупке данного продукта.
2	Питание	Используется для включения и выключения сетевого видеорегистратора.
3	LED Indicator	REC : Загорается во время записи.
		ALARM : Загорается в случае какого-либо события.
		POWER : Показывает включенное/отключенное состояние.
		BACKUP : Указывает на выполнение резервного копирования.
		NETWORK : Указывает на сетевое соединение и отображает состояние передачи данных.
4	HDD	Обычный доступ к жесткому диску.
		Индикатор загорается при доступе к жесткому диску.
5	USB	Используется для подключения устройств USB.

НАЗВАНИЯ И ФУНКЦИИ КОМПОНЕНТОВ (ВИД СЗАДИ)



Названия компонентов		Функции
1	Питание	Блок соединителей для подключения питания. ■ При двойном питании, даже если подключен только один источник, устройство может нормально работать. Однако для надежности рекомендуется использовать отдельные источники питания. ■ Если во время движения происходит проблема, будет звучать зуммер импульсного БП (зуммер можно отключить, нажав круглую зеленую кнопку). ■ Даже если блок питания не подключен, светодиод, применимый в зеленой кнопке импульсного БП и вентилятор БП могут работать.
2	VGA	Выходной порт видеосигнала VGA.
3	AUDIO OUT	Выходной порт аудиосигнала (гнездо RCA).
4	HDMI	Порт для подключения HDMI.
5	OPTICAL NETWORK 1/2	Порт оптической связи I/F
6	RS-232C	Соединитель для кабеля последовательной связи.
7	NETWORK1	Порт для подключения камер. Через него принимаются видеосигналы камер.
	NETWORK2	Порт для подключения камер; через него принимаются видеосигналы камер.
	NETWORK3	Порт используется для отправки видео в веб-обозреватель.
	iSCSI	Порт для подключения к внешнему накопителю iSCSI.
8	ALARM	- ALARM IN : Входные порты сигналов тревоги. (1~4 CH) - ALARM RESET : Порт сброса сигнала. - ALARM OUT : Выходные порты сигналов. (1~4 CH)

■ [CONSOLE] предназначена для использования только при обслуживании.

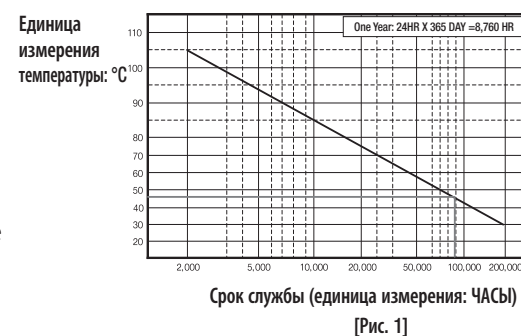
Перед использованием устройства убедитесь, что выполняются следующие рекомендации.

- Не используйте устройство вне помещения.
- Не допускайте попадания воды или любой другой жидкости на разъемы устройства.
- Не подвергайте систему чрезмерным сотрясениям или усилиям.
- Не тяните за вилку кабеля питания с чрезмерным усилием.
- Не разбирайте устройство самостоятельно.
- Не превышайте диапазон номинального входного/выходного напряжения.
- Используйте только сертифицированный кабель питания.
- Для устройства с заземлением на входе используйте вилку кабеля питания с заземлением.

ПРОВЕРКА УСЛОВИЙ ДЛЯ УСТАНОВКИ

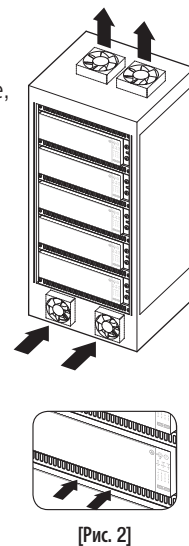
Данный сетевой видеорегистратор является отличным устройством обеспечения безопасности, он оснащен жестким диском большой емкости и другими важными компонентами.

Обратите внимание, что повышенная внутренняя температура устройства может стать причиной сбоя системы или сокращения срока службы устройства (см. рисунок справа). Перед установкой устройства соблюдайте приведенные далее инструкции.



При установке в стойку необходимо соблюдать следующие инструкции.

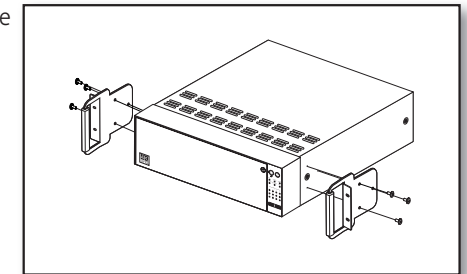
1. Убедитесь, что изнутри стойка не герметична.
2. Убедитесь, что воздух циркулирует через впускное/выпускное вентиляционное отверстие, как показано на рисунке.
3. При установке в стойку нескольких устройств, как показано на рисунке 2, обеспечьте достаточное пространство для вентиляции или установите вентиляционное отверстие.
4. Для обеспечения естественной циркуляции воздуха впускное отверстие должно находиться в нижней части стойки, а выпускное — в верхней.
5. Для обеспечения циркуляции воздуха через впускное и выпускное отверстия настоятельно рекомендуется использовать вентилятор. (Для задержки пыли или инородных частиц во впускном отверстии установите фильтр.)
6. Внутри стойки и вокруг нее необходимо поддерживать температуру в диапазоне 0°C ~ 40°C (32°F ~ 104°F), как показано на рис. 1.



УСТАНОВКА СТОЙКИ

Установите кронштейн стойки, как показано на рисунке, и затяните винты с обеих сторон.

- Надежно затяните винты, чтобы они не ослабли под воздействием вибрации.



ДОПОЛНИТЕЛЬНЫЙ ЖЕСТКИЙ ДИСК

Обязательно выньте кабель питания из сетевой розетки для предотвращения возможного поражения электрическим током, получения травм или повреждения устройства.

Обратитесь к поставщику для получения дополнительной информации об установке жесткого диска. Неправильная установка может стать причиной повреждения устройства.

- Поддерживаемое число жестких дисков: 12 Жестких дисков
- Обязательно выньте кабель питания из сетевой розетки перед установкой.



Меры предосторожности во избежание потери данных (уход за жестким диском)

Учтите данные меры во избежание повреждения данных жесткого диска.

Перед установкой дополнительного жесткого диска проверьте его на совместимость с используемым устройством.

Жесткий диск можно легко вывести из строя, поскольку он очень чувствителен к толчкам и ударам во время эксплуатации.

Не подвергайте жесткий диск ударам.

Наша компания не несет ответственности за какие-либо повреждения жесткого диска, причиной которых является неосторожное обращение пользователя с устройством или неправильное его использование.

Ситуации, которые могут привести к повреждению жесткого диска или записанных данных

Чтобы сократить риск потери данных, хранящихся на жестком диске, как можно чаще выполняйте резервное копирование этих данных.

При ударе или сотрясении жесткого диска во время его установки или извлечения возможно повреждение данных, которые были сохранены на нем.

В результате внезапного сбоя электропитания или выключения устройства во время работы жесткого диска возможно повреждение жесткого диска.

Жесткий диск или хранящиеся на нем данные могут быть повреждены из-за перемещения или сотрясения основного устройства во время его работы.

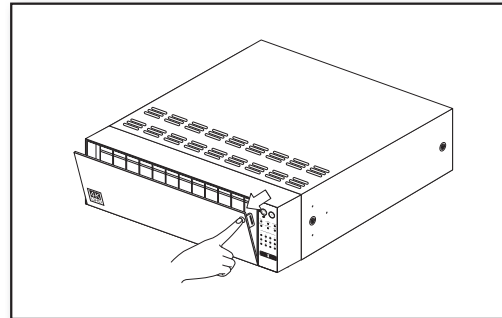
Меры предосторожности при установке жесткого диска

1. Не прилагайте к жесткому диску чрезмерные усилия.
2. При разборке устройства старайтесь сохранить винты или аксессуары.
 - Если винты или аксессуары не будут установлены надлежащим образом, это может привести к неисправности устройства или его неправильной работе.
3. Перед подключением жесткого диска проверьте его на совместимость с используемым устройством.
 - Список совместимых устройств можно получить у ближайшего дилера.
4. Перед тем, как заменять или добавлять HDD, свяжитесь с продавцом или с нашей службой поддержки клиентов.
 - Переднюю дверцу для доступа к HDD может открывать только администратор, отвечающий за устройство.

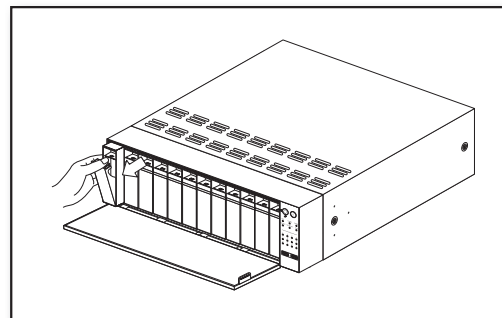
Установка жесткого диска

- ❗ Если к данному изделию в дополнение к первоначально установленным HDD добавляется новый или бывший в использовании HDD, перед началом использования его необходимо отформатировать в ручном режиме. Сведения о форматировании приведены в разделе «Уст-тво/формат» руководства по эксплуатации видеорегистратора (NVR) Wisenet.
- При замене или установке дополнительного HDD необходимо связаться с продавцом или с нашей службой поддержки клиентов.

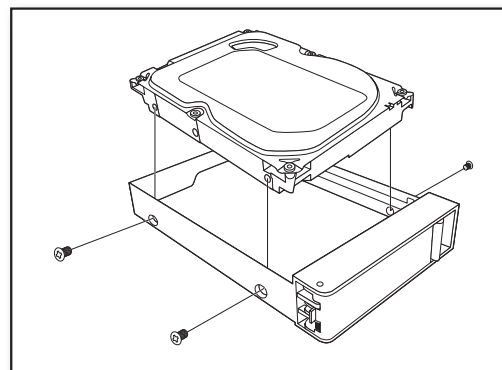
1. Для открывания передней крышки нажмите кнопку <PUSH>.



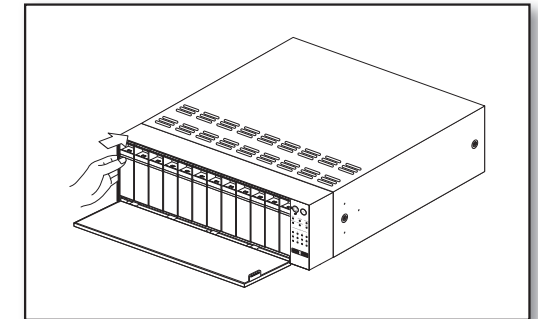
2. Нажав синюю кнопку на кронштейне жесткого диска, рукой потяните кронштейн, чтобы отделить его от основания.



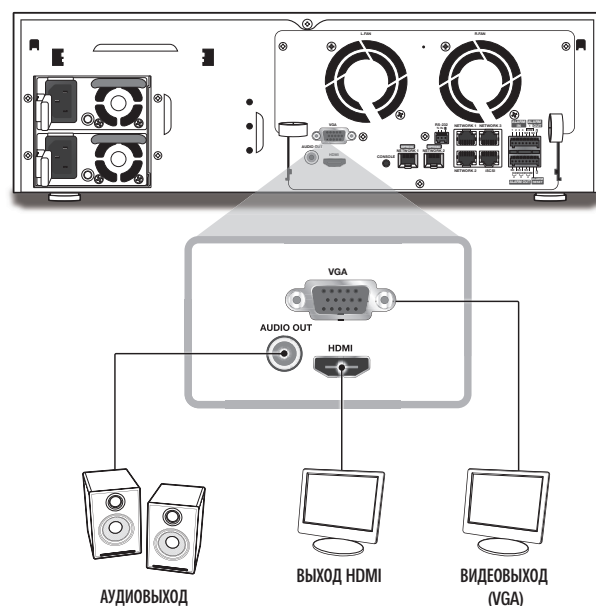
3. Установите жесткий диск на кронштейне и приверните его прилагаемыми винтами.



4. После установки жесткого диска на кронштейн прижмите кронштейн к основанию корпуса и закройте переднюю крышку.



ПОДКЛЮЧЕНИЕ К ВНЕШНЕМУ УСТРОЙСТВУ

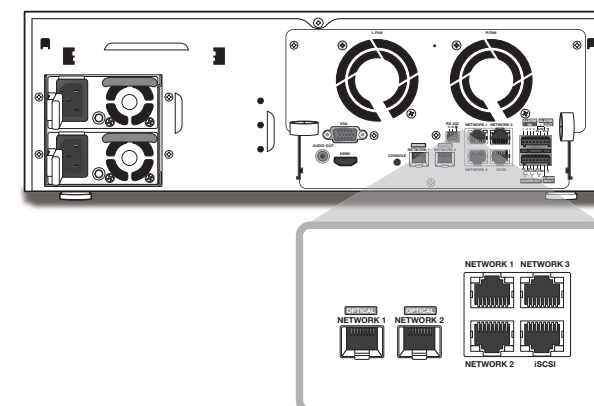


- ! Отличный от номинальной мощности или неподходящий источник питания может привести к повреждению системы. Прежде чем нажать кнопку ПИТАНИЕ убедитесь, что используется источник питания номинальной мощности.

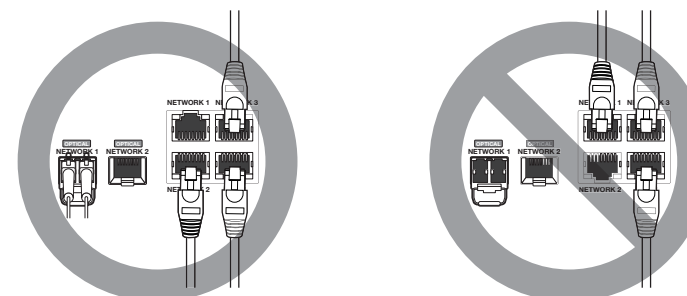
ПОДКЛЮЧЕНИЕ ОПТИЧЕСКОГО МОДУЛЯ

Номинальное питание для оптического модуля 3,3 В постоянного тока, 0,25 А.

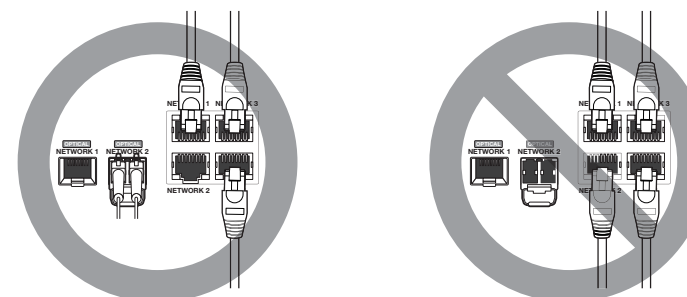
- При установленном оптическом модуле применение порта UTP ограничено.
- Устанавливайте оптический модуль только при необходимости.



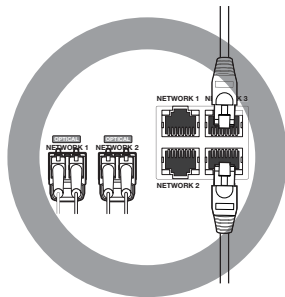
1. [OPTICAL NETWORK1] - это порт, используемый совместно с [NETWORK1].



2. [OPTICAL NETWORK2] - это порт, используемый совместно с [NETWORK2].



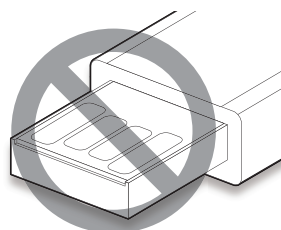
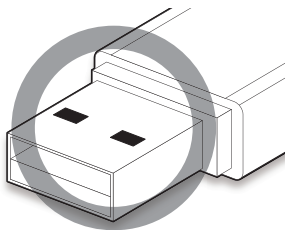
3. [OPTICAL NETWORK1/2] - это порт, используемый совместно с [NETWORK1/2].



ПОДКЛЮЧЕНИЕ УСТРОЙСТВ USB

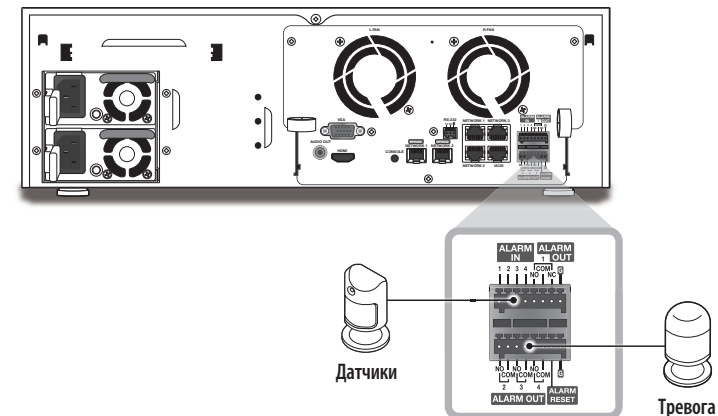
1. На передней стенке устройства имеется USB-порт.
2. К порту USB можно подключить жесткий диск USB, память USB или мышь.
3. Если к системе подключен жесткий диск USB, для его обнаружения и настройки следуйте инструкциям в разделе «**Меню** > **Устройство** > **Устр. хранения**» руководства по эксплуатации видеорегистратора (NVR) Wisenet.
4. Устройство поддерживает функцию "горячего" подключения, которая позволяет подключать и отключать устройства USB во время работы системы.

- ❗ Если устройство USB используется для резервного копирования, отформатируйте его на компьютере в системе FAT32, если до этого оно не было отформатировано на сетевом видеорегистраторе.
- Проверьте функционирование USB-устройства перед использованием потому что могут возникнуть проблемы с совместимостью некоторых USB-устройств.
- Исключается гарантия работы кроме USB-устройств имеющих металлическое покрытие.
- Могут возникнуть проблемы в передовании сигналов если поверхность разъема USB-устройства гладкая или повреждена.

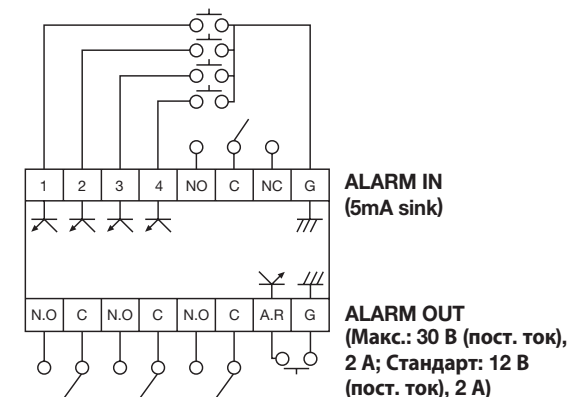


ПОДСОЕДИНЕНИЕ К ВХОДНЫМ/ВЫХОДНЫМ ПОРТАМ ДЛЯ СИГНАЛА ТРЕВОГИ

Входной/выходной порт для сигнала тревоги на задней панели представляет собой следующее.



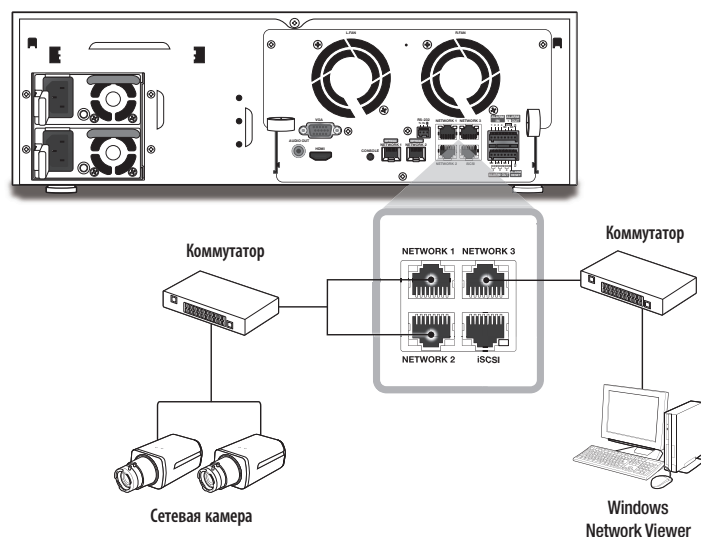
- ALARM IN 1 ~ 4: входной порт для сигнала
- ALARM RESET: при получении сигнала о сбросе система отменяет текущий входящий сигнал и возобновляет считывание.
- ALARM OUT 1 ~ 4: выходной порт сигнала



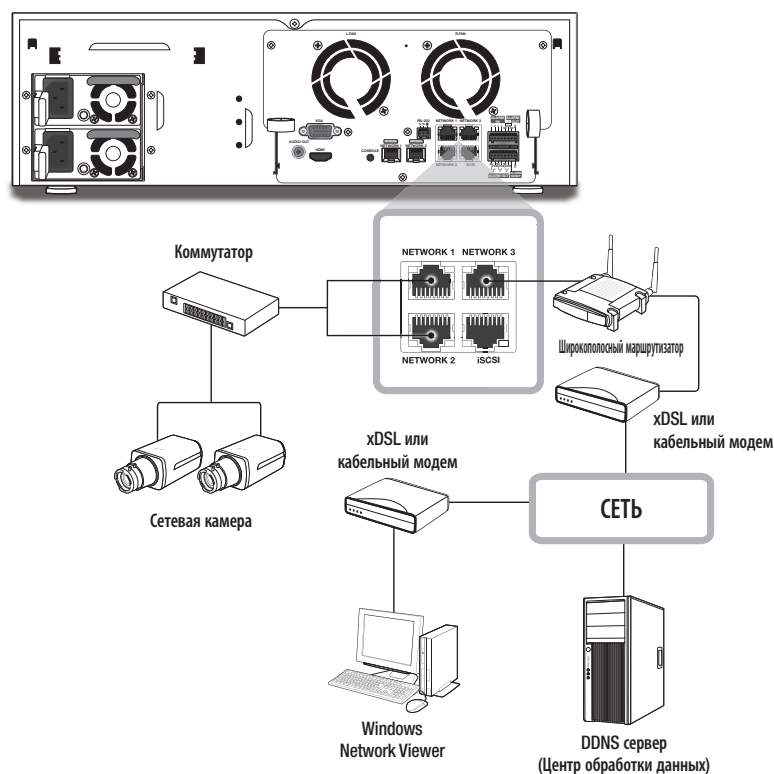
ПОДКЛЮЧЕНИЕ СЕТИ

■ Дополнительная информация о сетевом подключении приведена в разделе «Конфигурация сети» руководства по эксплуатации видеорегистратора (NVR) Wisenet.

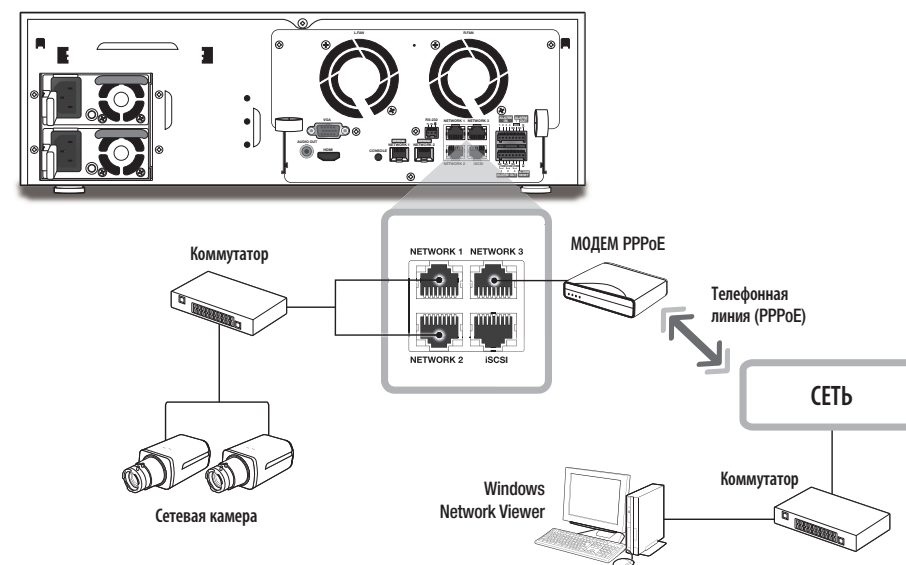
Сетевое подключение через Ethernet (10/100/1000BaseT)



Сетевое подключение через маршрутизатор

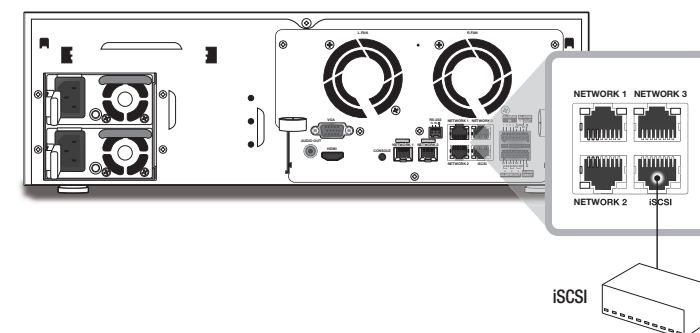


Подключение к Интернету через PPPoE

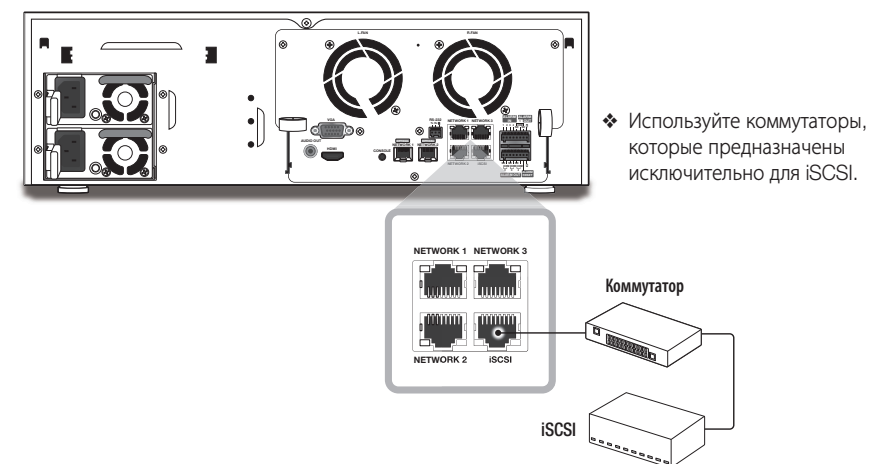


Подключение к iSCSI

Непосредственно соединяется с сетевым видеорегистратором



Для подключения может использоваться коммутатор.



Элемент		Подробные сведения	
Дисплей			
Сетевая камера	Входы	Макс. 64 канала	
	Разрешение	CIF ~ 12MP	
	Протоколы	Wisenet, ONVIF	
Прямая передача	Локальный дисплей	1x HDMI / 1x VGA Двойной монитор	
	Характеристики	[Локальный монитор] - 12M (30fps) - 8.3M(120fps) - 1080p(480fps) - 720P(960fps) - D1(1920fps)	
Характеристики			
Операционная система	Встроенная	Linux	
Запись	Сжатие	H.265, H.264, MJPEG, WiseStream(H.265, H.264)	
	Полоса пропускания записи	Макс. 250Mbps (не RAID)	Макс. 400Mbps (RAID-5/6)
	Разрешение	CIF ~ 12MP	
Поиск и воспроизведение	Полоса частот воспроизведения	До 32МБит/с (16 каналов одновременно)	
	Польз.	До 4 пользователей (1 локальный, 3 удаленных)	
	Одновременное воспроизведение	Макс. 16 каналов (локальный монитор, CMS)	
	Разрешение	CIF ~ 12MP	
	Устранение оптических искажений камеры "рыбий глаз"	WEB / CMS	
	Управление воспроизведением	Ускоренно/Медленно вперед/Назад, перемещение на один шаг вверх/вниз	
Накопитель	Встроенный	0TB ~ 8TB	
	Встроенный жесткий диск	12 (Макс. 96TB, Non-RAID Реж.)	
	Внешний	Хранилище iSCSI (до 192 Тбайт)	
	Массив RAID	RAID-5/6(размер массива : 2 массива x 6 HDD)	
Резервное копирование	Резервное копирование файлов	BU/Exec(GUI), JPG/AVI(сеть)	
	Функция	Многоканальное воспроизведение (до 16 каналов), отображение даты-времени/заголовка	

Элемент		Подробные сведения
Сенсор	Ввод-вывод	4/4 (с выбором HP/H3)
Аудио	Вход	64 канала (сеть)
	Сжатие	G.711, G.726, AAC(16/48KHz)
	Аудиосвязь	2-сторонняя
Сеть		
Интерфейс		RJ-45(Gigabit Ethernet) x4, SFP x2
Протокол		TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTSP, NTP, HTTP, DHCP (Сервер, Клиент), PPPoE, SMTP, ICMP, IGMP, ARP, DNS, DDNS, uPnP, HTTPS, SNMP, ONVIF (Profile-S), SUNAPI(Сервер, Клиент)
DDNS		Hanwha DDNS
Полоса пропускания передачи		Макс. 400Mbps
Максимальное число удаленных пользователей		Поиск (3)/Прямая одноадресная передача (10)/Многоадресный (20)
Версия IP		IPv4/v6
Безопасность		Фильтрация по IP-адресу, журнал доступа пользователей, аутентификация 802.1x, шифрование, правило двойного контроля
Язык		Английский, французский, немецкий, итальянский, испанский, русский, турецкий, польский, голландский, шведский, чешский, португальский, датский, румынский, сербский, хорватский, венгерский, греческий, норвежский, финский, корейский, китайский, японский, тайский
ОС		Windows 7, 8, 10, Mac OS X (10.8 или более поздняя)
Веб-браузер		MS IE, Google Chrome, Mac Safari
Программное обеспечение просмотра	Тип	SSM, Webviewer, SmartViewer, Wisenet Mobile Viewer
	Поддержка системы управления содержимым (CMS)	Поддержка SDK/CGI(SUNAPI) для интеграции с системами VMS сторонних производителей
Функции		
PTZ	Управление	Через графический интерфейс пользователя, Webviewer, SPC-2000
	Предустановка	300 предустановок
Смартфон	Опора модели	Android, iOS
	Поддержка протоколов	RTP, RTSP, HTTP, CGI (SUNAPI)
	Управление	Прямая передача(16ch) : Поддержка нескольких профилей воспроизведение(1ch)
	Макс. число удаленных пользователей	Поиск(3) / Прямая одноадресная передача(10)

Элемент		Подробные сведения
Резервирование	Failover	N+1
	ARB	Да
Управление системой		Мышь, веб-управление, SPC-2000(Контроллер)
Индикация/Интерфейс		
Передняя панель	Индикатор	Светодиодный индикатор состояния - Работа жесткого диска(12), RAID Status(1), тревожная сигнализация(1), питание(1), запись(1), Backup(1), сеть(1)
Разъемы	VGA	Вспом.: 1 шт. (поддержка экрана прямого видео с режимом разделения до 32 экранов)
	HDMI	Главный: 1 шт. (поддержка прямого видео/воспроизведения/настройки) - Поддержка до 4K (3840 x 2160, режим разделения одного монитора на 64 экрана)
	Аудио	Выход (1 шт., RCA, линейный)
	Ethernet	RJ-45 4шт. (LAN/WAN, 1Gbps), 1000M SFP 2шт.
	Сигнал тревоги	1) Вход(4 шт., клеммный блок) 2) Alarm Reset(1 шт.) 3) Выход (4 шт., клеммный блок) - Relay Out1(NO/NC/COM) - Relay Out2~4(NO/COM)
	USB	2шт.(спереди 2)
	Хранение	iSCSI
	Serial	RS-232C
	Сброс	Выключатель(1 шт.)
	Шнур питания	2 шт. входа питания переменным напряжением

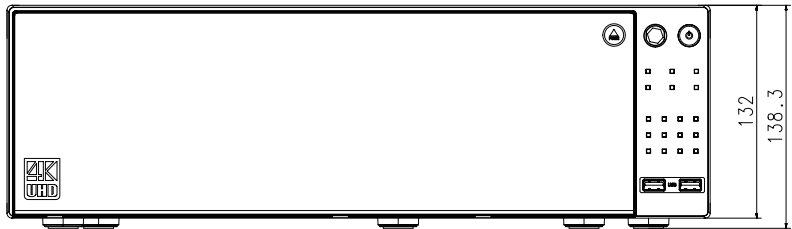
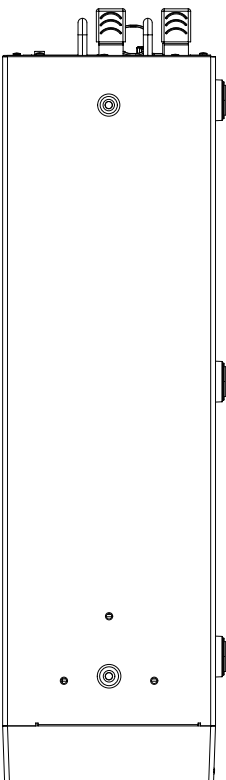
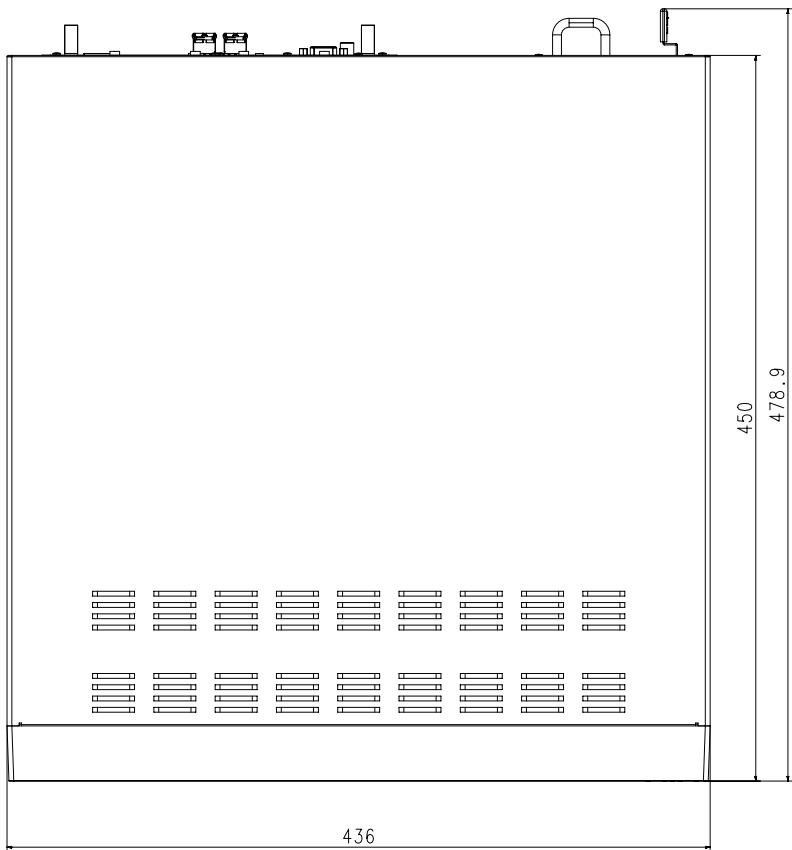
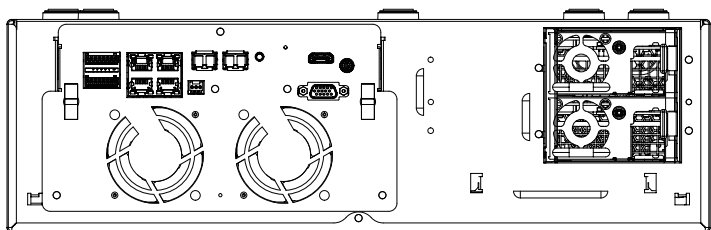
Элемент		Подробные сведения
Система		
Журнал	Список в журнале	Макс. 20,000 вводов (для системного журнала, для журнала событий отдельно)
Условия эксплуатации		
Рабочая температура/влажность		От +0°C до +40°C (+32°F до +104°F)
Влажность		20% ~ 85% RH
Электропитание		
Питание		100 ~ 240 В перем. тока ±10%; 50/60 Гц, 3~1.5А (Двойной SMPS)
Потребляемая мощность		До 250 Вт (853 БТЕ) при 12 HDD
Механические характеристики		
Цвет/материал		Черный/металлик
Размеры (ШxВxГ)		Ш436.0 x В132.0 x Г450.0mm (17.17" x 5.2" x 17.72") (3U)
Вес		Прибл. 11Kg (24.3 lb, HDD не включены)

Спецификация характеристики записи для условий работы HDD

Единица: (Мбит/с)

Способ хранения	Rcv	Сохранение			Удаленная передача	воспр.
		Внутрен.		iSCSI		
		Обычн.	Восстановление			
Внутрен. (RAID5)	400	400	320	300	300	32
Внутрен. (RAID6)	400	400	320	300	300	32
Одиночный HDD	400	250	-	250	300	32
iSCSI	300	-	-	300	300	32

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```

```
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3. [3]Viraj Bais <vbais@mailman1.intel.com> and [4]Clayton Kirkwood <kirkwood@striderfm.intel.com> port to WindowsNT 3.5

4. [5]Michael Barone <michael,barone@lmco.com> GPSVME fixes

5. [6]Karl Berry <karl@owl.HQ.ileaf.com> syslog to file option

6. [7]Greg Brackley <greg.brackley@bigfoot.com> Major rework of WINNT port. Clean up rcvbuf and iosignal code into separate modules.

7. [8]Marc Brett <Marc.Brett@westgeo.com> Magnavox GPS clock driver

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12. [13]Sven Dietrich <sven_dietrich@trimble.com> Palisade reference clock driver, NT adj. residuals, integrated Greg's Winnt port.

13. [14]John A. Dundas III <dundas@salt.jpl.nasa.gov> Apple A/UX port

14. [15]Torsten Duwe <duwe@immd4.informatik.uni-erlangen.de> Linux port

15. [16]Dennis Ferguson <dennis@mrbill.canet.ca> foundation code for NTP Version 2 as specified in RFC-1119

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23. [26]William L. Jones <jones@hermes.chpc.utexas.edu> RS/6000 AIX modifications, HP/UX modifications

24. [27]Dave Katz <dkatz@cisco.com> RS/6000 AIX port

25. [28]Craig Leres <leres@ee.lbl.gov> 4.4BSD port, ppsclock, Magnavox GPS clock driver

26. [29]George Lindholm <lindholm@ucs.ubc.ca> SunOS 5.1 port

27. [30]Louis A. Mamakos <louie@ni.umd.edu> MD5-based authentication

28. [31]Lars H. Mathiesen <thorinn@diku.dk> adaptation of foundation code for Version 3 as specified in RFC-1305

29. [32]David L. Mills <mills@udel.edu> Version 4 foundation: clock discipline, authentication, precision kernel; clock drivers: Spectracom, Austron, Arbiter, Heath, ATOM, ACTS, KSI/Odetics; audio clock drivers: CHU, WWW/H, IRIG

30. [33]Wolfgang Moeller <moeller@gwdgv1.dnet.gwdg.de> VMS port

31. [34]Jeffrey Mogul <mogul@pa.dec.com> ntpttrace utility

32. [35]Tom Moore <tmoore@fivel.daytonoh.ncr.com> i386 svr4 port

33. [36]Kamal A Mostafa <kamal@whence.com> SCO OpenServer port

34. [37]Derek Mulcahy <derek@toybox.demon.co.uk> and [38]Damon Hart-Davis <d@hd.org> ACRON MSF clock driver

35. [39]Rainer Pruy <Rainer.Pruy@informatik.uni-erlangen.de> monitoring/trap scripts, statistics file handling

36. [40]Dirce Richards <dirce@zk3.dec.com> Digital UNIX V4.0 port

37. [41]Wilfredo Sánchez <wsanchez@apple.com> added support for NetInfo

38. [42]Nick Sayer <mrapple@quack.kfu.com> SunOS streams modules

39. [43]Jack Sasportas <jack@innovativeinternet.com> Saved a Lot of space on the stuff in the html/pic/ subdirectory

40. [44]Ray Schnitzler <schnitz@unipress.com> Unixware1 port

41. [45]Michael Shields <shields@tembel.org> USNO clock driver

42. [46]Jeff Steinman <jss@pebbles.jpl.nasa.gov> Datum PTS clock driver

43. [47]Harlan Stenn <harlan@pfcs.com> GNU automake/autoconfigure makeover, various other bits (see the ChangeLog)

44. [48]Kenneth Stone <ken@sdd.hp.com> HP-UX port

45. [49]Ajit Thyagarajan <ajit@ee.udel.edu> IP multicast/anycast support

46. [50]Tomoaki TSURUOKA <tsuruoka@nc.fukuoka-u.ac.jp> TRAK clock driver

47. [51]Paul A Vixie <vixie@vix.com> TrueTime GPS driver, generic TrueTime clock driver

48. [52]Ulrich Windl <Ulrich.Windl@rz.uni-regensburg.de> corrected and validated HTML documents according to the HTML DTD

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