

СЕТЕВАЯ КАМЕРА

Руководство пользователя

XNP-6550RH



Сетевая Камера

Руководство пользователя

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※ Конструкция и характеристики устройства могут быть изменены без предварительного уведомления.

※ Первоначальный ID администратора - "admin", а пароль следует задать при первом входе в систему.

Для надежной защиты личной информации и предотвращения ущерба от кражи данных меняйте пароль каждые три месяца.

Имейте в виду, что ответственность за безопасность а также за любые проблемы, связанные с ненадлежащим обращением с паролем, несет пользователь.

ВАЖНЫЕ ПРАВИЛА ТЕХНИКИ БЕЗОПАСНОСТИ

1. Прочтите эти правила.
2. Сохраните эти правила.
3. Принимайте во внимание все предупреждения.
4. Следуйте всем правилам.
5. Не используйте изделие 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 контакта и третий заземляющий штырь. Широкое лезвие третьего заземляющего штыря предусмотрено для вашей безопасности.
Если вилка поставляемого вместе с аппаратом шнура питания не подходит для вашей розетки, попросите опытного электрика заменить старую розетку.
10. Не наступайте на шнур питания и не допускайте его защемления, особенно вблизи от штепсельной вилки, в месте подключения к розетке и там, где шнур выходит из изделия.
11. Пользуйтесь только теми приспособлениями/ принадлежностями, которые рекомендованы изготовителем.
12. Используйте устройство только с тележкой, подставкой, штативом, кронштейном и столом, указанными производителем или приобретенными вместе с устройством. Во избежание травм вследствие опрокидывания тележки с устройством соблюдайте осторожность при ее передвижении.
13. Отсоединяйте устройство от сети во время грозы или если оно не используется в течение длительного времени.
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.
15. Это изделие предназначено для поставки с указанным источником питания с маркировкой «Класс 2» или «LPS» и номинальной мощностью от 24 В перем. тока (50/60 Гц), мин. 4,9 А или PoE, 1,15 А.
16. Если при установке изделия прилагать чрезмерные усилия, возможно повреждение с нарушением работы камеры.
Если с силой устанавливать устройство, пользуясь неподходящими инструментами, возможно повреждение устройства.
17. Не допускается установка устройства в местах, где присутствуют или могут появляться химические вещества или пары масла. Поскольку пищевые масла, например, соевое, могут вызвать повреждение или привести к деформации устройства, не устанавливайте его на кухне или вблизи кухонного стола.
В противном случае возможна порча устройства.
18. При установке устройства будьте осторожны, не допускайте попадания химических веществ на его поверхность.
Некоторые химические растворители, например, очистители или клеящие вещества, могут сильно повредить поверхность продукта.
19. Если монтировать/демонтировать устройство не рекомендованным образом, нельзя гарантировать выполнение функций/ соответствие характеристик устройства.
Устанавливайте устройство, обратившись к разделу "Установка и подключение" в руководстве пользователя.
20. Установка или эксплуатация устройства в воде может привести к значительному повреждению изделия.
21. При нормальной эксплуатации изделия предварительно заданная точность составляет 0,2°. В случае перезагрузки вследствие отключения питания, обновления прошивки и других причин может потребоваться скорректировать допустимое отклонение после проверки изменений в настройке предустановок.



ПРЕДУПРЕЖДЕНИЕ

ВО ИЗБЕЖАНИЕ ПОВРЕЖДЕНИЙ, СЛЕДСТВИЕМ КОТОРЫХ МОЖЕТ БЫТЬ ПОЖАР ИЛИ ПОРАЖЕНИЕ ЭЛЕКТРИЧЕСКИМ ТОКОМ, НЕ ДОПУСКАЙТЕ ПОПАДАНИЯ ДАННОГО ИЗДЕЛИЯ ПОД ДОЖДЬ ИЛИ В УСЛОВИЯ ВЫСОКО Й ВЛАЖНОСТИ. ЗАПРЕЩАЕТСЯ ВСТАВЛЯТЬ КАКИЕ- ЛИБО МЕТАЛЛИЧЕСКИЕ ПРЕДМЕТЫ В ВЕНТИЛЛЯЦИОННЫЕ РЕШЕТКИ ИЛИ ДРУГИЕ ОТВЕРСТИЯ В ОБОРУДОВАНИИ.

Не подвергайте устройство воздействию жидкостей. Не следует также ставить на него предметы, наполненные жидкостью, например вазы.

Во избежание травм данное устройство должно быть надежно закреплено на стене/потолке в соответствии с инструкциями по установке.

Гарантия на механизмы панорамирования, наклона и увеличения, а также на контактное кольцо предоставляется на один год в условиях непрерывного использования.

ВНИМАНИЕ

	ВНИМАНИЕ ОПАСНОСТЬ ПОРАЖЕНИЯ ЭЛЕКТРИЧЕСКИМ ТОКОМ. НЕ ОТКРЫВАТЬ	
ВНИМАНИЕ : ВО ИЗБЕЖАНИЕ ПОРАЖЕНИЯ ЭЛЕКТРИЧЕСКИМ ТОКОМ, НЕ СНИМАЙТЕ ЗАДНЮЮ КРЫШКУ. ВНУТРИ НЕТ ДЕТАЛЕЙ, ОБСЛУЖИВАЕМЫХ ПОЛЬЗОВАТЕЛЕМ. ДЛЯ ТЕХНИЧЕСКОГО ОБСЛУЖИВАНИЯ ОБРАЩАЙТЕСЬ К КВАЛИФИЦИРОВАННОМУ СПЕЦИАЛИСТУ.		

ОПИСАНИЕ ГРАФИЧЕСКИХ ОБОЗНАЧЕНИЙ



Молния со стрелкой в равностороннем треугольнике предупреждает пользователя об "опасном напряжении" в корпусе изделия, которое может представлять риск поражения электрическим током.



Восклицательный знак в равностороннем треугольнике предупреждает пользователя о важных инструкциях по работе и обслуживанию в руководстве, которое прилагается к устройству.

Класс Конструкции I

Устройства КЛАССА I следует подключать к ЭЛЕКТРО розетке с защитным заземлением.

Батарея

Не подвергайте батареи (батарейный блок) чрезмерному нагреванию под воздействием солнечных лучей, огня и т.п.

Батарею невозможно заменить.

Отключение устройства

Отсоедините вилку кабеля питания от устройства в случае повреждения. Обратитесь к местному специалисту по ремонту.

При использовании за пределами США с соединениями одобренными соответствующим органом, может использоваться кодировка HAR.

ВНИМАНИЕ

Настоящие инструкции по обслуживанию предназначены только для квалифицированных специалистов.

Во избежание поражения электрическим током не следует выполнять работы по обслуживанию, описанные в инструкциях по эксплуатации, если вы не обладаете соответствующей квалификацией.

Выходной разъем CVBS устройства предназначен для облегчения монтажа и не рекомендуется использовать его для целей мониторинга.

К источнику входного питания может подсоединяться только одна камера.

Оборудование ITE подключается только к сети питания по Ethernet без маршрутизации на оборудование наружной установки.

Внимательно прочитайте приведенные ниже правила техники безопасности.

- Не ставьте устройство на неровную поверхность.
- Не устанавливайте устройство на поверхность, подверженную прямым солнечным лучам, рядом с нагревательным оборудованием или в очень холодном месте.
- Не устанавливайте это устройство вблизи электропроводящего.
- Не следует ремонтировать устройство самостоятельно.
- Не следует ставить на устройство стаканы с водой.
- Не устанавливайте поблизости источники магнитного поля.
- Не допускайте загрождения вентиляционных отверстий.
- Не ставьте тяжелые предметы на устройство.
- При установке/демонтаже камеры надевайте защитные перчатки. Высокая температура поверхности изделия может вызвать ожог.

Руководство пользователя содержит инструкции по использованию продуктов.

В руководстве используются следующие обозначения.

- Справка : сведения по использованию устройства
 - Примечание : На случай возможных повреждений имущества или вреда здоровью людей в результате несоблюдения инструкций
- ※ Прочтите это руководство по безопасности перед использованием устройств и сохраните его в безопасном месте.

В некоторых условиях установки могут возникать помехи радиосвязи.

Если данное устройство и какое-либо устройство радиосвязи создают взаимные электромагнитные помехи, рекомендуется разнести их на достаточное расстояние или изменить направление приемной антенны.

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РЕКОМЕНДУЕМАЯ КОНФИГУРАЦИЯ ПК

- Процессор : Intel(R) Core(TM) i7 3,4 Ггц или больше
- ОЗУ: 8 ГБ или больше
- Поддерживаемые ОС : MS Windows, Mac OS X
- Рекомендуемый браузер: Google Chrome
Поддерживаемые браузеры: MS Explorer, MS Edge, Mozilla Firefox (только 64-битная Windows), Apple Safari (только Mac OSX)

※ Подробные данные о версиях проверенных ОС и браузеров см. в приложении.

РЕКОМЕНДУЕМЫЕ ХАРАКТЕРИСТИКИ КАРТ ПАМЯТИ МИКРО SD/SDHC/SDXC

- Рекомендуемая емкость : от 16 до 256 Гбайт (типа MLC)
- Для данной камеры рекомендуются карты памяти следующих типов указанных производителей.
 - Производитель : SanDisk, Transcend
 - Линейка изделий: C длительным сроком службы

РЕКОМЕНДУЕМЫЕ ТЕХНИЧЕСКИЕ ХАРАКТЕРИСТИКИ NAS

- Рекомендуемый объем : Рекомендуемый объем – не менее 200 ГБ.
- Одновременный доступ : К одному устройству NAS может иметь доступ максимум шестнадцать камер.
- Для этой модели камеры рекомендуется использование NAS со следующими техническими характеристиками производителя.

Рекомендуемые продукты	Доступные размеры
Netgear NAS	Максимальное количество камер для одновременного доступа - 16.
Synology NAS	Максимальное количество камер для одновременного доступа - 16.



- При использовании оборудования Netgear NAS не выполняйте распределение общей емкости для дальнейшего использования.
- Если предполагается использование оборудования NAS не только для хранения видеоматериалов, количество одновременно доступных камер может быть сокращено.

КОМПЛЕКТ ПОСТАВКИ

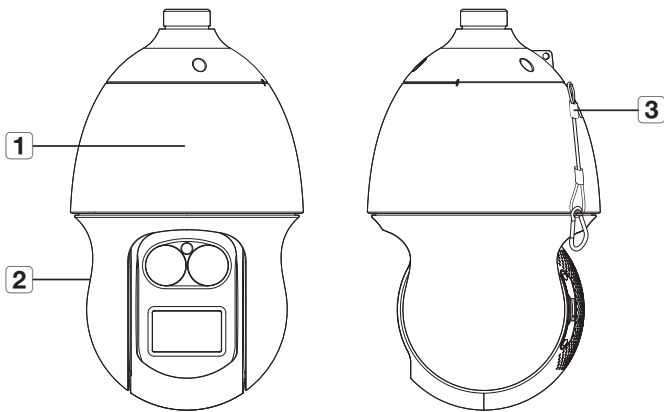
Проверьте наличие всех принадлежностей в комплекте поставки камеры.
(У изделий, продаваемых в разных странах, принадлежности могут отличаться.)

Внешний вид	Название элемента	Количество	Описание
	Основной корпус	1	
	Краткое Руководство (необязательно)	1	
	Гарантийный талон (необязательно)	1	
	Адаптер HPoE ※ В комплекте только с XNP-6550RH / (*США, *ЕС, *Япония)	1	Соединяет источник питания с сетью
	Шнур питания ※ В комплекте только с XNP-6550RH / (*США, *ЕС, *Япония)	1	Подключается к HPoE
	Кабель для тестирования монитора	1	Используется для подключения камеры к портативному устройству отображения
	Аудиоразъем/разъем RS-485	1	Используется для подключения аудиовыхода и RS-485
	Винт с шестигранной головкой	3	Используется для крепления основания для установки к камере.
	Г-образный ключ	1	Используется для фиксации основания для установки после прикрепления его к камере.

Внешний вид	Название элемента	Количество	Описание
	Основание для установки	1	Кронштейн для установки устройства
	Гидроизоляционные принадлежности	1	Устанавливаются для использования в местах с высокой влажностью

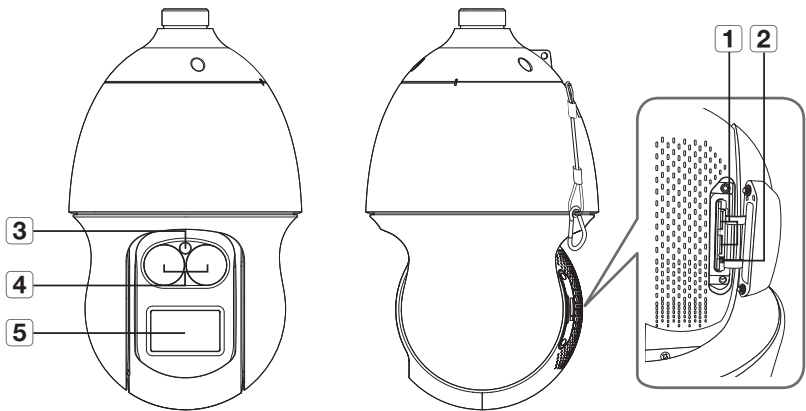
ОБЩИЙ ОБЗОР

Внешний вид



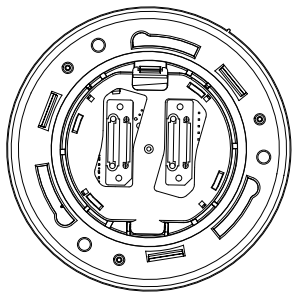
Элемент	Описание
1 Основная секция	Защищает внутренний механизм PTZ от воздействия прямых солнечных лучей, дождя и других внешних воздействий.
2 Крышка	Крышка для защиты объектива и самого устройства.
3 Предохранительный трос	Трос предохраняет изделие от падения при установке.

Внутренняя часть

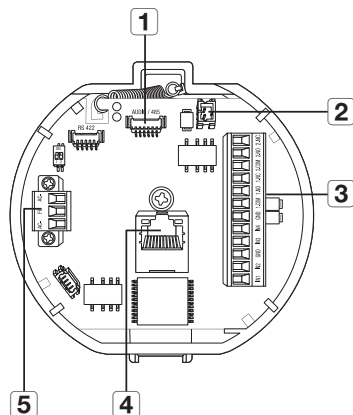


Элемент	Описание
1 Отсек для карты памяти Micro SD	Отсек для карты памяти Micro SD. ☑ См. Раздел <Вставление/извлечение карточки памяти Micro SD> для определения положения установки карты памяти Micro SD. (стр. 10)
2 Кнопка сброса	Восстановление заводских настроек по умолчанию для всех параметров камеры. Для перезагрузки системы нажмите и удерживайте в течение 5 секунд. ❗ Если сбросить настройки камеры, то сетевые настройки позволят активировать DHCP. Если в сети нет DHCP-сервера, то перед первым подключением к сети необходимо запустить программу Device Manager, чтобы изменить основные сетевые параметры, такие как IP-адрес, маска подсети, шлюз и т. д.
3 Светочувствительный датчик	Обнаруживает поступающий свет для управления инфракрасным светодиодом.
4 Инфракрасный светодиод	Инфракрасные светодиоды управляются светочувствительным датчиком.
5 Объектив	Объектив видеокамеры.

Основание для установки
- вид снизу



Основание для установки
- вид изнутри



Элемент	Описание
1 Аудиоразъем/разъем RS-485	Это выход для подключения аудиокабеля и кабеля RS-485.
2 Порт видеовыхода	Порт аналогового видеовыхода. (для установки)
3 Порт ввода-вывода тревог	Используется для подключения кабеля ввода-вывода тревог.
4 Сетевые подключения	Порт подсоединения к локальной сети с помощью кабеля Ethernet.
5 Порт питания	Используется для подключения кабеля питания.

УСТАНОВКА

- 
- Эта камера водонепроницаема и соответствует стандарту IP66, однако штекер внешнего кабеля водонепроницаемым не является. Рекомендуется установить это устройство под карнизом во избежание выпутания кабеля наружу.

Меры предосторожности, принимаемые перед установкой

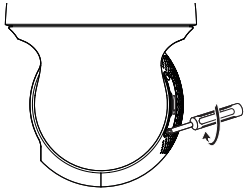
Прежде чем устанавливать камеру, обязательно прочтите приведенные далее инструкции.

- Выберите место для установки, которое сможет выдержать вес, минимум в 5 раз превышающий вес самой камеры.
- Кабели с поврежденной или снятой изоляцией могут стать причиной повреждения устройства или возгорания.
- С целью предосторожности попросите посторонних лиц покинуть место установки. На всякий случай уберите все посторонние личные вещи.
- Если аппарат устанавливается с чрезмерным усилием, это может привести к повреждению камеры из-за неправильной работы.
При сборке неподходящими инструментами с приложением усилий возможно повреждение аппарата.

Установка карты памяти microSD

1. При помощи отвертки ослабьте два винта на кронштейне держателя карты SD, повернув их против часовой стрелки.

- 
- Перед установкой карты Микро SD отключите кабель питания от камеры.
 - Не рекомендуется вставлять или вынимать карту памяти Микро SD во время дождя или при высокой влажности.
 - Перед установкой/извлечением карты памяти microSD убедитесь, что устройство находится на ровной поверхности, во избежание потери или падения каких-либо деталей.
 - Не вынимайте винт.

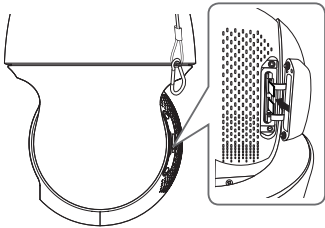


2. Вытащите кронштейн держателя карты SD и потяните карту памяти microSD в направлении стрелки, как показано на рисунке.

- 
- Не пытайтесь вставить ее обратной стороной, так как это может повредить карту памяти microSD и устройство.

3. После вставки карты памяти microSD соберите камеру в обратном порядке.

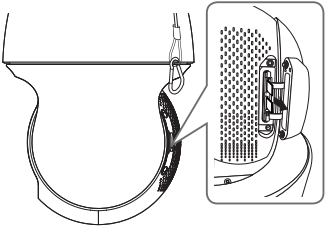
- 
- Затяните винты в процессе сборки корпуса камеры, закройте крышку и кронштейн держателя карты SD во избежание попадания влаги.



Извлечение карты памяти microSD

Мягко нажмите на выступающий конец карточки как показано на диаграмме, чтобы извлечь карточку из гнезда.

- 
- Заметьте, что если во время извлечения сильно нажать на карту памяти Микро SD, а затем отпустить ее, она может выскочить.
 - Перед извлечением карты памяти SD в меню <Накопитель>, установите устройство в состояние <Выкл.>, нажмите кнопку [Применить] и выключите камеру.
 - Если Вы выключите камеру или извлечете из продукта карту памяти Микро SD, содержащую данные, то эти данные могут быть потеряны или повреждены.



Подготовка и установка кронштейна камеры

Руководство по установке кронштейнов и корпусов приведено в руководстве по установке, прилагаемом к кронштейну или корпусу.

Доступные модели кронштейнов

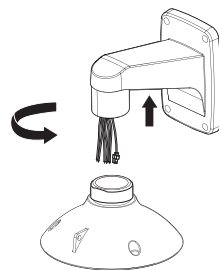
Модель	Позиция
SBP-300WM1	Настенное крепление
SBP-300WM	
SBP-300CM	Установка на потолок
SBP-300LM	Крепление на парапет
SBP-300KM	Угловое крепление
SBP-300PM	Крепление к опоре

- 
- Внешний вид каждого кронштейна (продаются отдельно) можно посмотреть в разделе "Дополнительные принадлежности для установки", (стр. 13)

Установка с помощью настенного крепления

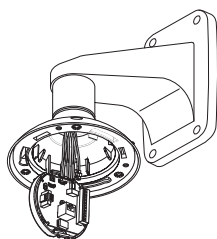
■ Фиксация основания для установки на кронштейне

1. Зафиксируйте основание на кронштейне, повернув его в направлении часовой стрелки.



2. Как показано на рисунке ниже, слегка нажмите и приподнимите ручку на навесной дверце, которая находится в нижней части основания для установки. Подсоедините провода, выполнив инструкции раздела "Плата проводного интерфейса камеры" на стр. 14.

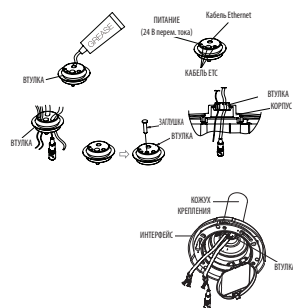
-  ■ Не подключайте камеру к сетевой розетке до тех пор, пока установка не будет полностью завершена. Поддача питания в процессе установки может привести к возгоранию или повреждению продукта.



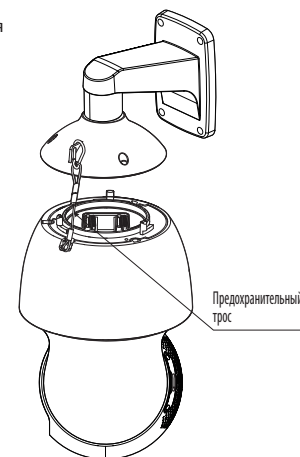
-  Проверьте способ подсоединения кабеля и подключите его.

- Следует иметь в виду, что прилагаемые ВТУЛКИ предназначены для установки на улице, где они будут подвержены воздействию влаги через ТРУБКУ или КРЕПЕЖ. Для предотвращения попадания влаги используйте ВТУЛКУ при установке КОРПУСА.

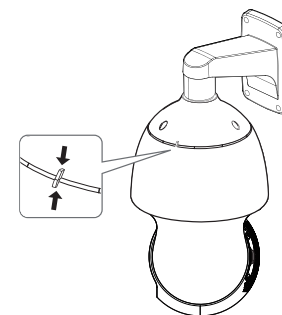
- Перед сборкой нанесите соответствующее количество смазки на ВТУЛКУ, а затем пропустите кабели через каждое отверстие втулок. Для закрытия отверстий, через которые не проходят кабели, используйте ЗАГЛУШКИ.
- Собирайте ВТУЛКИ с верхней стороны КОРПУСА внутри, как показано на следующем рисунке. Быстро равномерно надавите на ВТУЛКУ, чтобы прочно закрепить ее в КОРПУСЕ, как показано на рисунке.



3. Подсоедините предохранительный трос камеры к основанию для установки.

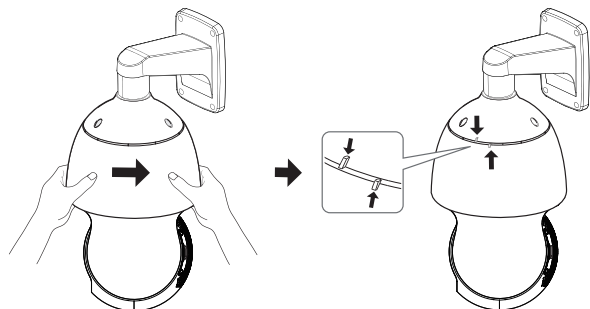


4. Сборка камеры и основания для установки. Соедините основание для установки и камеру, сопоставив установочные метки этих двух частей.



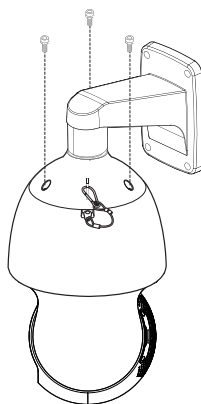
5. Крепление камеры.

Поверните основной корпус камеры по часовой стрелке так, чтобы расположить опорные метки на верхней и нижней секциях так, как показано на рисунке.



6. Крепление камеры и основания для установки.

Как показано на рисунке ниже, скрепите вместе основание для установки и камеру с помощью 3 винтов с шестигранной головкой.



Замечания по обеспечению водонепроницаемости

Эта модель представляет собой интегрированный продукт для наружной установки.

■ Фиксация крепежного элемента на основном корпусе для настенного монтажа.

1. Закрепите настенный держатель на вертикальной стене. При монтаже на наклонную стену, влага может попадать в корпус через внешний кабель.
2. Оберните винтовую часть корпуса достаточным количеством тефлоновой ленты для монтажа.
3. Убедитесь, что прокладка не отошла от крышки во время снятия крышки и установки на корпус изделия.
4. Установите держатель настенного крепления для обеспечения водонепроницаемости и используйте силиконовый герметик между стеной и настенным держателем и вокруг стены и настенного держателя для уплотнения.



■ Обратите особое внимание на обеспечение надлежащего уплотнения, если поверхность, на которую проводится монтаж, не является плоской.

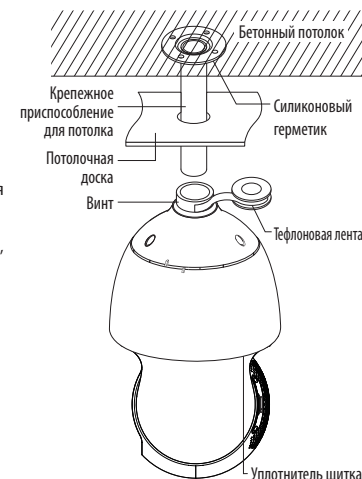


■ Фиксация крепежного элемента на основном корпусе и настенном адаптере для установки не стене.

1. Оберните винтовую часть корпуса достаточным количеством тефлоновой ленты.
2. Убедитесь, что прокладка не отошла от крышки во время снятия крышки и установки на корпус изделия.
3. Установите крепежное приспособление для потолка для обеспечения водонепроницаемости и используйте силиконовый герметик между стеной и потолочным креплением и вокруг стены и потолочного крепления для уплотнения.



■ Обратите особое внимание на обеспечение надлежащего уплотнения, если поверхность, на которую проводится монтаж, не является плоской.

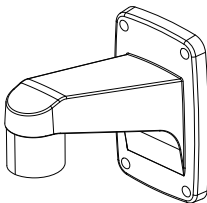


Дополнительные принадлежности для установки

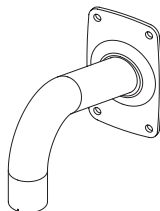
Для упрощения установки можно приобрести дополнительные принадлежности.

1. Если камера устанавливается на стене

- Настенное крепление (SBP-300WM1)

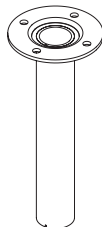


- Настенное крепление (SBP-300WM)



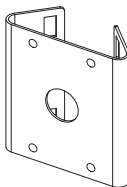
2. Если камера устанавливается на потолке

- Установка на потолке (SBP-300CM)



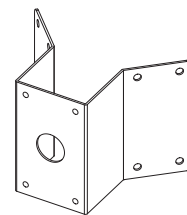
3. Если настенное крепление (SBP-300WM/SBP-300WM1) устанавливается на цилиндре длиной не менее 80 мм

- Крепление к опоре (SBP-300PM)



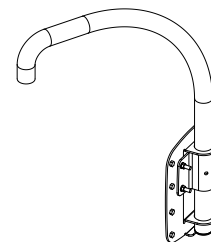
4. Если настенное крепление (SBP-300WM/SBP-300WM1) устанавливается в углу стены

- Угловое крепление (SBP-300KM)

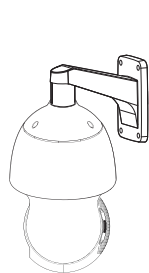


5. Если установка выполняется на крыше здания

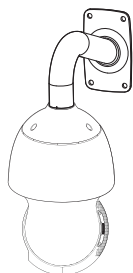
- Крепление на парапет (SBP-300LM)



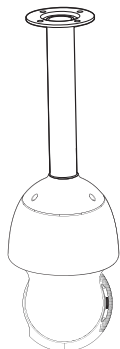
■ Монтажное соединение



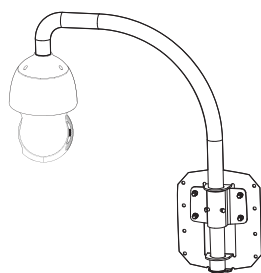
Настенное крепление
(SBP-300WM1)



Настенное крепление
(SBP-300WM)



Установка на потолке
(SBP-300CM)

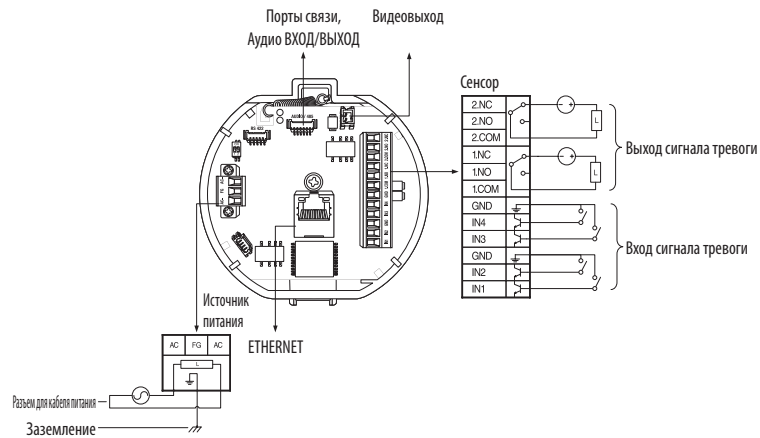


Крепление на парапет
(SBP-300LM)

ПОДКЛЮЧЕНИЕ К ДРУГОМУ УСТРОЙСТВУ

Плата проводного интерфейса камеры

Детали электропроводки камеры представлены на рисунке ниже.



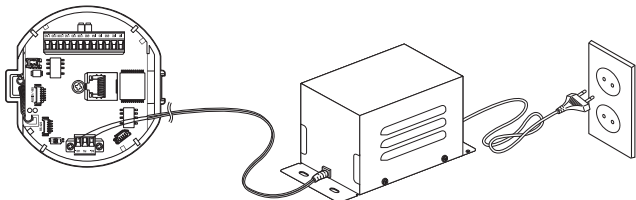
- Выберите опцию "Нормально открытый" в меню установки.
 - Входной разъем сенсора активируется при коротком замыкании для контактного типа, или когда он находится на уровне "Низкий" для активного типа.
- Выберите опцию "Нормально закрытый" в меню установки.
 - Входной разъем сенсора активируется при размыкании цепи для контактного типа или при нахождении в режиме высокого импеданса (разомкнутый коллектор) для активного типа.
- Максимальная емкость разъема выхода тревоги составляет 30 В пост. тока/2 А, 125 В пер. тока/0,5 А и 250 В пер. тока/0,25 А.
- При подключении входных и выходных сигнальных кабелей убедитесь, что каждый из них подключен к соответствующему разъему.
- Для подключения продуктов, мощность которых выше мощности камеры, используйте дополнительное релейное устройство.
- Если кабели питания и заземления подключены неправильно к разъемам NC/NO или COM, это может привести к возгоранию или поломке оборудования.

Подготовка адаптеров и кабелей

- !

■

Подсоедините камеру к адаптеру питания. Затем подключите кабель адаптера к сетевой розетке.



Перед выполнением подключений проверьте номинальное напряжение и силу тока.

Номинальная мощность	Допустимое входное напряжение	Потребление тока
24 В перем. тока	22-26 В перем. тока	6 А

- !

■

Это изделие нельзя использовать при температуре окружающей среды -50°C и ниже.
- Это изделие нельзя размораживать, в зависимости от зоны установки, при температуре -50°C.
- После того, как этот продукт был оставлен на морозе, для начала его нормальной работы потребуется до 2 часов.
- Скорость увеличения регулятора освещенности ИК может снизиться при температуре -40°C и ниже.
- Если изделие было включено после нахождения на морозе -20°C и ниже в течение некоторого времени, сбросьте время.
- Если необходимо подключить внешнее устройство, сначала отключите его.

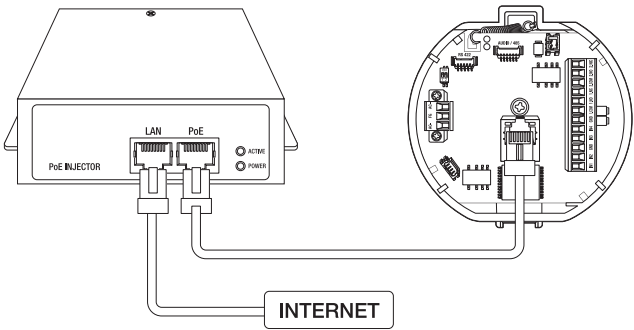
Характеристики кабеля питания

При входной мощности 24 В переменного тока:

Марка провода (AWG)	#16	#14
Длина кабеля (макс.)	14m	23m

Подключение к сети Ethernet

Подключите кабель Ethernet к локальной сети или к Интернету.



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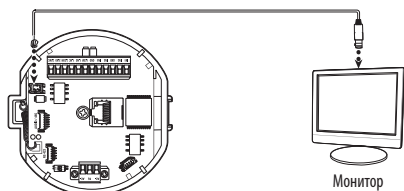
Используйте совместимый адаптер для питания устройства.

Спецификация сетевого кабеля

Пункт	Содержание	Примечание
Разъем	RJ45 (10/100BASE-T)	
Ethernet	10/100BASE-T	
Кабель	UTP категории 5e	
Макс. расстояние	100 м	Сопротивление по постоянному току ≤ 0.125 Ом/м
Поддержка питания по HPoE	HPoE	

Подключение монитора

Подключите кабель к выходному видеоразъему на задней панели камеры и к входному видеоразъему монитора.

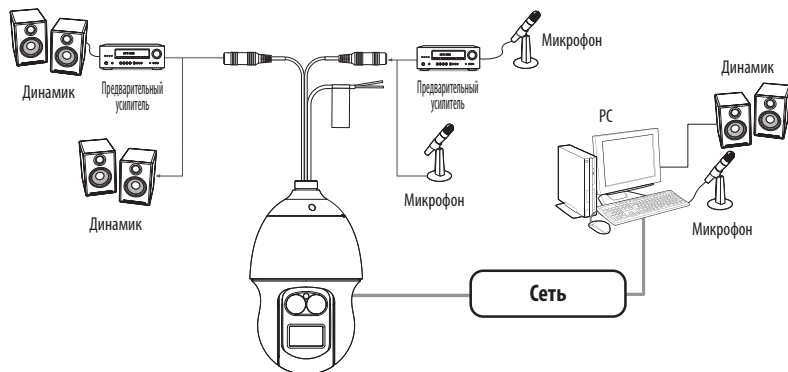


■ Тип проводов зависит от типа монитора и набора периферийных устройств; см. руководство пользователя к каждому из устройств.

■ При выполнении подключения проверьте, выключено ли питание монитора и камеры.

- Данный продукт является сетевой камерой, передающей видеосигналы по сети; выходной видеоразъем используется для настройки диапазона визуализации камеры при ее установке.
- Использование этого разъема с целью мониторинга может вызвать такие проблемы, как снижение качества видео.
- Не подходит для 24-часового наблюдения с использованием профессиональных ЭЛТ-мониторов или портативных мониторов TFT / LCD.
- Для 24-часового наблюдения и хранения данных используйте сетевой экран.

Подсоединение звукового ввода/вывода



1. Подключите микрофон к порту AUDIO IN камеры или соедините порты AUDIO IN и LINE OUT усилителя, к которому подсоединен микрофон.
2. Подключите динамик к порту AUDIO OUT камеры или соедините порты AUDIO OUT и LINE OUT усилителя, к которому подсоединен динамик.
3. Проверьте характеристики для аудиовхода.

Аудиокодек

- Аудио вход : G.711 PCM (скорость передачи: 64кбит/с / частота дискретизации: 8кГц), G.726 АДИКДМ (скорость передачи: 16кбит/с , 24кбит/с , 32кбит/с , 40кбит/с / частота дискретизации: 8кГц), AAC (скорость передачи: 48кбит/с / частота дискретизации: 16кГц)
- Аудио выход : G.711 PCM (скорость передачи: 64кбит/с / частота дискретизации: 8кГц)

Дуплексное аудио

- **Звуковой вход** : Выбираемый (микрофон/линейный вход), поддерживаемое напряжение: 2,5 В постоянного тока (4 мА), входное сопротивление: 2 кОм
- **Звуковой выход** : Линейный выход (монофонический штекер 3,5 мм), максимальный сигнал: 1 В (действующее значение)
- **Сопротивление выходного канала Line out** : 600 Ом

Подключение Камеры

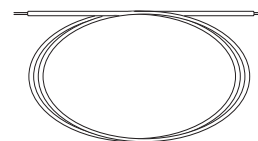
Разъемы управляющего сигнала

- Связь по RS-485



Кабель связи

Для установки связи камеры с контроллером требуется линия связи RS-485.



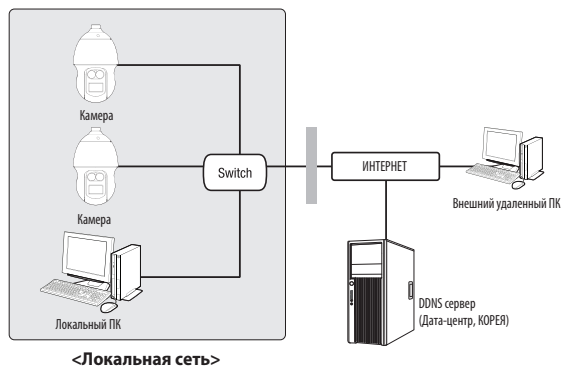
- Рекомендуемая длина кабеля, используемого для подключения, должна составлять 30 м или меньше.
- Кабель связи не должен находиться в одном корпусе с камерой.

Можно выставить сетевые настройки согласно сетевой конфигурации.

ПОДКЛЮЧЕНИЕ КАМЕРЫ НАПРЯМУЮ К ЛОКАЛЬНОЙ СЕТИ

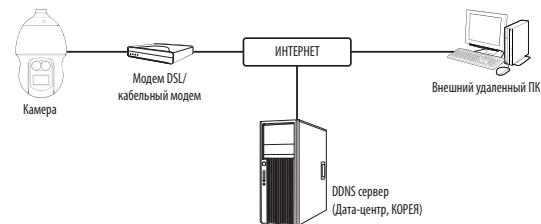
Подключение к камере через локальный ПК в локальной сети

1. Запустите Интернет-браузер на локальном ПК.
2. Введите адрес IP-роутера в адресной строке браузера.



- Удаленный ПК во внешней сети или в Интернете не может подключиться к камере, установленной в интранет, если не задана правильная перадресация портов или установлен фаервол. В этом случае обратитесь к системному администратору для устранения проблемы.
- В Device Manager для установки IP-адреса, маски подсети, шлюза, порта HTTP, порта VNP и типа IP можно использовать исходный пароль «4321». Для лучшей защиты после изменения сетевого интерфейса войдите в web viewer и поменяйте пароль.
- Согласно заводским настройкам по умолчанию, IP-адрес назначается сервером DHCP автоматически. Если сервер DHCP отсутствует, будет задан следующий IP-адрес: 192.168.1.100. Чтобы изменить IP-адрес, нужно использовать Device Manager. Для получения дополнительной информации об использовании Device Manager см. раздел «Использование Device Manager». (Стр. 18)

ПРЯМОЕ ПОДКЛЮЧЕНИЕ КАМЕРЫ К МОДЕМУ DSL/КАБЕЛЬНОМУ МОДЕМУ С ПОДДЕРЖКОЙ ПРОТОКОЛА DHCP



1. Подсоедините напрямую ПК пользователя с сетевой камерой.
2. Запустите Device Manager и измените IP-адрес камеры, чтобы можно было для подключения к Интернету использовать веб-браузер вашего компьютера.
3. Установите подключение к интерактивной программе просмотра в веб-браузере.
4. Перейдите на страницу [Настройка].
5. Перейдите на страницу [Сеть] - [DDNS] и настройте параметры DDNS.
6. Перейдите по меню [Basic] - [IP & Порт] и задайте тип IP для [DHCP].
7. Подсоедините камеру, отключенную от ПК, непосредственно к модему.
8. Перезапустите камеру.

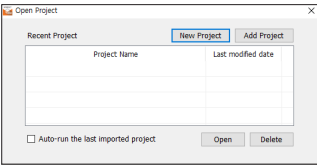
- За информацией об установке DDNS обратитесь к онлайнной справке программы Web Viewer.
- За информацией о задании формата IP-адреса обратитесь к онлайнной справке программы Web Viewer.

ИСПОЛЬЗОВАНИЕ DEVICE MANAGER

- Программу Device Manager можно загрузить с веб-сайта Hanwha Vision через меню <Служба поддержки> – <Tool>. (<https://www.HanwhaVision.com>)
- Дополнительные инструкции по Device Manager можно найти в меню <Help> главной страницы.

НАСТРОЙКА ПРОЕКТОВ

Вы можете сохранять и импортировать камеры для каждого проекта.
Для создания нового проекта задайте название проекта и пароль.
Необходимо ввести пароль для запуска созданного проекта.



АВТОМАТИЧЕСКИЙ ПОИСК КАМЕРЫ

Если камера подключена к той же сети, что и ПК, на котором установлен Device Manager, можно найти такую сетевую камеру с помощью функции поиска.

1. Нажмите <Search> на главной странице Device Manager.
2. В открывшемся списке выберите нужную камеру.
 - Проверьте MAC-адрес на наклейке, прикрепленной к камере.

НАСТРОЙКА IP-АДРЕСА

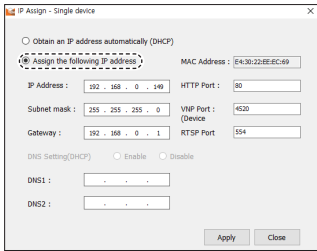
Чтобы изменить сетевые настройки камеры, в поле <Status> должен отображаться значок <Login OK>. Чтобы войти в систему, на главной странице нажмите <Credential>.

Настройка статического IP

Вручную введите IP-адрес и информацию о порте.

Настройка одной камеры

1. Выберите из списка камеру, у которой нужно изменить параметры IP.
2. Нажмите кнопку <IP Assign> на главной странице Device Manager.
3. Выберите <Assign the following IP address>.
 - В данных параметров IP камеры будут отображаться введенные значения.
4. Заполните категории IP-адреса и порта.



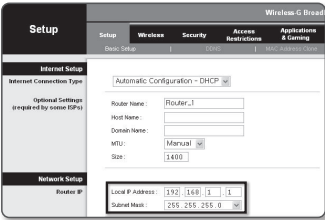
В случае отсутствия Широкополосный маршрутизатор

Попросите сетевого администратора выдать вам значения <IP Address (IP-адрес)>, <Subnet Mask (Маска подсети)>, <Gateway (Шлюз)>.

- HTTP Port : Используется для получения доступа к камере через веб-обозреватель. Значение по умолчанию - 80.
- RTSP Port: Порт, который управляет потоковой передачей в реальном времени. По умолчанию установлено значение 554.

В случае использования Широкополосный маршрутизатор

- IP Address : введите адрес, который соответствует IP-диапазону, заданному Широкополосный маршрутизатор. пр) 192.168.1.2~254, 192.168.0.2~254, 192.168.XXX.2~254
- Subnet Mask : параметр <Subnet Mask> Широкополосный маршрутизатор соответствует параметру <Subnet Mask> камеры.
- Gateway : параметр <Local IP Address> Широкополосный маршрутизатор соответствует параметру <Gateway> камеры.



- Параметры могут различаться в зависимости от модели Широкополосный маршрутизатор. Для получения дополнительных сведений см. руководство пользователя соответствующего маршрутизатора.
- Дополнительную информацию о переадресации портов на широкополосном маршрутизаторе см. в разделе "Настройка Переадресации Диапазона Портов (Распределение Портов)". (Стр. 20)

Если к Широкополосный маршрутизатор подключено несколько камер

Настройте параметры, связанные с IP-адресом и портами, в соответствии друг с другом.

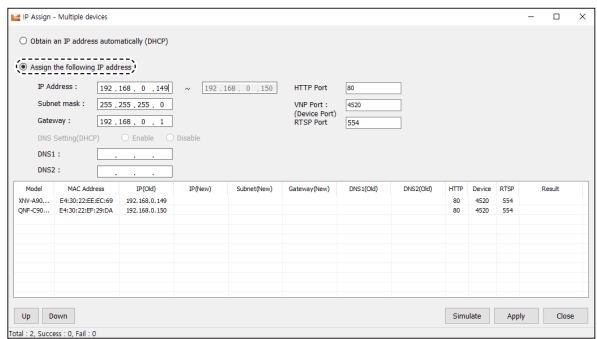
пр)

Категория		Камера №1	Камера №2
Настройки, связанные с IP	IP Address	192.168.1.100	192.168.1.101
	Subnet Mask	255.255.255.0	255.255.255.0
	Gateway	192.168.1.1	192.168.1.1
Настройки, связанные с портами	Порт HTTP	8080	8081
	Порт RTSP	554	555

- Если для параметра <HTTP Port> выбрано значение выше 80, необходимо указать номер <Port> в адресной строке веб-обозревателя, прежде чем получить доступ к камере. пр) http://IP-адрес : Порт HTTP http://192.168.1.100:8080

5. Нажмите кнопку [Apply].
6. Если появится сообщение об успешной настройке, нажмите [OK].

Настройка нескольких камер



1. Выберите из списка камеру, у которой нужно изменить параметры IP.
2. Нажмите кнопку <IP Assign> на главной странице Device Manager.
3. Выберите <Assign the following IP address>.
4. Назначьте начальный адрес из диапазона IP-адресов.
5. Нажмите кнопку [Simulate] для проверки IP-адреса, который будет назначен каждой единице оборудования.
 - Можно изменить любой IP-адрес, дважды щелкнув строку с ним.
6. Нажмите кнопку [Apply] для назначения IP-адреса.
7. Проверьте в столбце <Result> успешность присвоения IP-адреса.

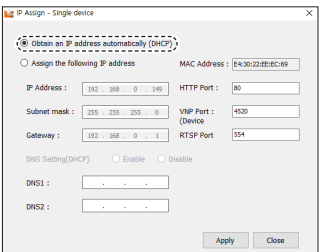
Настройка динамического IP-адреса

Получите IP-адрес от DHCP

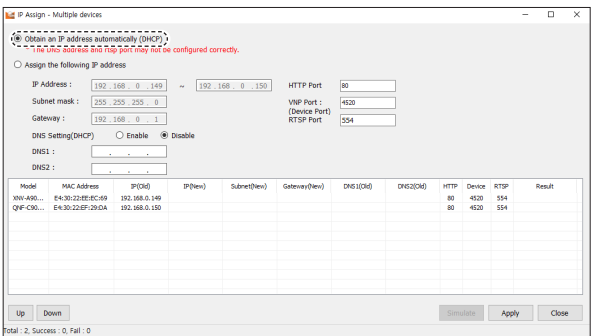
- Примеры динамического IP-окружения
 - Сервер DHCP назначает IP-адрес Широкополосный маршрутизатор с подключенными камерами.
 - Прямое подключение камеры к модему с помощью протоколов DHCP
 - Внутренний сервер DHCP назначает IP-адреса по локальной сети.

Настройка одной камеры

1. Выберите из списка камеру, у которой нужно изменить параметры IP.
2. Нажмите кнопку <IP Assign> на главной странице Device Manager.
3. Выберите <Obtain an IP address automatically (DHCP)>.
4. Нажмите кнопку [Apply].
5. Если появится сообщение об успешной настройке, нажмите [OK].



Настройка нескольких камер

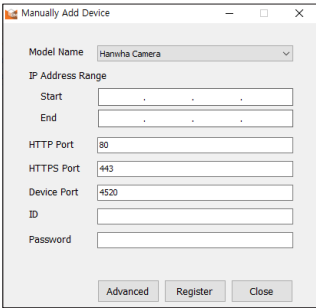


1. Выберите из списка камеру, у которой нужно изменить параметры IP.
2. Нажмите кнопку <IP Assign> на главной странице Device Manager.
3. Выберите <Obtain an IP address automatically (DHCP)>.
4. Нажмите кнопку [Apply] для назначения IP-адреса.
5. Проверьте в столбце <Result> успешность присвоения IP-адреса.

РЕГИСТРАЦИЯ КАМЕРЫ ВРУЧНУЮ

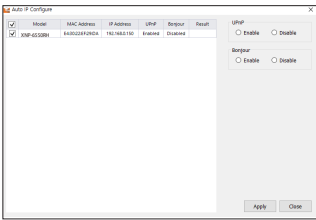
Если не удастся найти камеру с помощью функции поиска (если камера подключена к внешней сети), ее можно зарегистрировать удаленно, введя ее параметры IP вручную.

- 1. На главной странице Device Manager нажмите <Add Devices> – <Manually Add Device>.
- 2. Введите нужный диапазон IP-адресов.
- 3. Выберите <Model Name> камеры, которую нужно зарегистрировать, и введите данные о порте HTTP, порте HTTPS, идентификатор и пароль.
- 4. Нажмите кнопку [Register].
- 5. Проверьте, зарегистрировалась ли камера.
 - Проверьте MAC-адрес на наклейке, прикрепленной к камере.



АВТОМАТИЧЕСКАЯ НАСТРОЙКА IP

- 1. Выберите из списка камеру, для которой необходимо автоматически настроить параметры IP.
- 2. На главной странице Device Manager нажмите <+>.
 - Появится меню настроек оборудования.
- 3. Выберите в меню <Auto IP Configure>.
- 4. Для использования протокола <UPnP> или <Bonjour> выберите <Enable> и нажмите кнопку [Apply].

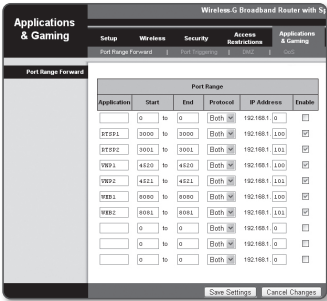


НАСТРОЙКА ПЕРЕАДРЕСАЦИИ ДИАПАЗОНА ПОРТОВ (РАСПРЕДЕЛЕНИЕ ПОРТОВ)

После установки Широкополосный маршрутизатор с подключенными камерами необходимо настроить для него переадресацию диапазона портов, чтобы с удаленного компьютера можно было получить доступ к подключенным камерам.

Переадресации диапазона портов вручную

- 1. В меню настроек Широкополосный маршрутизатор выберите <Applications & Gaming> - <Port Range Forward>.
Сведения о настройке переадресации диапазона портов для Широкополосный маршрутизатор стороннего производителя см. в его руководстве пользователя.
- 2. Выберите <TCP> и <UDP Port> для каждой камеры, подключенной к Широкополосный маршрутизатор. Номер каждого из портов, конфигурируемых в IP-маршрутизаторе, следует устанавливать в соответствии с номером, назначенным в пункте меню <Настройка> - <Basic> - <IP & Порт> в Web viewer камеры.
- 3. Затем нажмите кнопку [Save Settings].
Заданные настройки будут сохранены.

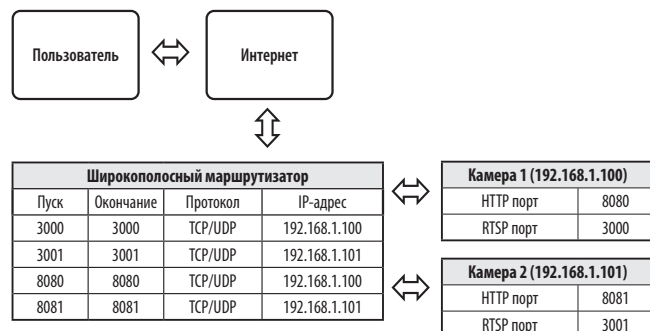


- Настройка переадресации портов является примером настройки IP-маршрутизатора CISCO.
- Параметры могут различаться в зависимости от модели Широкополосный маршрутизатор. Для получения дополнительных сведений см. руководство пользователя соответствующего маршрутизатора.

Настройка переадресации диапазона портов для нескольких сетевых камер

- Правило переадресации порта для Широкополосный маршрутизатор можно задать с веб-страницы его настроек.
- С помощью экрана настройки камеры можно изменить все порты.

Когда камера 1 и камера 2 подключены к маршрутизатору:



- Переадресация портов выполняется без дополнительной настройки роутера, если роутер поддерживает функцию UPnP (включи и работай). После соединения с сетевой камерой установите из меню <Быстрое соединение> флажок <DDNS> в пункте "Настройки -> Сеть -> DDNS".

ПОДКЛЮЧЕНИЕ К КАМЕРЕ С ЛОКАЛЬНОГО КОМПЬЮТЕРА ОБЩЕГО ДОСТУПА

1. Запустите Device Manager. Она выполнит поиск подключенных камер и составит список найденных.
2. Выберите нужный проект и нажмите кнопку [Open].
3. При вводе пароля отобразится список камер в проекте.
4. Дважды щелкните нужную камеру, чтобы получить к ней доступ. Запустится веб-обозреватель и подключится к выбранной камере.

- Получить доступ к найденной камере можно и другим способом: просто введите IP-адрес камеры в адресную строку веб-обозревателя.

ПОДКЛЮЧЕНИЕ К КАМЕРЕ С УДАЛЕННОГО КОМПЬЮТЕРА ЧЕРЕЗ ИНТЕРНЕТ

На удаленном компьютере, который не входит в сетевой кластер широкополосного маршрутизатора, пользователи не могут получить доступ к камерам в сети широкополосного маршрутизатора, используя URL-адрес DDNS конкретной камеры.

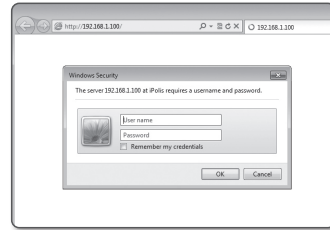
1. Прежде чем получить доступ к камере в сети Широкополосный маршрутизатор, необходимо настроить переадресацию диапазона портов для Широкополосный маршрутизатор.
2. На удаленном компьютере запустите веб-обозреватель и введите DDNS URL-адрес камеры или IP-адрес Широкополосный маршрутизатор в адресную строку.
пр) <http://ddns.hanwha-security.com/ID>

- Чтобы использовать DDNS, зарегистрируйтесь на домашней странице DDNS (<http://ddns.hanwha-security.com>) и зарегистрируйте продукт через меню [Мой DDNS]> [Зарегистрировать продукт].

ПОДКЛЮЧЕНИЕ К КАМЕРЕ

Обычный порядок действий

1. Запустите веб-обозреватель.
2. Введите IP-адрес камеры в адресную строку.
пр) • IP-адрес (IPv4) : 192.168.1.100
→ <http://192.168.1.100>
- появится диалоговое окно входа.
• IP-адрес (IPv6) : 2001:230:abcd:ffff:0000:0000:ffff:1111
→ [http://\[2001:230:abcd:ffff:0000:0000:ffff:1111\]](http://[2001:230:abcd:ffff:0000:0000:ffff:1111]) - появится диалоговое окно входа.



Номер порта HTTP отличен от 80

1. Запустите веб-обозреватель.
2. Введите IP-адрес и номер порта HTTP камеры в адресную строку.
пр) IP-адрес: 192.168.1.100: номер порта HTTP(8080)
→ <http://192.168.1.100:8080> - появится диалоговое окно входа.

Использование URL-адреса

1. Запустите веб-обозреватель.
2. Введите DDNS URL-адрес камеры в адресную строку.
пр) URL-адрес: <http://ddns.hanwha-security.com/ID>
- появится диалоговое окно входа.



■ Сетевое подключение выключено только в среде LAN.

Подключение через UPnP

1. Запустите систему клиента или операционную систему в подтверждение UPnP протокола.
2. Кликните имя камеры для поиска.
В операционной системе Windows кликните на имя камеры для поиска в меню сети.
- Отобразится окно входа.

Соединение через службу Bonjour

1. Запустите систему клиента или операционную систему в подтверждение Bonjour протокола.
2. Кликните имя камеры для поиска.
В операционной системе Mac кликните имя камеры для поиска во вкладке Bonjour в браузере Safari.
- Отобразится окно входа.



■ Для использования протокола UPnP или Bonjour обратитесь к разделу "Автоматическая настройка IP".

Просмотр DDNS-адреса

Если камера подключена непосредственно к кабельному модему на основе DHCP или к модему DSL, то IP-адрес будет изменяться каждый раз при соединении с Интернет-провайдером (компанией, с которой у вас подписка).

В этом случае вам не будет сообщаться об изменении IP-адреса, выполненном DDNS.

Если вы зарегистрируете устройство с динамическим IP-адресом на сервере DDNS, то во время доступа к этому устройству вы всегда можете проверить, как изменился его IP-адрес.

Чтобы зарегистрировать устройство на сервере <DDNS>, посетите веб-сайт <http://ddns.hanwha-security.com>. Сначала зарегистрируйте камеру, а затем задайте <Сеть> - <DDNS> для <DDNS> в программе Web Viewer, а также укажите <Код продукта>, который использовался для регистрации DDNS.

УСТАНОВКА ПАРОЛЯ

Когда доступ к продукту выполняется первый раз, необходимо зарегистрировать пароль входа в систему.

Когда откроется окно **“Смена пароля”**, введите новый пароль.



- Для нового пароля от 8 до 9 символов, необходимо использовать не менее 3 символов из числа следующих: строчные/прописные буквы, цифры и специальные символы. Для пароля от 10 до 15 символов необходимо использовать не менее 2 типов указанных символов.
 - Допускаются следующие специальные символы: ~`!@#\$%^&*()_-=+[]{}?/
- Для лучшей защиты пароля не рекомендуется повторять одинаковые символы либо символы, последовательно расположенные на клавиатуре.
- При утрате пароля можно нажать кнопку [RESET] для инициализации продукта. Не теряйте пароль, сохраните его в записной книжке или запомните.

ВХОД

При каждом доступе к камере будет появляться окно входа.

Укажите идентификатор пользователя и пароль для доступа к камере.

1. Введите **“admin”** в поле ввода **<User Name>**. Идентификатор администратора **“admin”** постоянный и не подлежит изменению.
2. Введите пароль в поле ввода **<Password>**.
3. Нажмите кнопку [OK]. После входа в систему отобразится экран интерактивной программы просмотра.



- При доступе к камере через модуль Web viewer уделите внимание безопасности и проверьте, зашифрованы ли данные, содержащие изображение.



- Если установить флажок **“Remember my credentials”** во время ввода данных, то в следующий раз и далее вход в систему будет выполняться автоматически без запроса данных.
- Лучшее качество видео обеспечивается при размере экрана 100%. При уменьшении экрана изображение может быть обрезано по краям.

НАСТРОЙКА WEB VIEWER

1. Щелкните по значку [Настройка (⚙)].
2. Откроется окно настроек.
3. Можно задать по локальной сети базовую информацию о камере, а также настройки видео, аудио, локальной сети, событий, анализа и системы.
4. Выберите **<Справка (🔍)>** для просмотра подробного описания каждой функции.

ХАРАКТЕРИСТИКИ

Элементы		Описание
Видео	Устройство обработки изображения	1/2.8" 2.16M CMOS
	Общее количество пикселей	1945(Г) X 1109(В), 2.16М пикселей
	Количество эффективных пикселей	1945(Г) X 1097(В), 2.13М пикселей
	Система сканирования	Построчная развертка
	Мин. освещенность	Цветное: 0.02 люкс (1/30 с, F1.6) Ч/Б: 0.002 люкс (1/30 с, F1.6) 0 люкс (ИК светодиод включен)
	Соотношение сигнал/шум	50dB
	Видеовыход	CVBS : 1.0 Vp-p / 75Ω композитный, 720x480(N), 720x576(P), Для установки
	Фокусное расстояние (коэффициент трансфокации)	4.75мм ~ 261.4мм(55x)
Объектив	Макс. относительное отверстие	F1.6(широкоуг.) / F6.5(теле)
	Угловое поле зрения	Г : 58.6° (широкоуг) ~ 1.23° (теле) / В : 34.8° (широкоуг) ~ 0.71° (теле)
	Мин. расстояние до объекта	5м
	Регулятор фокусировки	АФ / Одномоментный автофокус / Вручную
	Тип объектива	Автоматическая диафрагма
	Тип крепления	Встроенное
	Скорость увеличения	Прим. 5 сек. (с широкоэкранный в телевизионный режим)
	Диапазон панорамирования	360° до бесконечности
Панорама/ Наклон/Поворот	Скорость панорамирования	Предуст.: 400°/сек, Вручную: 0,024°/сек - 250°/сек
	Диапазон наклона	95° (-5° ~ 90°)
	Скорость наклона	Предуст.: 250°/сек, Вручную: 0,024°/сек - 250°/сек
	Чередование	Предустановки (300 шт.), качание, группа (6 шт.), слежение, тур, автозапуск, расписание
	Точность предустановки	±0.2°
	Азимут	Да (E / W / S / N / NE / NW / SE / SW OSD)
	Автоматическое слежение	Выкл. / Вкл.

Элементы	Описание
Дальность видимости	500 м
Название камеры	Выкл. / Вкл (отображается до 85 знаков) - Общемировые: Английские/Цифровые/Специальные символы - Общие: Многострочный (до 5), цвет (серый/зеленый/красный/синий/черный/белый), прозрачность, автоматическое масштабирование по разрешению
День/Ночь	Авто (ICR) / Цвет / Ч/Б
Компенсация подсветки	Выкл. / BLC / HLC / WDR
Широкий динамический диапазон	120dB
Улучшение контрастности	SSDR (Выкл./Вкл.)
Цифровое шумоподавление	SSNR5 (фильтр шумов 2D+3D) (Выкл./Вкл.)
Цифровая стабилизация изображения	Выкл./вкл. (встроенный гироскоп)
Защита от злотования (Optical)	Авто / Вручную / Выкл.
Детектор движения	Да (8 многоугольных зоны)
Зоны маскирования	Выкл. / Вкл. (24 прямоугольные зоны) - Цвет: Серый / Зеленый / Красный / Синий / Черный / Белый - Опция коэффициента увеличения для режима маскирования - Функция мозаики
Регулировка усиления	Выкл. / Низкий / Средний / Высокий
Баланс белого	Авто баланс белого / Автобаланс цвета / Вручную / Для помещений / Вне помещений / Ртутные / Натрий
Скорость электронного затвора	Мин/Макс/Подавление мерцаний (2 ~ 1/12 000 с)
Цифровая трансфокация	32x, функция увеличения для зоны поддерживает 2x
Поворот изображения	Переворот / Зеркальное отображение : Вкл. / Выкл.
Аналитика интеллектуального видео	Обнаружение взлома, передвижения, направления, виртуальная линия, вход/выход, появление/исчезновение, обнаружение звука, распознавание лица, детектор движения, обнаружение тумана, классификация звука
В/В сигнала	Вход 4 шт./Выход 2 шт. (Вид ретрансляции)
Интерфейс ДУ	RS-485
Протокол RS-485	Samsung-T, Pelco-D/P, Panasonic, Honeywell, AD, Vicon, GE, BOSCH
Триггеры сигналов тревоги	Вход сигнализации, обнаружение движения, интеллектуальный анализ видео, отключение локальной сети

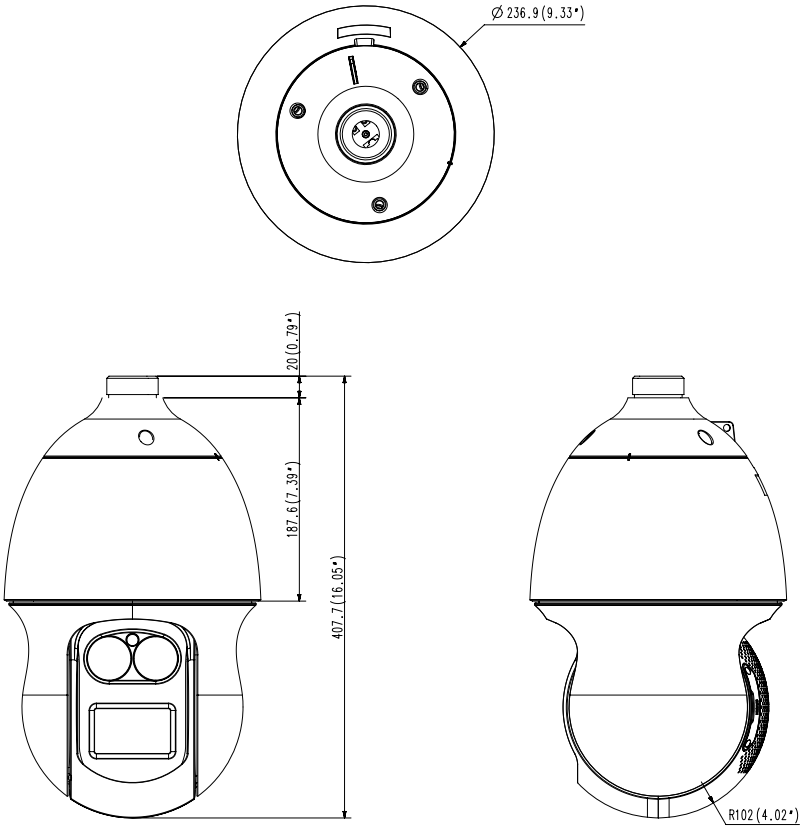
Элементы		Описание
Рабочие характеристики	События тревоги	- Выгрузка файла через FTP, электронную почту - Уведомление по электронной почте - Локальный носитель (SD/SDHC/SDXC), или NAS запись при наличии события (триггеры сигналов тревоги) - Внешний выход - Предустановка PTZ
	Аудио вход	На выбор (вход Mic IN / вход Line IN), Сетевое напряжение: 2,5 В постоянного тока (4 мА), входное сопротивление: приблизительно 2 кОм
	Аудио выход	Линейный выход (монофонический штекер 3,5 мм), макс. выходной уровень: 1 В действ.
	Счетчик пикселей	Поддержка
Сеть	Ethernet	RJ-45 (10/100BASE-T) SFP (*используется только SBP-303HF)
	Формат сжатия видео	H.265/H.264 (MPEG-4 часть 10/AVC): Главная/Базовая линия/Верх, Движение JPEG
	Разрешение	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
	Макс. частота кадров	H.265/H.264: До 60 кадр/с при всех разрешениях Motion JPEG: До 30 кадр/с при всех разрешениях
	Технология Smart Codec	Ручной режим (на основе зон: 5 зон)
	WiseStream II	Поддержка
	Настройка качества видео	для H.264/H.265/MJPEG: Управление скоростью передачи
	Способы управления скоростью передачи бит	H.264/H.265: CBR или VBR MJPEG: VBR
	Возможности потоковой передачи	Многопотоковая (до 10 профилей)
	Формат сжатия звука	G.711 u-law /G.726, выбирается G.726 (ADPCM) 8 кГц, G.711 8 кГц G.726: 16 кбит/с, 24 кбит/с, 32 кбит/с, 40 кбит/с AAC-LC: 48 кбит/с при 16 кГц
	Аудиосвязь	Двунаправленный

Элементы		Описание
Сеть	IP	IPv4, IPv6
	Протокол	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour
	Безопасность	Проверка подлинности при входе HTTPS (SSL); проверка подлинности при входе Digest; фильтрация IP-адресов; регистрация доступа пользователей Способ проверки подлинности 802.1x (EAP-TLS, EAP-LEAP)
	Способ потоковой передачи	Одноадресная / многоадресная
	Макс. количество пользователей	20 пользователей в одноадресном режиме
	Функция Edge Store	2 разъема microSD/SDHC/SDXC (до 512 Гбайт) - Непрерывная запись (на 1 карту или 2) - Возможность загрузки киноизображений, записанных на карту памяти microSD/SDHC/SDXC. NAS (сетевое хранилище данных) Локальный ПК для мгновенной записи
	Интерфейс прикладного программирования	ONVIF Profile S/G SUNAPI 2.0(HTTP API) Открытая платформа WiseNet
	Язык веб-страницы	Английский, Французский, Немецкий, Испанский, Итальянский, Китайский, Корейский, Русский, Японский, Шведский, Португальский, Чешский, Польский, Турецкий, Голландский, Венгерский, Греческий
	Веб-обозреватель	Поддерживаемые ОС: Windows 7 / 8.1 / 10, MAC OS X 10.10, 10.11, 10.12 Рекомендуемый браузер: Google Chrome Поддерживаемый браузер: IE11, MS Edge, Mozilla Firefox (который поддерживается только Windows 64bit), Apple Safari 10 (который поддерживается только Mac OS X)
	ПО для центрального управления	SmartViewer

Элементы	Описание
Условия	Рабочая температура/влажность 24 В перем. тока : от -50°C до +55°C (-58°F до +131°F) / Относительная влажность менее 90% HrPoE : -40°C ~ +55°C (-40°F ~ +131°F) / Относительная влажность менее 90% * Запуск следует выполнять при температуре выше -30°C (HrPoE Mode)
	Температура хранения/влажность от -50°C до +60°C (-58°F до +140°F) / Относительная влажность менее 90%.
	Пыле- и влагозащита IP66
	Антивандалная защита IK10
Электропитание	Входное напряжение/сила тока 24 В перем. тока / HrPoE
	Потребляемая мощность 24 В перем. тока : 92Вт HrPoE : 60Вт
Физические характеристики	Цвет/материал Черная (головка) + слоновая кость (корпус)/алюминий, пластик
	Размеры (Ø x В) Ø236,9 x В407,7 mm
	Вес 7.2кг

ПРИЛОЖЕНИЕ

Единицы измерения: мм (дюймы)



ПОИСК И УСТРАНЕНИЕ НЕПОЛАДOK

ПРОБЛЕМА	РЕШЕНИЕ
Если доступ производится через подключаемый программный модуль Free webviewer на Safari через HTTPS, видео не отображается.	- При первоначальном доступе к https во всплывающем окне с предложением аутентификации выберите "Просмотр сертификата подлинности" и установите флажок "Всегда доверять при соединении по IP, назначенному программе веб-просмотра". - Если модуль веб-просмотра по-прежнему не отображает видео после выбора "Далее" в окне сообщения внизу, нажмите командную кнопку + Q, чтобы выйти из браузера Safari, вновь войдите в систему и следуйте процедуре, приведенной выше.
Нет доступа к камере через веб-браузер.	- Проверьте на правильность сетевые настройки камеры. - Убедитесь в правильности подключения всех сетевых кабелей. - Убедитесь в том, что камера получает динамический IP-адрес при использовании DHCP-технологии. - Если камера подключена к Широкополосный маршрутизатор, убедитесь в том, что переадресация портов настроена правильно.
Происходит разрыв соединения по время мониторинга видео в экране просмотра.	- При любом изменении настроек камеры или сети происходит разрыв соединения с наблюдательными терминалами. - Проверьте все сетевые соединения.
Подключенная к сети камера не обнаружена в программе Device Manager.	Отключите фаервол на своем ПК и заново запустите поиск камеры.
Картинки перекрываются.	Убедитесь в том, что две или более камеры не транслируют данные на один и тот же multicast-адрес. Картинки могут перекрываться, если один адрес используется несколькими камерами.
Нет картинок.	- Если задан метод передачи на группу адресов, убедитесь, что в локальной сети, к которой подключена камера, есть роутер, поддерживающий технологию multicast. - Проверка нормальной работы модуля объектива.

ПРОБЛЕМА	РЕШЕНИЕ
<Детектор движения> в меню <Аналитика> установлено в <Активировать>, но уведомление по электронной почте не приходит, даже когда произошло событие аналитики.	- Проверьте настройки в следующей последовательности: А. Проверьте настройки параметра <Дата и время>. В. Для параметра <Детектор движения> необходимо задать значение <Активировать>. С. Проверьте, выбран ли в меню <Настройка событий> параметр <Настройка событий>.
Сигнал тревоги не выводится на соответствующий порт даже при регистрации события анализа интеллектуального видео.	Проверьте настройки для выходных портов сигналов.
Не удается записать данные на карту памяти Micro SD.	Проверьте, исправна ли карта памяти.
Карта памяти Micro SD установлена, однако камера работает неверно.	- Проверьте, в правильном ли направлении вставлена карта памяти. Возможность использования карт памяти, отформатированных на других устройствах, не гарантируется. - Снова отформатируйте карту памяти в меню <Настройка> → <Событие> → <Накопитель>.
Не удается произвести запись в NAS.	- Убедитесь в том, что информация, зарегистрированная в NAS, указана верно. - Убедитесь в том, что IP-адрес NAS введен правильно. - Убедитесь в том, что ID/пароль NAS введены правильно. - Убедитесь в том, что доступ к папке, установленной в качестве основной папки с использованием ID номера NAS, открыт. - Убедитесь в том, что с элементов NAS SMB/CIFS сняты флажки (выделения). - Убедитесь в том, что IP-адрес NAS и IP-адрес камеры имеют одинаковый формат. - Ex) Начальное значение маски подсети для NAS и камеры 255.255.255.0. - Если IP-адрес 192.168.20.32, то IP-адрес NAS должен быть в диапазоне 192.168.20.1~192.168.20.255. - Проверьте, не осуществлялась ли попытка получения доступа под другим пользователем без форматирования основной папки (сохраненной или используемой). - Убедитесь в том, что используется рекомендуемое оборудование NAS.
Это сообщение о том, что настройка NAS не удалась.	

OPEN SOURCE ANNOUNCEMENT

GPL/LGPL software license

The software included in this product contains copyrighted software that is licensed under the GPL/LGPL. You may obtain the complete Corresponding Source code from us for a period of three years after our last shipment of this product by sending email to help.cctv@hanwha.com

If you want to obtain the complete Corresponding Source code in the physical medium such as CD-ROM, the cost of physically performing source distribution might be charged.

GPL SW

Component Name	License	URL
Base Kernel	GPL 2.0	
Busybox	GPL 2.0	http://www.busybox.net/downloads/snapshots
iproute2-4.3.0	GPL 2.0	
iptables-1.4.21	GPL 2.0	http://ftp.netfilter.org/pub/iptables
ethtool-4.2	GPL 2.0	
mtdev-1.5.2	GPL 2.0	ftp://ftp.infradead.org/pub/mtdev-utils
mii-diag-2.11	GPL 2.0	
rp-pppoe-3.11	GPL 2.0	http://www.roaringpenguin.com/pppoe/
wpa_supplicant-2.5	GPL 2.0	
bash-4.3.30	GPL 3.0	
zeroconf	GPL 2.0	

LGPL SW

Component Name	License	URL
glibc	LGPL 2.0	
inetutils	LGPL 3.0	
neon-0.29.6	LGPL 2.0	http://www.webdav.org/neon/

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

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Preamble

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 2. to develop and manufacture the Embedded Product containing the Binary Code, and, whether with or without payment, provide the End User with the same and make the Binary Code available to the End User on the Embedded Product.
5. The Source Code User and the System Developer shall be obligated to give a notice that the Source Code is used, in such a way as separately specified by T-Engine Forum, when they use the Source Code or the Binary Code, or make the Binary Code available for the End User on the Embedded Product.

Article 5. Distribution of Modified Source Code

1. Any of A- members of T-Engine Forum may become the Distributor of Modification by obtaining the approval of T-Engine Forum through the registration procedure as prescribed by the Forum provided that only the department of the A- member which has taken the registration procedure may distribute the Modified Source Code in such a way as provided for in this Article as long as it holds the Amembership.
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4. The Distributor of Modification shall determine the name of the Modified Source Code subject to the rules separately established by T-Engine Forum and publish an appropriate notice as required by the rules on the Patch for Modification and the Modified Source Code.
5. The Distributor of Modification may distribute the Modified Source Code to a third party, whether with or without payment, provided that the Distributor of Modification shall take the necessary measures to prohibit the third party from making the re-Distribution of the Modified Source Code.
6. Developer with the Patch for Modification. Provided, however, that the Distributor of Modification shall be obligated to confirm that the System Developer is the Source Code User duly licensed under Article 4.1.
7. The Distributor of Modification may perform the Vicarious Execution of Patch Processing for the System Developer.
8. The System Developer shall not distribute the Modified Source Code in further modified form to any third party as a stand-alone software product.
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Article 6. Distribution and Registration of the Ported Source Code

1. The Source Code User and the System Developer may, whether with or without charge, distribute to any third party only the following parts of the Ported Source Code on the T-Engine Hardware or the Similar Hardware to T-Engine Hardware:
 1. The Hardware-dependent Part and/or Compiler-dependent Part; provided that the Source Code User and the System Developer shall inform T-Engine Forum of, and T-Engine Forum may publish, a method for distributing said Part(s) to third parties.
 2. The Header File; provided that the Header File shall be distributed together with the Binary Code of the Ported Source Code.
2. Any member of T-Engine Forum may request T-Engine Forum to register and distribute, as an original source code for T-Kernel, the Ported Source Code on the T-Engine Hardware or the Similar Hardware to T-Engine Hardware.

3. Any member of T-Engine Forum who requests the distribution mentioned in the preceding paragraph shall accede to the following conditions:

1. The member shall confirm that the object hardware is the T-Engine Hardware or the Similar Hardware to T-Engine Hardware.
2. The member shall provide T-Engine Forum with a complete set of operational environment for the object hardware and T-Kernel free of charge when requesting the distribution.
3. The member shall submit test results of the Ported Source Code to T-Engine Forum when requesting the distribution.
4. In the event that T-Engine Forum accepts the request mentioned in Article 6.2, T-Engine Forum shall register and distribute the Ported Source Code as the Source Code for T-Kernel. Provided, however, that the Ported Source Code may be treated in the same way as the Modified Source Code until the time of registration hereunder.
5. The provision set forth in Article 3 shall apply to the Ported Source Code registered in accordance with this Article.

Article 7. Use for Other Purpose

1. Any use of the Source Code, the Modified Source Code or the Ported Source Code other than those stipulated in Articles 4, 5 and 6 shall be subject to the prior approval of T-Engine Forum.

Article 8. Limited Warranty

1. T-Engine Forum and the copyright holder of the Source Code warrant that the Source Code does not infringe third party's copyrights. Provided, however, that T-Engine Forum and the copyright holder of the Source Code make no warranty as to the Hardware-dependent Part and/or Compiler- dependent Part set forth in Article 6.2 in the Ported Source Code by any third party.
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Julian Seward, jseward@bzip.org

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Iperf performance test

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Jean-loup Gailly Mark Adler

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The data format used by the zlib library is described by RFCs (Request for Comments) 1950 to 1952 in the files <http://www.ietf.org/rfc/rfc1950.txt> (zlib format), [rfc1951.txt](http://www.ietf.org/rfc/rfc1951.txt) (inflate format) and [rfc1952.txt](http://www.ietf.org/rfc/rfc1952.txt) (gzip format).



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