

# СЕТЕВАЯ КАМЕРА

Руководство пользователя

PNM-9084RQZ/PNM-9085RQZ  
PNM-9084RQZ1/PNM-9085RQZ1



# Сетевая Камера

## Руководство пользователя

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### Все права защищены

Каждый из торговых знаков далее в документе является зарегистрированным. Название данного продукта и другие торговые знаки, упоминаемые в данном руководстве, являются зарегистрированными торговыми знаками соответствующих компаний.

### Ограничения

Данный документ защищен авторским правом. Данный документ ни при каких обстоятельствах не разрешается воспроизводить, распространять или изменять, полностью или частично, без документально подтвержденного разрешения.

### Отказ от ответственности

Компания **Hanwha Vision** тщательно проверяет достоверность и правильность содержимого данного документа, однако не несет официальной ответственности за представленную информацию. Пользователь несет полную личную ответственность за использование этого документа и за последующие результаты. Компания **Hanwha Vision** оставляет за собой право изменять содержание документа без предварительного уведомления.

❖ 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. Данное изделие предназначено для питания от утвержденных источников питания с маркировкой "Class 2" или "LPS" с номинальным выходом 12 В перем. тока, не менее 3,2А, либо PoE(55 В пост. тока), не менее 0,77А. (PNM-9084RQZ)
16. Данное изделие предназначено для питания от утвержденных источников питания с маркировкой "Class 2" или "LPS" с номинальным выходом 12 В перем. тока, не менее 3,5А, либо PoE(55 В пост. тока), не менее 0,82А. (PNM-9085RQZ)
17. Не используйте питание постоянным током и HPOE инжектор одновременно.
18. Это изделие предназначено для использования с изолированным источником питания.
19. Если при установке изделия прилагать чрезмерные усилия, возможно повреждение работ камеры.  
Если с силой устанавливать устройство, пользуясь неподходящими инструментами, возможно повреждение устройства.
20. 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.
21. 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.



22. 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.
23. Установка или эксплуатация устройства в воде может привести к значительному повреждению изделия.
24. анная модель должна устанавливаться горизонтально.  
При установке в вертикальном положении камера может быть повреждена из-за неправильного режима работы.

## 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.

## ВНИМАНИЕ

|                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                        |                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                                                                                                                          | <div style="background-color: black; color: white; padding: 5px; margin-bottom: 5px;"><b>ВНИМАНИЕ</b></div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"><b>ОПАСНОСТЬ ПОРАЖЕНИЯ ЭЛЕКТРИЧЕСКИМ ТОКОМ. НЕ ОТКРЫВАТЬ</b></div> |  |
| <p><b>ВНИМАНИЕ : ВО ИЗБЕЖАНИЕ ПОРАЖЕНИЯ ЭЛЕКТРИЧЕСКИМ ТОКОМ, НЕ СНИМАЙТЕ ЗАДНЮЮ КРЫШКУ.ВНУТРИ НЕТ ДЕТАЛЕЙ, ОБСЛУЖИВАЕМЫХ ПОЛЬЗОВАТЕЛЕМ. ДЛЯ ТЕХНИЧЕСКОГО ОБСЛУЖИВАНИЯ ОБРАЩАЙТЕСЬ К КВАЛИФИЦИРОВАННОМУ СПЕЦИАЛИСТУ.</b></p> |                                                                                                                                                                                                                                                        |                                                                                     |

## 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.

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

Существует риск взрыва при замене батарее на батарею несоответствующего типа. Утилизируйте использованные батареи в соответствии с инструкциями.

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.

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 заграждения вентиляционных отверстий.
- Не ставьте тяжелые предметы на устройство.
- При установке/демонтаже камеры надевайте защитные перчатки. Высокая температура поверхности изделия может вызвать ожог.
- Не регулируйте и не перемещайте объектив непосредственно руками. Это может повредить объектив или ухудшить его характеристики.
- Ожидаемый срок службы двигателя объектива составляет 200 оборотов.

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.

Качество приобретаемых отдельно сторонних продуктов (например, объективов или принадлежностей) не гарантируется.

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.

ВНИМАНИЕ!

Светодиодная ИК-подсветка может травмировать вам глаза. Не смотрите напрямую на включенный источник света.

Только для указанных далее моделей.

PNM-9084RQZ/PNM-9085RQZ

|                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------|
| Группа риска 1                                                                                                         |
| <b>ВНИМАНИЕ! Этот прибор испускает инфракрасный свет.</b><br><b>Не смотрите напрямую на включенный источник света.</b> |
| Изделие соответствует стандарту IEC 62471                                                                              |

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РЕКОМЕНДУЕМАЯ КОНФИГУРАЦИЯ ПК

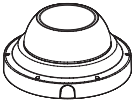
- Процессор : Intel(R) Core(TM) i7 3,4 ГГц или больше
  - ОЗУ: 8 ГБ или больше
  - Рекомендуемый браузер: Chrome
  - Поддерживаемые браузеры: Chrome, Safari, Firefox, MS Edge(chromium based)
  - Поддерживаемые ОС : Windows, Mac, Linux, Android, iOS, Chrome
  - Среда проверки
    - Windows 10: Google Chrome версии 80 или новее, Firefox версии 72 или новее, MS Edge версии 83 или новее
    - Mac 10.13/14: Safari версии 11.0.1 или новее
- ※ Производительность просмотра видео в Web Viewer зависит от производительности процессора и графической платы компьютера пользователя.

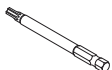
РЕКОМЕНДУЕМЫЕ ХАРАКТЕРИСТИКИ КАРТ ПАМЯТИ МИКРО SD/SDHC/SDXC

- Рекомендуемая емкость : от 16 до 256 Гбайт (типа MLC)
- Рекомендуемые производители: SanDisk, Transcend
- Тип карты: износостойкая
- Совместимость может отличаться в зависимости от производителя и типа карты.
- Рекомендуется применять карту памяти на 16 ГБ или более, которая отвечает спецификации UHS-3 класс (тип MLC).

КОМПЛЕКТ ПОСТАВКИ

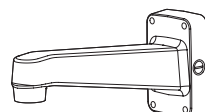
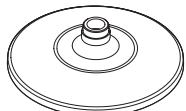
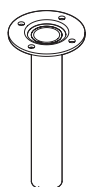
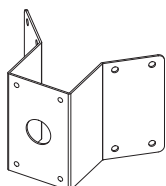
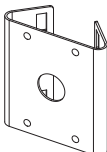
Проверьте наличие всех принадлежностей в комплекте поставки камеры.  
(У изделий, продаваемых в разных странах, принадлежности могут отличаться.)

| Внешний вид                                                                         | Название элемента                   | Количество | Описание                                                                                      |
|-------------------------------------------------------------------------------------|-------------------------------------|------------|-----------------------------------------------------------------------------------------------|
|  | Камера                              | 1          |                                                                                               |
|  | Краткое Руководство (необязательно) | 1          |                                                                                               |
|  | Шаблон                              | 1          | Руководство по установке устройства                                                           |
|  | Клеммник питания                    | 1          | Вставлен в разъем электропитания                                                              |
|  | Шнур питания                        | 1          | Вставляется в разъем питания                                                                  |
|  | Крепежные винты                     | 4          | Винты, используемые для установки камеры на подвесное крепление, в установочной коробки и др. |
|  | Установщик защитного колпачка       | 1          | Используется для подключения кабеля RJ-45                                                     |

| Внешний вид                                                                       | Название элемента              | Количество | Описание                                                                             |
|-----------------------------------------------------------------------------------|--------------------------------|------------|--------------------------------------------------------------------------------------|
|  | Насадка к дрели                | 1          | Используется для демонтажа и монтажа купольной крышки, а также для установки камеры. |
|  | Кабельная втулка               | 1          | Запасные кабельные вводы для кабелей LAN или сигнальных и аудиокабелей.              |
|  |                                | 1          |                                                                                      |
|  | Адаптер НРoE                   | 1          | Соединяет источник питания с сетью                                                   |
|  | Звуковой кабель/кабель тревоги | 1          | Подключается в звуковой разъем и разъем тревоги                                      |

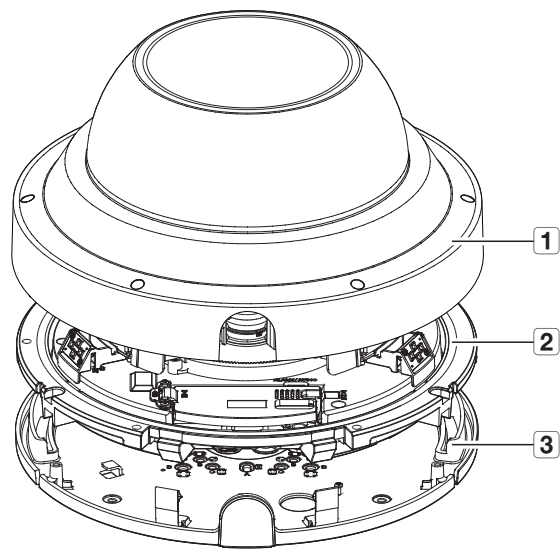
## ДОПОЛНИТЕЛЬНЫЕ ПРИНАДЛЕЖНОСТИ ДЛЯ УСТАНОВКИ

Вы можете приобрести дополнительные принадлежности.

| Тип продукта        | Настенное крепление                                                                 |                                                                                     |
|---------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Наименование модели | SBP-390WMW2                                                                         |                                                                                     |
|                     |  |                                                                                     |
| Тип продукта        | Подвесное крепление                                                                 | Потолочное крепление                                                                |
| Наименование модели | SBP-317HMW                                                                          | SBP-300CMW                                                                          |
|                     |  |  |
| Тип продукта        | Угловое крепление                                                                   | Крепление к столбу                                                                  |
| Наименование модели | SBP-300KMW                                                                          | SBP-300PMW                                                                          |
|                     |  |  |

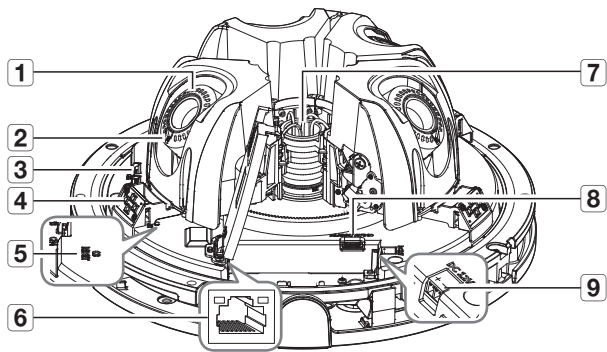
ОБЩИЙ ОБЗОР

Внешний вид



| Элемент              | Описание                                                                                                           |
|----------------------|--------------------------------------------------------------------------------------------------------------------|
| 1 Крышка купола      | Крышка корпуса, предназначенная для защиты объектива и основного устройства.                                       |
| 2 Блок камеры        | Часть корпуса, где находится объектив камеры и соединительные клеммы.                                              |
| 3 Монтажная пластина | Пластина, которая фиксирует камеру при ее креплении к потолку или при креплении к отдельно продаваемому креплению. |

Компоненты



| Элемент                           | Описание                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 Объектив                        | Объективы 4 камер показывают в разных направлениях.                                                                                                                                                                                                                                                                                                                                                                                                |
| 2 Светочувствительный датчик      | Обнаруживает поступающий свет для управления инфракрасным светодиодом.                                                                                                                                                                                                                                                                                                                                                                             |
| 3 Отсек для карты памяти Micro SD | Отсек для карты памяти Micro SD.                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 4 Инфракрасный светодиод          | Инфракрасные светодиоды управляются светочувствительным датчиком.                                                                                                                                                                                                                                                                                                                                                                                  |
| 5 Кнопка сброса                   | Восстановление заводских настроек по умолчанию для всех параметров камеры.<br>Для перезагрузки системы нажмите и удерживайте в течение 5 секунд.<br>❗ 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. |
| 6 Порт подключения НРоЕ           | Эта клемма соединяет питание и сеть через адаптер НРоЕ или подключается к сети через интернет-кабель.                                                                                                                                                                                                                                                                                                                                              |

| Элемент |                                       | Описание                                                             |                                                                                                |
|---------|---------------------------------------|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| 7       | Кабели                                | Цвет - CH 1: красный<br>CH 2: зеленый<br>CH 3: синий<br>CH 4: черный |                                                                                                |
| 8       | Разъем аудио и кабеля сигнала тревоги | ARM-IN                                                               | Используется для подключения сенсора входного сигнала тревоги или наружного сенсора день/ночь. |
|         |                                       | ARM-OUT                                                              | Используется для передачи выходных сигналы тревоги.                                            |
|         |                                       | GND                                                                  | Это общие порты для подключения входа/выхода тревожной сигнализации.                           |
|         |                                       | MIC                                                                  | Используется для подключения к микрофону.                                                      |
|         |                                       | SPEAKER                                                              | Используется для подключения к динамикам.                                                      |
| 9       | Порт питания                          | Разъем для клеммника питания.                                        |                                                                                                |

## УСТАНОВКА



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

### Меры предосторожности, принимаемые перед установкой

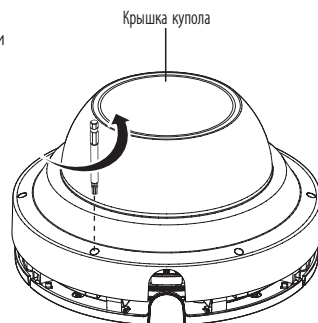
Прежде чем устанавливать камеру, обязательно прочтите приведенные далее инструкции.

- 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 устанавливать с чрезмерным усилием, это может привести к повреждению камеры из-за неправильной работы.

При сборке неподходящими инструментами с приложением усилий возможно повреждение аппарата.

### Разборка

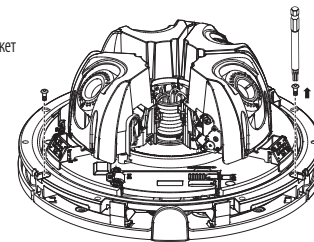
1. Снимите купольную крышку, отвернув винт на этой крышке. Это можно сделать, поворачивая его против часовой стрелки с помощью прилагаемой насадки к дрели.



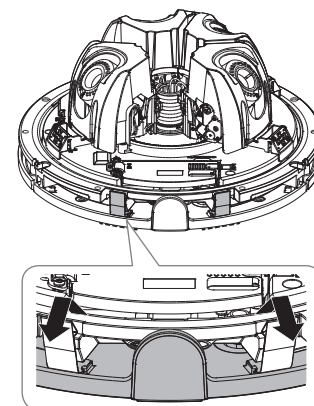
2. Отверните крепежный винт на корпусе камеры.



- Не регулируйте и не перемещайте объектив непосредственно руками. Это может повредить объектив или ухудшить его характеристики.

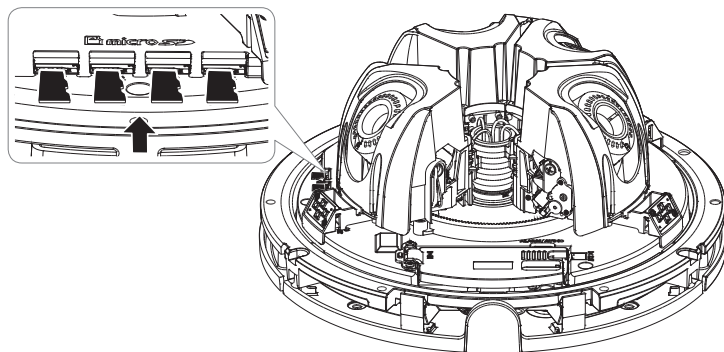


3. Снимите корпус камеры и монтажную пластину, потянув пружину пластины, как показано на рисунке.



## Установка карты памяти Микро SD

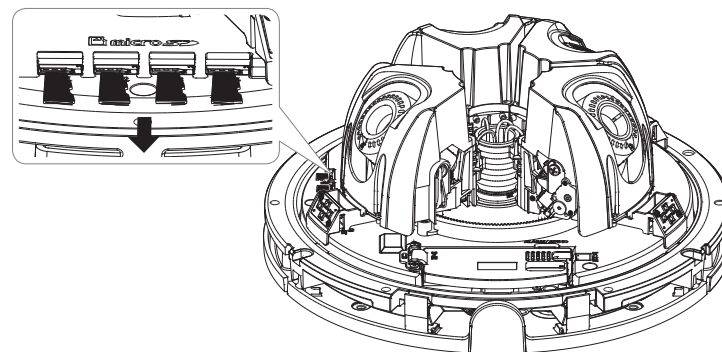
1. Снимите купол камеры.
2. Вставьте карту памяти Микро SD в направлении стрелки, как показано на рисунке.



- Перед установкой карты Микро SD отключите кабель питания от камеры.
- Попытки неправильно вставить карту памяти microSD в гнездо могут привести к повреждению карты и всего устройства.
- Не рекомендуется вставлять или вынимать карту памяти Микро SD во время дождя или при высокой влажности.
- Снятие крышки изделия следует закончить в течение 5 минут, поскольку в противном случае возникает опасность конденсации росы внутри изделия.
- Если ИК-светодиод вашей камеры блокирует слот Micro SD, откройте веб-просмотрщик и переместите объектив, чтобы не блокировать слот.

## Извлечение карты памяти Микро SD

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

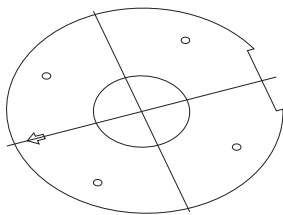


- Для каждого канала требуется отдельная карта памяти.
- Заметьте, что если во время извлечения сильно нажать на карту памяти Micro SD, а затем отпустить ее, она может выскочить.
- Перед извлечением карты памяти Micro SD, в разделе <Установка (⚙️)><Событие><Накопитель>, установите устройство в положение <Выкл.> и 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.

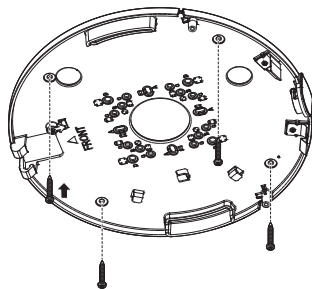
## Установка (монтажная панель)

### [Установка непосредственно на стене или потолке]

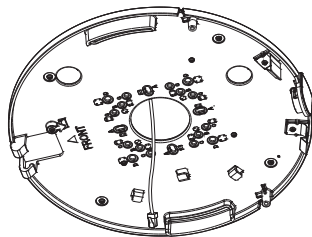
1-1. Закрепите шаблон установки в нужном месте и сделайте отверстия для винтов и кабелей.



1-2. Закрепите монтажную панель с помощью подходящих винтов.



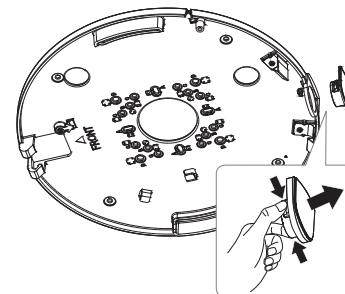
1-3. Пропустите необходимые кабели питания / LAN / аудио & сигнализации через отверстие в монтажной панели.



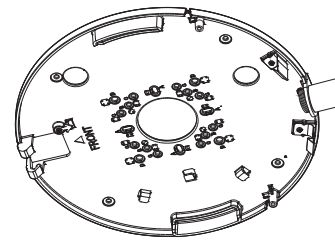
### [Установка с использованием трубы]

2-1. Закрепите шаблон установки и сделайте отверстия для винтов и кабелей.

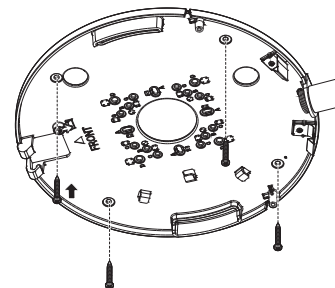
2-2. Удалите заглушку отверстия трубы с монтажной панели, надавив на нее по бокам.



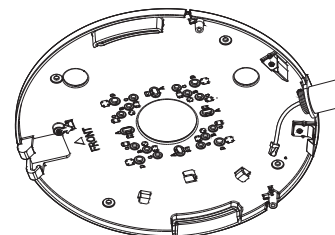
2-3. Поместите трубу на монтажную панель.



2-4. Закрепите монтажную панель с помощью подходящих винтов.



2-5. Пропустите необходимые кабели питания / LAN / аудио & сигнализации через трубу.

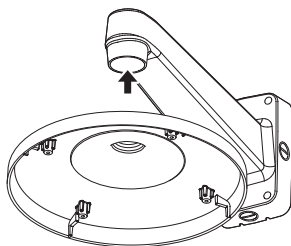


### [Подсоединение к адаптеру (продается отдельно)]

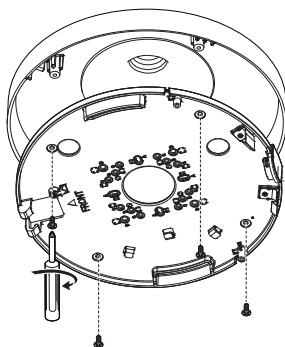
Выберите и приобретите любой из следующих вариантов адаптеров (продаются отдельно), который оптимально подойдет для места установки или покажется вам более удобным.

#### 3-1. Установите кронштейн для подвешивания в адаптер настенного крепления.

- Адаптер и кронштейн для подвешивания приобретаются отдельно.

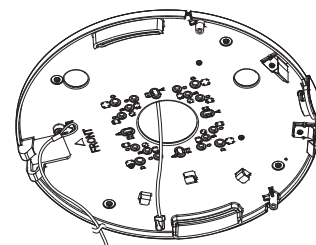


#### 3-2. Соедините монтажную пластину и подвесное крепление.



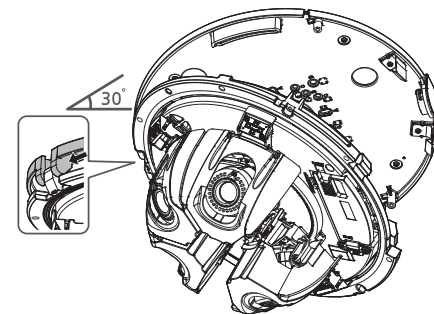
### Установка (корпус камеры и купольную крышку)

#### 1. Присоедините страховочный трос.



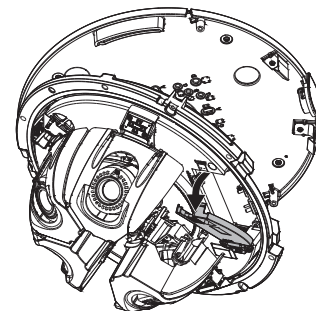
#### 2. Совместите корпус камеры с монтажной пластиной.

- Убедитесь, что петли закрылись, как показано на рисунке.

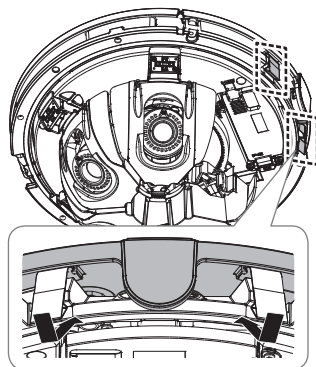


#### 3. Откройте крышку кабеля на корпусе камеры.

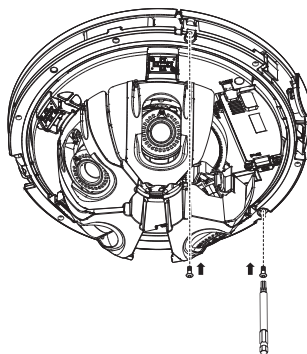
#### 4. Подключите клеммы внутри камеры с помощью необходимых кабелей, а затем закройте крышку кабеля.



5. Нажмите на листовую пружину до щелчка, как показано на рисунке.

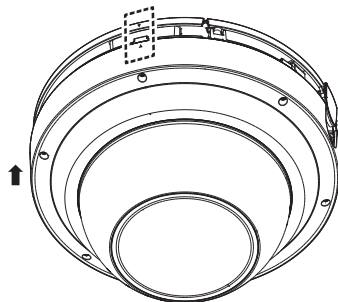


6. Используя крепежные винты на корпусе камеры, закрепите его на монтажной панели.



7. Закрепление купольной крышки.

- При установке купольной крышки совместите стрелки.
- Чтобы избежать проблем с гидроизоляцией, плотно затяните крепежные болты с помощью сверла.



### Соединение водонепроницаемого шнура питания и кабеля LAN

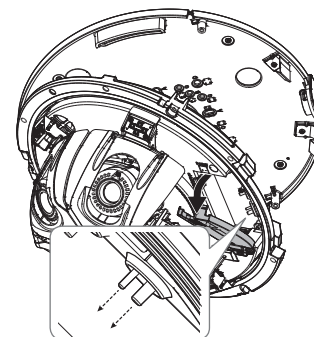


- Для подключаемого кабеля локальной сети используйте соответствующую втулку.

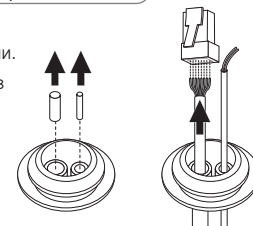
- Базовая камера: используйте кабель Ø5~6.5.
- Прилагаемые компоненты: Используйте кабель Ø7~8.5.

#### [Способ 1. Установка кабелей LAN/питания]

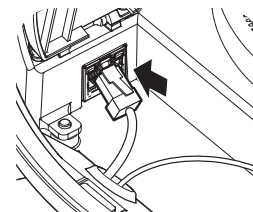
1. Извлеките выступающие части из кабельного ввода, который собираетесь использовать, как показано на рисунке.



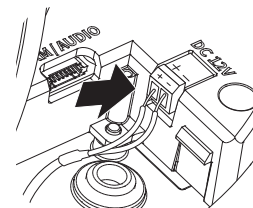
2. Протяните кабель LAN через большое отверстие во втулке.
3. Удалите оболочку с помощью кабельного резака и выровняйте кабели.
4. Подключите кабель LAN с помощью коннектора LAN и вставьте его в инструмент LAN.



5. Подключите готовый кабель к порту HPoE.

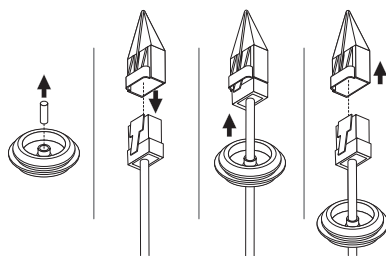


6. Протяните кабель питания через маленькое отверстие кабельного ввода и подключите к клеммной колодке.

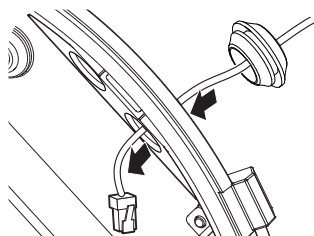


## [Способ 2. Установка кабеля LAN (с помощью адаптера HPoE)]

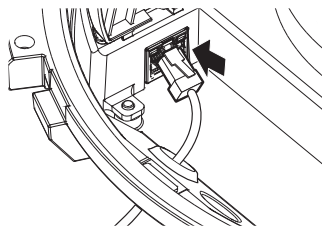
1. Извлеките выступающую часть из кабельного ввода с одним отверстием, входящего в комплект поставки.
2. Пропустите кабель LAN через отверстие, используя направляющий колпачок.



3. Закрепите кабельный ввод на корпусе камеры.

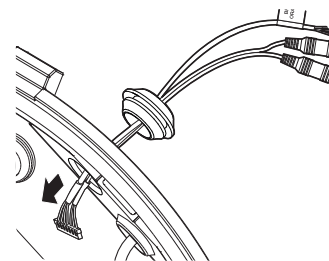


4. Подключите кабель LAN к порту HPoE.

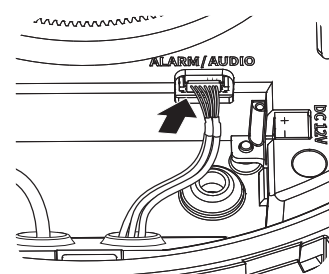


## Установка аудиокабеля и кабеля сигнала тревоги

1. Закрепите кабельный ввод аудиокабеля и кабеля сигнала тревоги, входящих в комплект, в корпусе камеры.



2. Подключите аудиокабель и кабель сигнала тревоги к клемме ALARM/AUDIO.



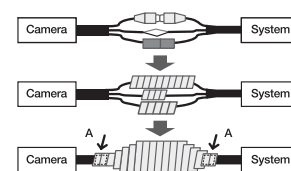
## Наружный монтаж

При монтаже этого устройства вне здания, пожалуйста, обеспечьте его водонепроницаемость с помощью водонепроницаемой ленты бутылкачука (ее можно купить в магазине) так, чтобы вода не протекла в щель кабеля, выведенного наружу.

1. Подключите кабели питания, ввода-вывода, АУДИО и LAN.
2. Оберните черный кабельный кожух (Зона А) и зону присоединения кабеля водонепроницаемой лентой (бутылкачук) так, чтобы лента бутылкачука перекрывалась больше чем на половину.



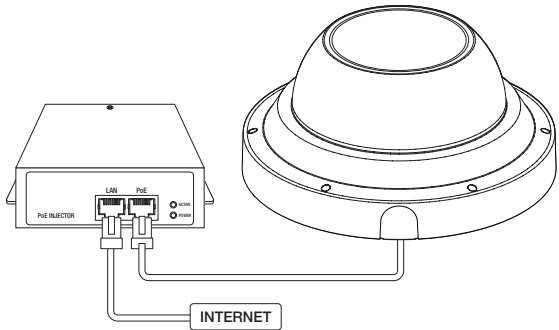
- Если не обеспечена надлежащая водонепроницаемость кабельного кожуха, это может стать причиной течи. Удостоверьтесь, что кабель обмотан толстым слоем ленты.
- Водонепроницаемая лента сделана из бутылкачука, который может растягиваться по длине более чем в два раза.



ПОДКЛЮЧЕНИЕ К ДРУГОМУ УСТРОЙСТВУ

Питание и сеть

Подключите устройство HPoE к разъему HPoE камеры.



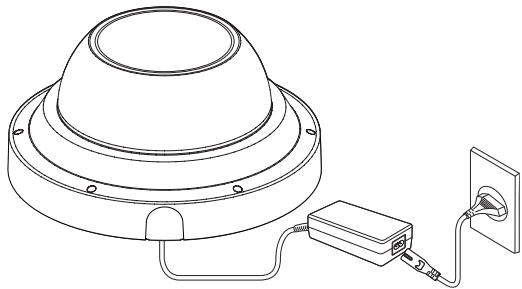
- Подключите маршрутизатор с поддержкой HPoE.
- Используйте устройство HPoE, соответствующее стандарту IEEE802.3bt (ПИТАЮЩИЕ УСТРОЙСТВА КЛАССА 3 или 4).
- Если вы подключаетесь при помощи маршрутизатора с поддержкой HPoE, вам не нужен отдельный кабель питания для его включения.

Спецификация сетевого кабеля

| Пункт            | Содержание               | Примечание                                                                                                                  |
|------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Разъем           | RJ45 (10/100/1000BASE-T) |                                                                                                                             |
| Ethernet         | 10/100/1000BASE-T        | При работе с 1000BASE-T для гигабайтного концентратора следует использовать кабель Категории 6 или более высокой категории. |
| Кабель           | Категории 6              |                                                                                                                             |
| Макс. расстояние | 100 м                    | Сопротивление по постоянному току ≤ 0,188 Ом/м                                                                              |
| HPoE             | HPoE                     |                                                                                                                             |

Источник питания

Подключите все провода кабеля питания (+, -) к соответствующему порту камеры с помощью отвертки.



- Рекомендуется адаптер с напряжением 12 В постоянного тока (4 А).
- Для питания блока рекомендуется использовать HPoE инжекторы.
- Не используйте питание постоянным током и HPoE инжектор одновременно.
- Подключая кабель питания, будьте очень внимательны, чтобы не перепутать полярность.
- Если необходимо подключить внешнее устройство, перед началом работы его необходимо выключить.

Спецификация кабеля питания

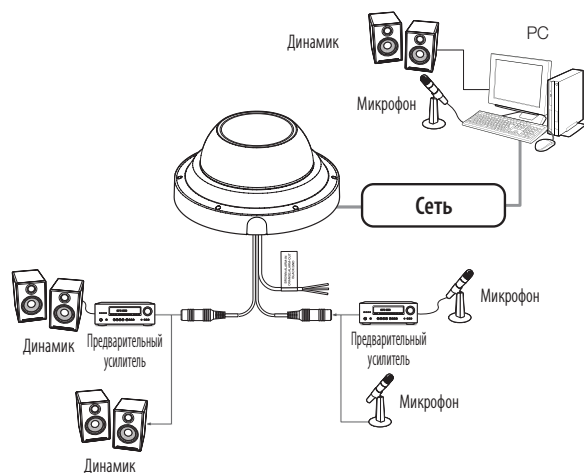
Вход 12 В постоянного тока:

| Калибр провода (AWG) | #14  | #16 |
|----------------------|------|-----|
| Длина кабеля (макс.) | 14 м | 9 м |

Подключение к сети Ethernet

Подключите кабель Ethernet к локальной сети или к Интернету.

## 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

- **Вход аудио** : По выбору (микрофон/линейный вход), поддерживаемое напряжение: 2,5 В постоянного тока (4 mA), входное сопротивление: 2000 Ом
- **Звуковой выход** : Линейный выход (монофонический штекер 3,5 мм), максимальный сигнал: 1 В (действующее значение)
- **Сопротивление выходного канала Line out** : 600 Ом

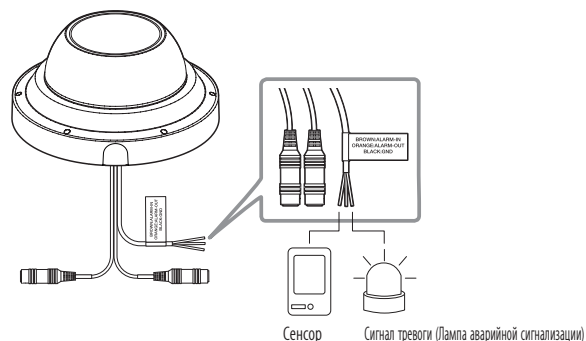


■ При выборе внешнего микрофона в качестве источника звука в разделе <Видео и аудио> — <Настройка аудио> в Web Viewer рекомендуется указать следующие характеристики.

- Частотный диапазон: 40–16 000 Гц
- Импеданс: 1500 Ом
- Чувствительность:  $-40 \pm 3$  дБ (7,1–14,1 мВ)

## Подключение к блоку портов ввода-вывода

Подсоедините кабель ввода/вывода сигнала тревоги к соответствующему порту платы.



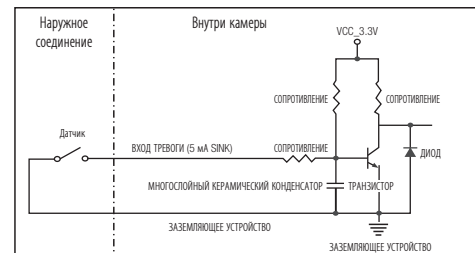
- ALARM-IN : Используется для подключения сенсора входного сигнала тревоги или наружного сенсора день/ночь.
- ALARM-OUT : Используется для передачи выходных сигналы тревоги.
- GND : Общий порт для ввода/вывода тревожной сигнализации.

❗ Если устройства (например, проблесковый световой маяк или сирена), превышающие допустимый уровень напряжение и тока, указанный в технических спецификациях, подсоединяются при помощи метода открытого коллектора, это может привести к сбою. При подключении устройств, напряжение и ток которых превышают значения, указанные в спецификации, см. Раздел «**Монтажная диаграмма выхода тревоги**».

## Подключение к внешнему датчику

Подсоедините один провод двухпроводного кабеля датчика к порту [ALARM IN], а другой провод - к порту [GND].

## Монтажная схема входа тревоги



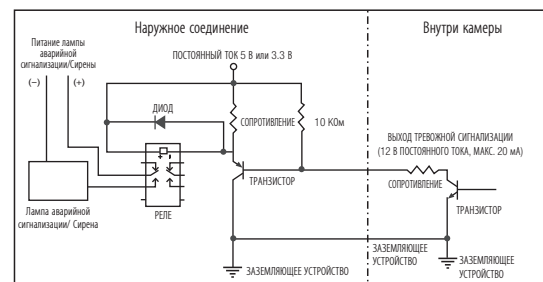
## Подключение выхода тревоги

Если устройства (например, проблесковый световой маяк или сирена), превышающие допустимый уровень напряжение и тока, указанный в технических спецификациях, подсоединяются при помощи метода открытого коллектора, это может привести к сбою.

При подключении устройств, напряжение и текущие технические характеристики которых выше указанных в спецификации, смотрите схему подключения выхода тревоги, представленную ниже.

❗ НЗ (Нормально замкнутый) метод не поддерживается.

## Монтажная диаграмма выхода тревоги

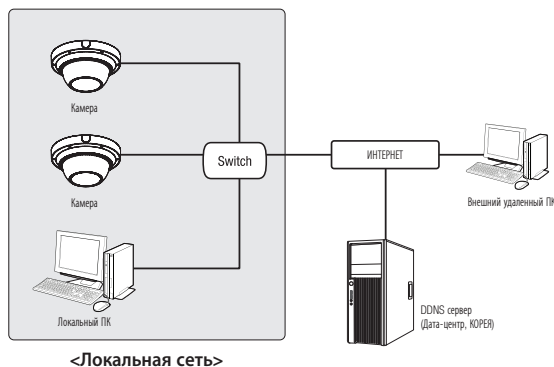


Можно выставить сетевые настройки согласно сетевой конфигурации.

## ПОДКЛЮЧЕНИЕ КАМЕРЫ НАПРЯМУЮ К ЛОКАЛЬНОЙ СЕТИ

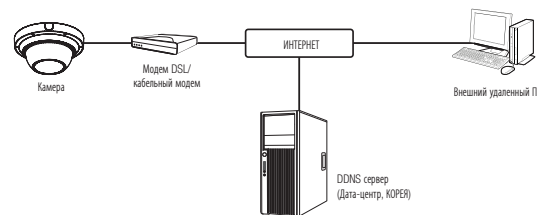
### Подключение к камере через локальный ПК в локальной сети

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 переадресация портов или установлен фаервол. В этом случае обратитесь к системному администратору для устранения проблемы.
- 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. 20)

## ПРЯМОЕ ПОДКЛЮЧЕНИЕ КАМЕРЫ К МОДЕМУ DSL/КАБЕЛЬНОМУ МОДЕМУ С ПОДДЕРЖКОЙ ПРОТОКОЛА DDNS



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

- Программы Device Manager можно загрузить с веб-сайта Hanwha Vision через меню <Technical Guides> – <Online Tool>. (<https://www.hanwhavision.com>)
- Дополнительные инструкции по Device Manager можно найти в меню <Справка> главной страницы.

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 (Поиск)> на главной странице Device Manager.
2. В открывшемся списке выберите нужную камеру.
  - Проверьте MAC-адрес на наклейке, прикрепленной к камере.

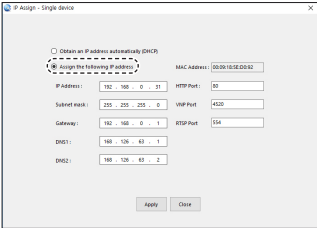
НАСТРОЙКА IP-АДРЕСА

Чтобы изменить сетевые настройки камеры, в поле <Status (Состояние)> должен отображаться значок <Login OK (Вход ОК)>. Чтобы войти в систему, на главной странице нажмите <Authentication (Аутентификация)>.

Настройка статического IP

Вручную введите IP-адрес и информацию о порте.

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



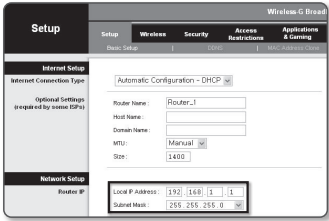
В случае отсутствия Широкополосный маршрутизатор

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. 22)

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 свыше 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

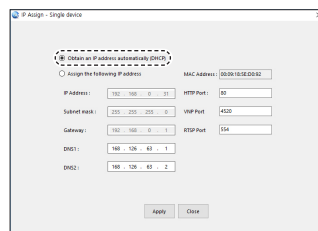
5. Нажмите кнопку [Применить].
6. Если появится сообщение об успешной настройке, нажмите [OK].

## Настройка динамического IP-адреса

Получите IP-адрес от DHCP

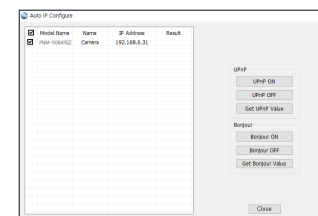
- Примеры динамического IP-окружения
  - Сервер DHCP назначает IP-адрес Широкополосный маршрутизатор с подключенными камерами.
  - Прямое подключение камеры к модему с помощью протоколов DHCP
  - Внутренний сервер DHCP назначает IP-адреса по локальной сети.

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



## АВТОМАТИЧЕСКАЯ НАСТРОЙКА IP

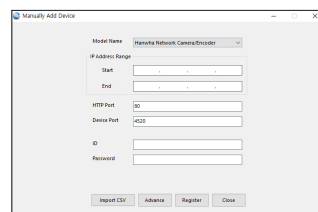
1. Выберите из списка камеру, для которой необходимо автоматически настроить параметры IP.
2. На главной странице Device Manager нажмите **< + >**.
  - Появится меню настроек оборудования.
3. Выберите в меню **<Auto IP Configure (Автоматическая настройка IP)>**.
4. Нажмите кнопку **[Close (Закрыть)]**.



## 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 (Добавить устройства)>** – **<Manually Add Device (Добавить устройство вручную)>**.
2. Введите нужный диапазон IP-адресов.
3. Выберите **<Model Name (имя модели)>** камеры, которую вы регистрируете, и введите порт HTTP, идентификатор и пароль.
4. Нажмите кнопку **[Register (Зарегистрировать)]**.
5. Проверьте, зарегистрировалась ли камера.
  - Проверьте MAC-адрес на наклейке, прикрепленной к камере.

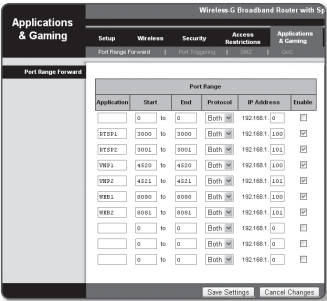


НАСТРОЙКА ПЕРЕАДРЕСАЦИИ ДИАПАЗОНА ПОРТОВ (РАСПРЕДЕЛЕНИЕ ПОРТОВ)

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.

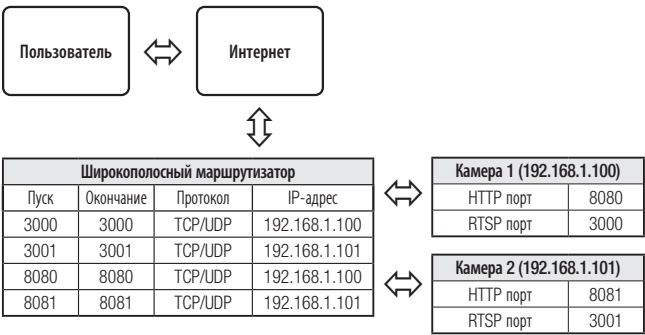


- Настройка переадресации портов является примером настройки IP-маршрутизатора CISCO.
- Параметры могут различаться в зависимости от модели Широкополосный маршрутизатор. Для получения дополнительных сведений см. руководство пользователя соответствующего маршрутизатора.

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. 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>

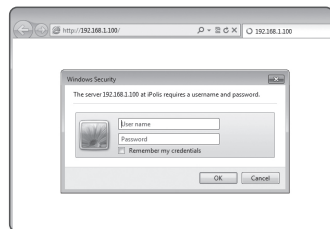


- Чтобы использовать DDNS, зарегистрируйтесь на домашней странице DDNS (<http://ddns.hanwha-security.com>) и зарегистрируйте продукт через меню **[Мой DDNS]> [Зарегистрировать продукт]**.

## 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] - 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.

### 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.

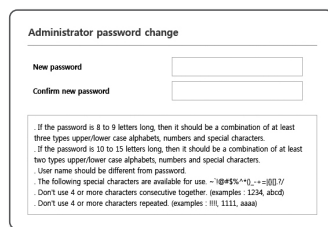
Если вы зарегистрируете устройство с динамическим IP-адресом на сервере DDNS, то во время доступа к этому устройству вы всегда можете проверить, как изменился его IP-адрес.

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.

- 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.

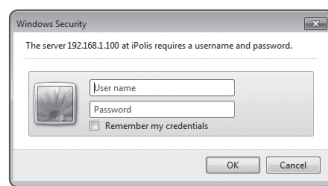


## ВХОД

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.

## ПОИСК И УСТРАНЕНИЕ НЕПОЛАДОК

| ПРОБЛЕМА                                                                                                                    | РЕШЕНИЕ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Если доступ производится через подключаемый программный модуль Free webviewer на Safari через HTTPS, видео не отображается. | <ul style="list-style-type: none"> <li>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".</li> <li>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.</li> </ul> |
| Нет доступа к камере через веб-браузер.                                                                                     | <ul style="list-style-type: none"> <li>Проверьте на правильность сетевые настройки камеры.</li> <li>Убедитесь в правильности подключения всех сетевых кабелей.</li> <li>Убедитесь в том, что камера получает динамический IP-адрес при использовании DHCP-технологии.</li> <li>Если камера подключена к Широкополосный маршрутизатор, убедитесь в том, что переадресация портов настроена правильно.</li> </ul>                                                                                                                    |
| Происходит разрыв соединения по время мониторинга видео в экране просмотра.                                                 | <ul style="list-style-type: none"> <li>При любом изменении настроек камеры или сети происходит разрыв соединения с наблюдательными терминалами.</li> <li>Проверьте все сетевые соединения.</li> </ul>                                                                                                                                                                                                                                                                                                                              |
| Подключенная к сети камера не обнаружена в программе Device Manager.                                                        | <ul style="list-style-type: none"> <li>Отключите фаервол на своем ПК и заново запустите поиск камеру.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                   |

| ПРОБЛЕМА                                                                                                                                                      | РЕШЕНИЕ                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Картинки перекрываются.                                                                                                                                       | <ul style="list-style-type: none"> <li>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.</li> </ul>                                                                                                                              |
| Нет картинки.                                                                                                                                                 | <ul style="list-style-type: none"> <li>Если задан метод передачи на группу адресов, убедитесь, что в локальной сети, к которой подключена камера, есть роутер, поддерживающий технологию multicast.</li> <li>Проверка нормальной работы модуля объектива.</li> </ul>                                                                                              |
| <Детектор движения> в меню <Аналитика> установлено в <Активировать>, но уведомления по электронной почте не приходят, даже когда произошло событие аналитики. | <ul style="list-style-type: none"> <li>Проверьте настройки в следующей последовательности:<br/>А. Проверьте настройки параметра &lt;Дата и время&gt;.<br/>В. Для параметра &lt;Детектор движения&gt; необходимо задать значение &lt;Активировать&gt;.<br/>С. Проверьте, выбран ли в меню &lt;Настройка событий&gt; параметр &lt;Настройка событий&gt;.</li> </ul> |
| Не удается записать данные на карту памяти Micro SD.                                                                                                          | <ul style="list-style-type: none"> <li>Проверьте, исправна ли карта памяти.</li> </ul>                                                                                                                                                                                                                                                                            |
| Карта памяти Micro SD установлена, однако камера работает неверно.                                                                                            | <ul style="list-style-type: none"> <li>Проверьте, в правильном ли направлении вставлена карта памяти. Возможность использования карт памяти, отформатированных на других устройствах, не гарантируется.</li> <li>Снова отформатируйте карту памяти в меню &lt;Настройка&gt; → &lt;Событие&gt; → &lt;Накопитель&gt;.</li> </ul>                                    |

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| 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 |                                            |
| mtdd-1.5.2         | GPL 2.0 | ftp://ftp.infradead.org/pub/mtdd-utils     |
| mi-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 |                                            |
| zerocoinf          | 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/ |

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established by T-Engine Forum  
on January 23, 2004  
revised on June 17, 2004  
revised on December 21, 2006  
revised on March 24, 2009

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bzip2/libbzip2 version 1.0.5 of 10 December 2007

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iperf performance test

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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) (deflate format) and [rfc1952.txt](http://www.ietf.org/rfc/rfc1952.txt) (gzip format).



Компания Hanwha Vision заботится об окружающей среде и прилагает усилия для ее сохранения на всех этапах производства и предоставляет потребителям экологически безопасную продукцию. Знак Eco демонстрирует цель компании Hanwha Vision по созданию экологически безопасной продукции и указывает на соответствие изделия директиве EC RoHS.



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