

СЕТЕВАЯ КАМЕРА

Руководство пользователя

QNF-8010

QNF-9010



Сетевая Камера

Руководство пользователя

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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 вилки 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 использования с сертифицированным источником питания с маркировкой «Класс 2» или «LPS» и номинальной мощностью от PoE (48 В), 0,14 А. (QNF-8010)
16. Это изделие предназначено для использования с сертифицированным источником питания с маркировкой «Класс 2» или «LPS» и номинальной мощностью от PoE (48 В), 0,17 А. (QNF-9010)
17. Это изделие предназначено для использования с изолированным источником питания.
18. Если при установке изделия прилагать чрезмерные усилия, возможно повреждение с нарушением работы камеры.
Если с силой устанавливать устройство, пользуясь неподходящими инструментами, возможно повреждение устройства.
19. 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.
20. 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.



21. 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.
22. Установка или эксплуатация устройства в воде может привести к значительному повреждению изделия.

ПРЕДУПРЕЖДЕНИЕ

ВО ИЗБЕЖАНИЕ ПОВРЕЖДЕНИЙ, СЛЕДСТВИЕМ КОТОРЫХ МОЖЕТ БЫТЬ ПОЖАР ИЛИ ПОРАЖЕНИЕ ЭЛЕКТРИЧЕСКИМ ТОКОМ, НЕ ДОПУСКАЙТЕ ПОПАДАНИЯ ДАННОГО ИЗДЕЛИЯ ПОД ДОЖДЬ ИЛИ В УСЛОВИЯ ВЫСОКОЙ ВЛАЖНОСТИ. ЗАПРЕЩАЕТСЯ ВСТАВЛЯТЬ КАКИЕ-ЛИБО МЕТАЛЛИЧЕСКИЕ ПРЕДМЕТЫ В ВЕНТИЛЯЦИОННЫЕ 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

	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 (батареиный 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

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.

Выходной разъем VIDEO 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.

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.

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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 : Windows 7, 8.1, 10, Mac OS X 10.12, 10.13, 10.14
 - Рекомендуемый браузер: Google Chrome
 - Поддерживаемые браузеры: MS Explorer11, MS Edge, Mozilla Firefox (только 64-битная Windows), Apple Safari (только Mac OS X)
 - VGA : Графическая видеокарта PCIe 256 Мбайт GDDR3 или выше.
- ※ Некоторые функции могут быть ограничены даже в поддерживаемых браузерах.

РЕКОМЕНДУЕМЫЕ ХАРАКТЕРИСТИКИ КАРТ ПАМЯТИ МИКРО SD/SDHC/SDXC

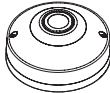
- Рекомендуемая емкость : от 16 до 256 Гбайт (типа MLC)
- Рекомендуемые производители: SanDisk, Transcend
- Тип карты: износостойкая
- Совместимость может отличаться в зависимости от производителя и типа карты.

РЕКОМЕНДУЕМЫЕ ТЕХНИЧЕСКИЕ ХАРАКТЕРИСТИКИ NAS

- Рекомендуемый объем : Рекомендуемый объем – не менее 200 Гб.
 - Для этой модели камеры рекомендуется использование NAS со следующими техническими характеристиками производителя.
- Рекомендуемые продукты: QNAP NAS, Synology NAS

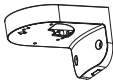
КОМПЛЕКТ ПОСТАВКИ

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	
	Кабель для тестирования монитора	1	Используется для подключения камеры к портативному устройству отображения
	Шаблон	1	Руководство по установке устройства
	Г-образный ключ	1	Снять/закрепить крышку наверху

Дополнительные принадлежности для установки

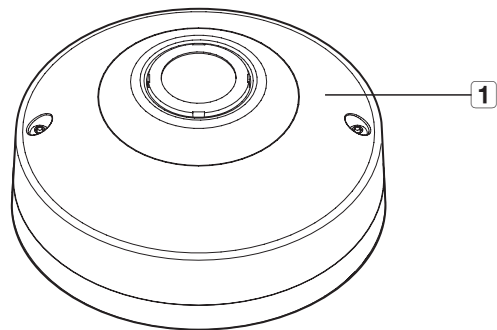
Для упрощения установки можно приобрести дополнительные принадлежности.



Наименование модели	Настенное крепление
QNF-8010, QNF-9010	SBP-120WMW

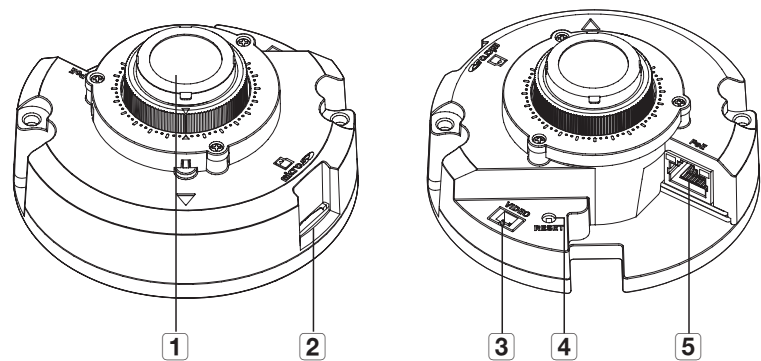
ОБЩИЙ ОБЗОР

Внешний вид

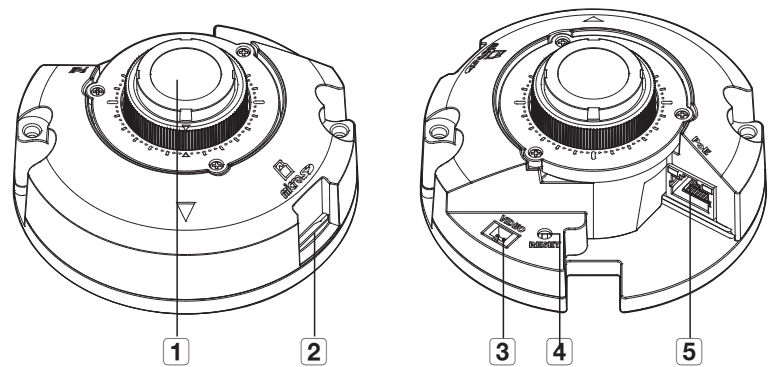


Элемент	Описание
1 Верхняя крышка	Крышка корпуса, предназначенная для защиты объектива и основного устройства.

Внутренняя часть (QNF-8010)



(QNF-9010)



Элемент	Описание
1 Объектив типа «рыбий глаз»	Данный объектив характеризуется углом обзора 360° и возможностью панорамной записи видео.
2 Отсек для карты памяти Micro SD	Отсек для карты памяти Micro SD.
3 Видеовыход	Порт вывода для тестирования выходного видеосигнала наблюдения. Подсоедините мобильный дисплей к порту с помощью кабеля для тестирования видеонаблюдения и проверьте видео.
4 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.
5 Соединитель PoE	Им подключается локальная сеть и напряжение питания, идущее по кабелю Ethernet.

УСТАНОВКА

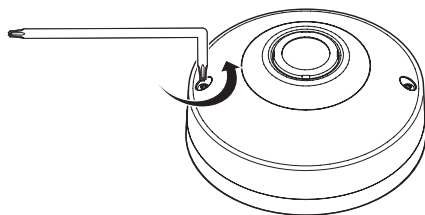
Меры предосторожности, принимаемые перед установкой

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.

Разборка

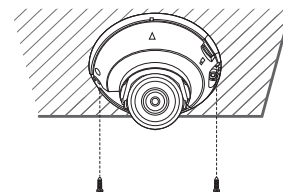
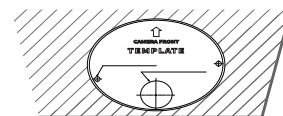
1. Снимите защитную пленку с объектива.
2. С помощью входящего в комплект торцевого гаечного ключа ослабьте 2 винта, повернув их против часовой стрелки, после чего снимите верхнюю крышку.
 - Обратите внимание на то, что ослабевать винты полностью не нужно.



-  ■ После снятия защитной пленки не прикасайтесь к объективу.

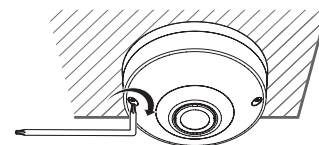
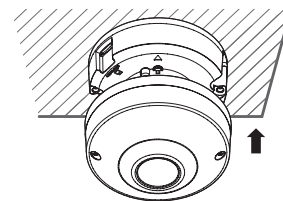
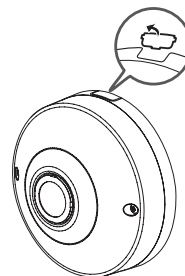
Установка камеры на потолок или стену

1. Учитывая направление наблюдения, приложите шаблон и просверлите по нему отверстия.
 - Установите отметку <↑>, выполненную на камере, в направлении мониторинга камеры.
2. Закрепите камеру, ввинтив два самонарезающих винта в проделанные по шаблону установки отверстия.
3. Подсоедините соответствующий кабель к внутреннему разъему камеры.
4. Отрегулируйте направление объектива см. раздел **“Регулировка направления наблюдения камеры”**. (стр. 9)

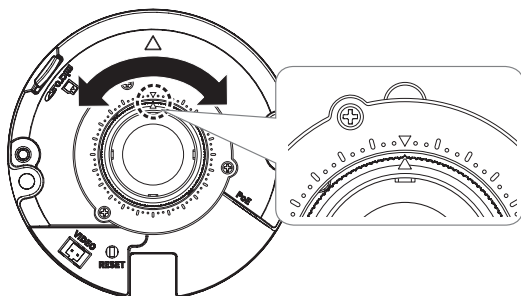


5. Закройте верхнюю крышку и поверните ее по часовой стрелке, используя торцевой гаечный ключ.

-  ■ При необходимости используйте его после снятия крышки для отверстия под провод.



Регулировка направления наблюдения камеры



■ Настройка направления мониторинга

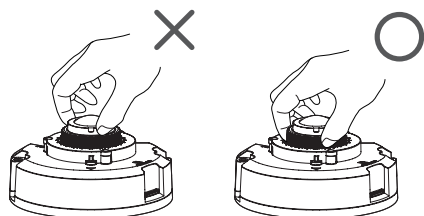
Направление камеры можно регулировать, только когда она закреплена на потолке. Вращение объектива вокруг своей оси называется поворотом.

- Эффективный диапазон поворота составляет в общей сложности ± 180 градусов.

■ Способы регулировки

Чтобы настроить направление обзора камеры, поворачивайте тубус объектива, наблюдая за изображением на экране.

- Чтобы настроить направление обзора камеры, поворачивайте тубус объектива. Если при этом взяться за сам объектив, можно нарушить фокус или оставить отпечатки пальцев на поверхности.

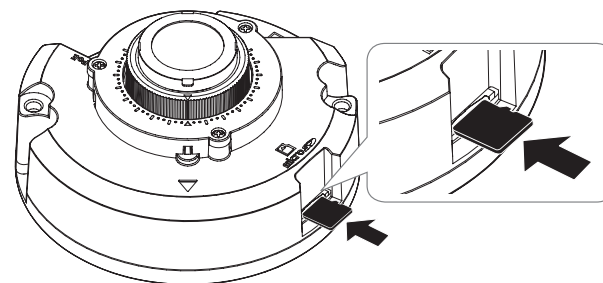


УСТАНОВКА/ИЗВЛЕЧЕНИЕ КАРТЫ ПАМЯТИ МИКРО SD

- Перед установкой карты Микро SD отключите кабель питания от камеры.
- Правильно расположенная карта памяти Микро SD вставляется без усилия. Принудительная установка карты памяти Микро SD не той стороной может привести к ее повреждению.
- Не рекомендуется вставлять или вынимать карту памяти Микро SD во время дождя или при высокой влажности.

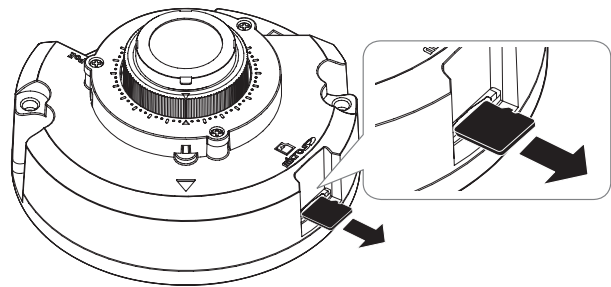
Установка карты памяти Микро SD

1. Отделите крышку от верха камеры.
2. Вставьте карту памяти Микро SD в направлении стрелки, как показано на рисунке.



Извлечение карты памяти Микро SD

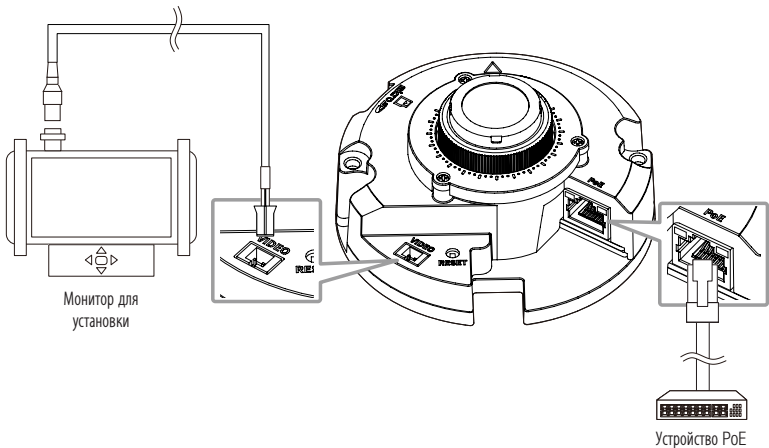
Мягко нажмите на выступающий конец карточки как показано на диаграмме, чтобы извлечь карточку из гнезда.



- 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.

ПИТАНИЕ И ПОДКЛЮЧЕНИЕ К СЕТИ

Подключите устройство PoE и соединители PoE камеры.



- Выходной разъем VIDEO устройства предназначен для облегчения монтажа и не рекомендуется использовать его для целей мониторинга.
- Подключите к соединителю PoE (питание по Ethernet) маршрутизатора с включенной функцией PoE.
- Используйте PoE (питание по Ethernet), которое совместимо с протоколами IEEE802.3af.

Спецификация сетевого кабеля

Пункт	Содержание	Примечание
Разъем	RJ45 (10/100BASE-T)	
Ethernet	10/100BASE-T	
Кабель	Категории 5е	
Макс. расстояние	100 м	Сопротивление по постоянному току ≤ 0,125 Ом/м
Поддержка питания по Ethernet	IEEE 802.3af	

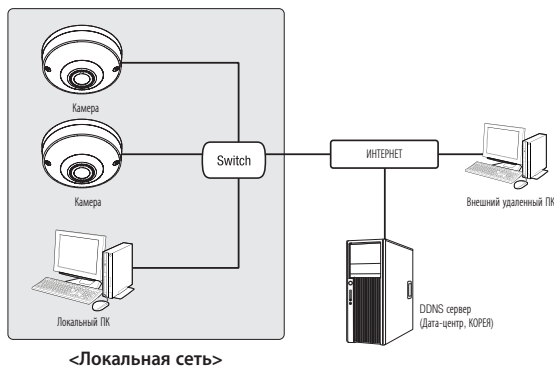
- При использовании кабеля, не соответствующего стандартам категории 5е, дальность передачи в 100 метров не гарантируется.

Можно выставить сетевые настройки согласно сетевой конфигурации.

ПОДКЛЮЧЕНИЕ КАМЕРЫ НАПРЯМУЮ К ЛОКАЛЬНОЙ СЕТИ

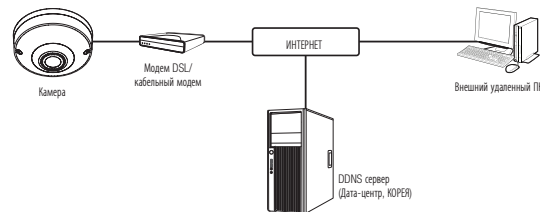
Подключение к камере через локальный ПК в локальной сети

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. 12)

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 <Служба поддержки> – <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.

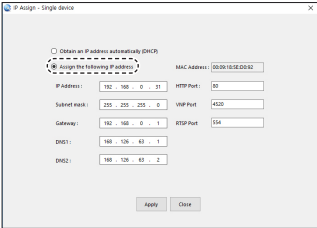
НАСТРОЙКА IP-АДРЕСА

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.



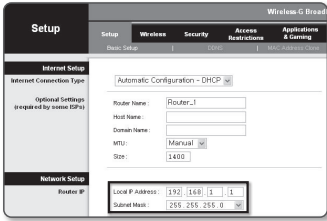
В случае отсутствия Широкополосный маршрутизатор

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. 14)

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

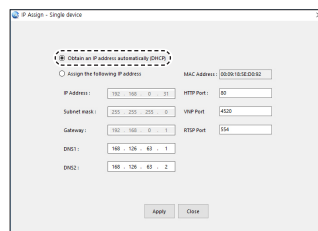
5. Нажмите кнопку [Применить].
6. Если появится сообщение об успешной настройке, нажмите [OK].

Настройка динамического IP-адреса

Получите IP-адрес от DHCP

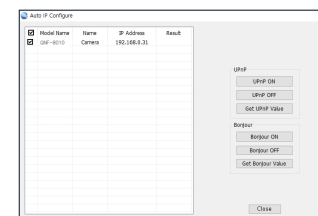
- Примеры динамического IP-окружения
 - Сервер DHCP назначает IP-адрес Широкополосный маршрутизатор с подключенными камерами.
 - Прямое подключение камеры к модему с помощью протоколов DHCP
 - Внутренний сервер DHCP назначает IP-адреса по локальной сети.

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

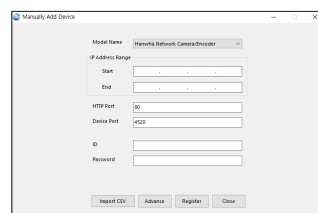
1. Выберите из списка камеру, для которой необходимо автоматически настроить параметры IP.
2. На главной странице Device Manager нажмите **< + >**.
 - Появится меню настроек оборудования.
3. Выберите в меню **<Auto IP Configure (Автоматическая настройка IP)>**.
4. Нажмите кнопку **[Close (Закрыть)]**.



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 нужно зарегистрировать, и введите данные о порте HTTP, идентификатор и пароль.
4. Нажмите кнопку **[Register (Зарегистрировать)]**.
5. Проверьте, зарегистрировалась ли камера.
 - Проверьте MAC-адрес на наклейке, прикрепленной к камере.

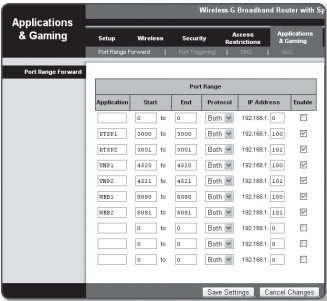


НАСТРОЙКА ПЕРЕАДРЕСАЦИИ ДИАПАЗОНА ПОРТОВ (РАСПРЕДЕЛЕНИЕ ПОРТОВ)

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.

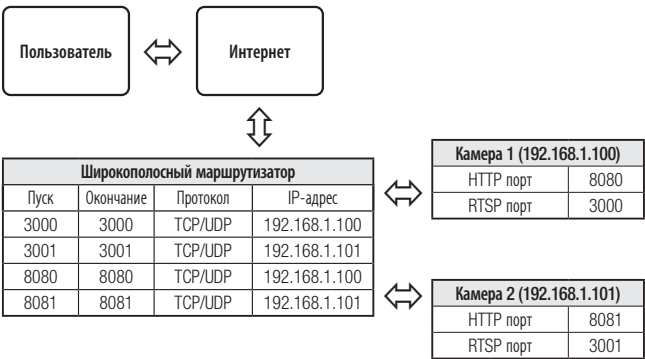


- Настройка переадресации портов является примером настройки IP-маршрутизатора CISCO.
- Параметры могут различаться в зависимости от модели Широкополосный маршрутизатор. Для получения дополнительных сведений см. руководство пользователя соответствующего маршрутизатора.

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>

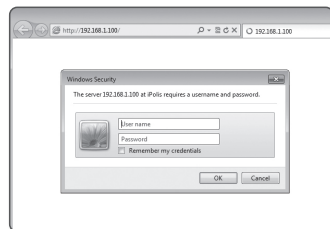


- Чтобы использовать DDNS, зарегистрируйтесь на домашней странице DDNS (<http://ddns.hanwha-security.com>) и зарегистрируйте продукт через меню **[Мой DDNS]> [Зарегистрировать продукт]**.

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://\[2001:230:abcd:ffff:0000:0000:ffff:1111\]](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.

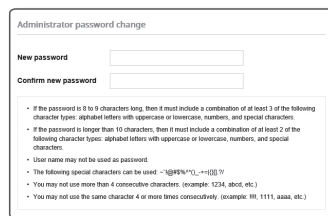
Чтобы зарегистрировать устройство на сервере <DDNS>, посетите веб-сайт <http://ddns.hanwha-security.com> Сначала зарегистрируйте камеру, а затем задайте <Сеть> - <DDNS> для <DDNS> в программе Web Viewer, а также укажите <Код продукта>, который использовался для регистрации DDNS.

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.

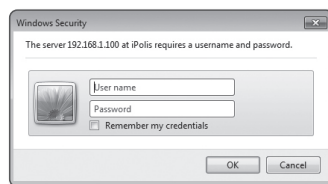
1. Введите "admin" в поле ввода <User Name>. Идентификатор администратора "admin" постоянный и не подлежит изменению.
2. Введите пароль в поле ввода <Password>.
3. Нажмите кнопку [OK]. После входа в систему отобразится экран интерактивной программы просмотра.



- 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 (ℹ)> для просмотра подробного описания каждой функции.

ХАРАКТЕРИСТИКИ

Элементы		Описание
		QNF-8010
Видео	Устройство обработки изображения	1/1,8" 6M CMOS
	Количество эффективных пикселей	2048(Г) x 2048(В)
	Мин. освещенность	Цветное: 0,2 люкс (F2,5, 1/30 с)
	Видеовыход	CVBS : 1,0 Vp-p / 75Ω композитный, 720x480(N), 720x576(P). Для установки
Объектив	Фокусное расстояние (коэффициент трансфокации)	1,14мм фикс. фокус
	Макс. относительное отверстие	F2,5
	Угловое поле зрения	Г: 187° / В: 187° / Д : 187°
	Мин. расстояние до объекта	0,3 м
Рабочие характеристики	Название камеры	отображается до 85 знаков
	День/Ночь	Авто (Электроспитание)
	Компенсация подсветки	BLC, HLC, WDR, SDR
	Широкий динамический диапазон	120dB
	Цифровое шумоподавление	SSNR V
	Детектор движения	8 зон, многоугольных областей
	Зоны маскирования	6 зон, прямоугольные зоны - Цвет: серый / зеленый / красный / синий / черный / белый - Мозаика
	Регулировка усиления	Низкий / Средний / Высокий
	Баланс белого	ATW / AWC / Средний / Внутри / Снаружи
	Скорость электронного затвора	Минимум / Максимум / Защита от мерцания (2 ~ 1/12 000 с)
	Цифровое PTZ	Поддержка (Предустановленный, Группа)
	Поворот видео	Переворот, Зеркальное отображение
	Аналитика	Определение расфокусировки, Обнаружение движения, Вмешательство в работу

Элементы		Описание
		QNF-8010
Рабочие характеристики	Анализ данных	Счет людей, тепловая карта
	Триггеры сигналов тревоги	Аналитика, Отключение сети
	События тревоги	- Загрузка файлов через FTP, электронную почту - Уведомление по электронной почте - Запись на SD/SDHC/SDXC или NAS по запускающему событию
Сеть	Ethernet	RJ-45 (10/100BASE-T)
	Сжатие видео	H.265/H.264: основной/базовый/высокий, MJPEG
	Разрешение	Исходный вид : 2048x2048, 1280x1280, 1080x1080, 960x960, 768x768, 720x720, 640x640, 480x480 Одиночная панорама : 2048x512, 1920x480, 1280x320, 640x160, 704x176 Две панорамы : 2048x1024, 1920x960, 1280x640, 640x320, 704x352 Четыре вида : 2048x1536, 1600x1200, 1280x960, 1024x768, 800x600, 640x480, 704x576 Q1/2/3/4 : 1024x768, 800x600, 640x480
	Макс. частота кадров	H.264/H.265: 30/25 кадров в секунду с разрешением 2048 x 2048 (60/50 Гц) MJPEG: До 15 кадр/с
	Кодек Smart	WiseStream II
	Настройка качества видео	для H.264/H.265 : Заданной скорости бит для MJPEG : Управление уровнем качества
	Управление битрейтом	для H.264/H.265 : CBR или VBR MJPEG : VBR
	Потоковая передача	Многопотоковая (до 3 профилей)

Элементы		Описание
		QNF-8010
Сеть	Протокол	IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, 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)
	Функция Edge Store	Micro SD/SDHC/SDXC 1slot 256 Гбайт
	Программируемый интерфейс	ONVIF Profile S/G SUNAPI(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 10.12, 10.13, 10.14 Рекомендуемый браузер: Google Chrome Поддерживаемые браузеры: MS Explorer11, MS Edge, Mozilla Firefox (только 64-битная Windows), Apple Safari (только Mac OS X)
	Память	ОЗУ 1024 МБ, флэш-память 256 МБ

Элементы		Описание
		QNF-8010
Условия	Рабочая температура/влажность	от -10°C до +55°C (от +14°F до +131°F) / Относительная влажность менее 90%.
	Температура хранения/влажность	от -50°C до +60°C (от -58°F до +140°F) / Относительная влажность менее 90%.
	Сертификация	IP42
Электропитание	Входное напряжение	PoE(IEEE802.3af, класс 3)
	Потребляемая мощность	PoE: макс. 6,4 Вт, обычно 4,6 Вт
Физические характеристики	Цвет/материал	Белый/пластик
	Код RAL	RAL9003
	Параметры/вес устройства	Ø99 x 49 мм(Ø3,9 x 1,93"), 320г (0,705 ф)

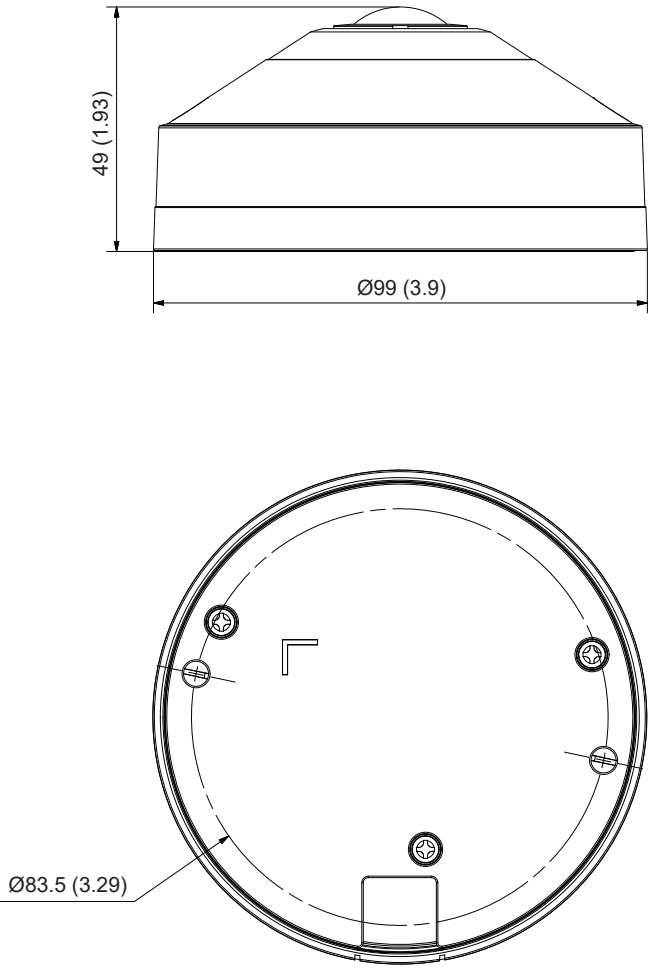
Элементы		Описание
		QNF-9010
Видео	Устройство обработки изображения	1/2,3" 12M CMOS
	Количество эффективных пикселей	3008(Г) x 3008(В)
	Мин. освещенность	Цветное: 0,39 люкс (F2,2, 1/30 с)
	Видеовыход	CVBS : 1,0 Вp-р / 75Ω композитный, 720x480(N), 720x576(P), Для установки
Объектив	Фокусное расстояние (коэффициент трансформации)	1,08 мм фикс. фокус
	Макс. относительное отверстие	F2,2
	Угловое поле зрения	Г: 187° / В: 187° / Д : 187°
	Мин. расстояние до объекта	0,5 м (1,64 фута)
Рабочие характеристики	Название камеры	отображается до 85 знаков
	День/Ночь	Авто (Электропитание)
	Компенсация подсветки	BLC, WDR, SDR
	Широкий динамический диапазон	120dB
	Цифровое шумоподавление	SSNR V
	Детектор движения	4 зон, многоугольных областей
	Зоны маскирования	6 зон, прямоугольные зоны - Цвет: серый / зеленый / красный / синий / черный / белый
	Регулировка усиления	Низкий / Средний / Высокий
	Баланс белого	ATW / AWC / Средний / Внутри / Снаружи
	Скорость электронного затвора	Минимум / Максимум / Защита от мерцания (2 ~ 1/12 000 с)
	Цифровое PTZ	Поддержка (Предустановленный, Группа)
	Поворот видео	Переворот, Зеркальное отображение
	Аналитика	Определение расфокусировки, Обнаружение движения, Вмешательство в работу
	Анализ данных	Счет людей, тепловая карта
	Триггеры сигналов тревоги	Аналитика, Отключение сети
	События тревоги	- Загрузка файлов через FTP, электронную почту - Уведомление по электронной почте - Запись на SD/SDHC/SDXC или NAS по запускающему событию

Элементы		Описание
		QNF-9010
Сеть	Ethernet	RJ-45 (10/100BASE-T)
	Сжатие видео	H.265/H.264: основной/высокий, MJPEG
	Разрешение	Исходный вид: 3008x3008, 640x640 Две панорамы: 2560x1280, 1920x960, 1280x640, 1024x512, 640x320 Одиночная панорама: 3200x800, 2560x640, 1920x480, 1280x320, 1024x256 Четыре вида : 2560x1920, 1920x1440, 1280x960, 1024x768, 640x480
	Макс. частота кадров	H.265/H.264: Исходный вид (макс.): 30/25 fps при разрешении 3008x3008 (60/50 Гц), две панорамы (макс.): 28/25 fps при разрешении 3200x800 (60/50 Гц), одиночная панорама (макс.): 28/25 fps при разрешении 2560x1280 (60/50 Гц) MJPEG: Макс. 5 fps (60/50 Гц)
	Кодек Smart	Вручную (область Sea), WiseStream II
	Настройка качества видео	для H.264/H.265 : Заданной скорости бит для MJPEG : Управление уровнем качества
	Управление битрейтом	для H.264/H.265 : CBR или VBR MJPEG : VBR
	Потоковая передача	Одноадресная (6 пользователей)/многоадресная передача Многопотоковая (до 3 профилей)

Элементы		Описание
		QNF-9010
Сеть	Протокол	IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, 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) Сертификат устройства (корневой центр сертификации Hapwha Vision)
	Функция Edge Store	Micro SD/SDHC/SDXC 1slot 256 Гбайт
	Программируемый интерфейс	ONVIF Profile S/G/T SUNAPI(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 10.12, 10.13, 10.14 Рекомендуемый браузер: Google Chrome Поддерживаемые браузеры: MS Explorer11, MS Edge, Mozilla Firefox (только 64-битная Windows), Apple Safari (только Mac OS X)
	Память	ОЗУ 2048 МБ, флэш-память 256 МБ
Условия	Рабочая температура/влажность	от -10°C до +40°C (от +14°F до +104°F) / Относительная влажность менее 90%.
	Температура хранения/влажность	от -50°C до +60°C (от -58°F до +140°F) / Относительная влажность менее 90%.
	Сертификация	IP42
Электропитание	Входное напряжение	PoE(IEEE802.3af, класс 3)
	Потребляемая мощность	PoE: макс. 7,7 Вт, обычно 6,4 Вт
Физические характеристики	Цвет/материал	Белый/пластик
	Код RAL	RAL9003
	Параметры/вес устройства	Ø99 x 49 мм(Ø3,9 x 1,93"), 370 г (0.816 ф)

ПРИЛОЖЕНИЕ

Единицы измерения: мм (дюймы)



ПОИСК И УСТРАНЕНИЕ НЕПОЛАДОК

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.
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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.
<Детектор движения> в меню <Аналитика> установлено в <Активировать>, но уведомления по электронной почте не приходят, 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>.
Не удается записать данные на карту памяти Micro SD.	Проверьте, исправна ли карта памяти.

ПРОБЛЕМА	РЕШЕНИЕ
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>.
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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	
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on January 23, 2004
revised on June 17, 2004
revised on December 21, 2006
revised on March 24, 2009

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

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Правильная утилизация данного устройства (Утилизация электрического и электронного оборудования)

(Действует во всех странах Европейского Союза и других странах Европы, принявших систему разделения отходов)

Подобная маркировка на изделии, принадлежностях или в руководстве к нему предупреждает, что по истечении срока службы изделие или электронные принадлежности для него (например, зарядное устройство, наушники, кабель USB) не следует выбрасывать вместе с другим бытовым мусором. Чтобы избежать вредного воздействия на окружающую среду или на здоровье человека от неконтролируемой утилизации отходов, следует отделять маркированные подобным образом изделия от другого мусора для соответствующей переработки и повторного использования в качестве сырья.

За подробной информацией о месте и способе экологически безопасной утилизации бытовым потребителям следует обращаться к продавцу данного изделия или в органы местного самоуправления. Промышленным потребителям необходимо обратиться к поставщику, чтобы уточнить сроки и условия договора купли-продажи. Подобные изделия и электронные принадлежности не следует утилизировать вместе с другими производственными отходами.



Правила утилизации батарей данного изделия

(Действительны в Европейском Союзе и иных европейских странах с системами раздельной утилизации.)

Данная маркировка на батарее или упаковке указывает на запрет утилизации изделия с иными бытовыми отходами по окончании срока службы. При наличии маркировки, химические символы Hg, Cd или Pb указывают на содержание в батарее ртути, кадмия или свинца выше контрольных уровней, указанных в директиве ЕС 2006/66. При неправильной утилизации батарей, данные вещества могут нанести вред здоровью человека или окружающей среде. Для защиты природных ресурсов и поддержки повторного использования материалов рекомендуется хранить батареи отдельно от других типов отходов и утилизировать их через местную систему бесплатного возврата батарей. Замена аккумуляторов, встроенных в данное изделие, пользователем не предусмотрена. Информация по замене аккумуляторов может быть получена у обслуживающей компании.



Подлежит использованию по назначению
в нормальных условиях
Срок службы : 7 лет.