

WISeNeT

СЕТЕВАЯ КАМЕРА

Руководство пользователя

XNV-6080RS/XNV-8080RS/XNV-6120RS



Сетевая Камера

Руководство пользователя

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❖ 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 24 В перем. тока (50/60 Гц), 1.1 А, либо 12 В пост. тока, 1.0 А. (XNV-6080RS/XNV-8080RS/XNV-6120RS)
16. Если при установке изделия прилагать чрезмерные усилия, возможно повреждение с нарушением работы камеры.
Если с силой устанавливать устройство, пользуясь неподходящими инструментами, возможно повреждение устройства.
17. Не допускается установка устройства в местах, где присутствуют или могут появляться химические вещества или пары масла. Поскольку пищевые масла, например, соевое, могут вызвать повреждение или привести к деформации устройства, не устанавливайте его на кухне или вблизи кухонного стола.
В противном случае возможна порча устройства.
18. При установке устройства будьте осторожны, не допускайте попадания химических веществ на его поверхность.
Некоторые химические растворители, например, очистители или клеящие вещества, могут сильно повредить поверхность продукта.
19. Если монтировать/демонтировать устройство не рекомендованным образом, нельзя гарантировать выполнение функций/соответствие характеристик устройства.
Устанавливайте устройство, обратившись к разделу "Установка и подключение" в руководстве пользователя.
20. Установка или эксплуатация устройства в воде может привести к значительному повреждению изделия.



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 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.

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

К источнику входного питания может подсоединяться только одна камера.

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

Внимательно прочитайте приведенные ниже правила техники безопасности.

- Не ставьте устройство на неровную поверхность.
- Не устанавливайте устройство на поверхность, подверженную прямым солнечным лучам, рядом с нагревательным оборудованием или в очень холодном месте.
- Не устанавливайте это устройство вблизи электропроводящего.
- Не следует ремонтировать устройство самостоятельно.
- Не следует ставить на устройство стаканы с водой.
- Не устанавливайте поблизости источники магнитного поля.
- Не допускайте заграждения 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.

СОДЕРЖАНИЕ

ОБЗОР

3

3	Важные правила техники безопасности
6	Характеристики Устройства
6	Рекомендуемая Конфигурация Пк
6	Рекомендуемые характеристики карт памяти Микро SD/SDHC/SDXC
6	Рекомендуемые Технические Характеристики NAS
7	Комплект Поставки
8	Общий Обзор (XNV-6080RS/XNV-8080RS)
10	Общий Обзор (XNV-6120RS)

УСТАНОВКА И ПОДКЛЮЧЕНИЕ

12

12	Установка
15	Установка/извлечение карты памяти Микро SD
16	Подключение к Другому Устройству

СЕТЕВОЕ СОЕДИНЕНИЕ И НАСТРОЙКА

19

19	Подключение Камеры Напрямую к Локальной Сети
19	Прямое Подключение Камеры к Модему DSL/кабельному Модему С Поддержкой Протокола DHCP
20	Подключение Камеры Напрямую к Модему PPPoE
20	Подключение Камеры к Широкополосный маршрутизатор Через PPPoE/кабельный Модем
21	Использование Device Manager
21	Автоматический поиск камеры
21	Настройка IP-адреса
22	Регистрация камеры вручную
22	Автоматическая настройка IP
23	Настройка Переадресации Диапазона Портов (Распределение Портов)
24	Подключение к Камере с Локального Компьютера Общего Доступа
24	Подключение к Камере с Удаленного Компьютера Через Интернет

ИНТЕРАКТИВНАЯ ПРОГРАММА ПРОСМОТРА

25

25	Подключение к Камере
26	Установка пароля
26	Вход
26	Спецификации подключаемых программных модулей для всех браузеров
27	Установка дополнительного модуля WebViewer
27	Использование подключаемого программного модуля веб-просмотра

ПРИЛОЖЕНИЕ

28

28	Характеристики
31	Приложение
32	Поиск и Устранение неполадок
33	Open Source Announcement

ХАРАКТЕРИСТИКИ УСТРОЙСТВА

- Материал: нержавеющая сталь**
Наружная часть камеры выполнена из нержавеющей стали, благодаря коррозионной стойкости и удобству управления, ее можно устанавливать в различных особых условиях окружающей среды.
- Защита от пыли/влаги**
Пыле- и влагонепроницаемая конструкция защищает аппарат от дождя и пыли при установке вне помещения.
- Инфракрасный режим**
При включении ИК-индикатора, устройство переключается в инфракрасный режим для того, чтобы объект не был слишком ярким, что позволит определить его на близком расстоянии.
- Поддерживаются видео с разрешением 2М пикселей (XNV-6080RS/XNV-6120RS)**
- Поддерживаются видео с разрешением 5М пикселей (XNV-8080RS)**
- Потоковая передача данных с использованием универсального кодека**
Эта сетевая камера может отображать видео с различным разрешением и качеством одновременно с помощью разных кодеков.
- Наблюдение с помощью веб-обозревателя**
Использование веб-обозревателя для просмотра изображений в локальной сетевой среде.
- Тревога**
При возникновении события соответствующее видео отправляется либо на зарегистрированный пользователем адрес электронной почты, FTP сервер, или сохраняется на карту памяти Micro SD, или в сетевом хранилище (NAS), или же на терминал выхода сигнала тревоги отправляется сигнал.
- Детектор несанкционированного вмешательства**
Выявление попыток вмешательства в настройки видеонаблюдения.
- Функция обнаружения расфокусировки**
Обнаруживает признаки расфокусировки объектива камеры.
- Детектор движения**
Определение движения с конкретного видеовхода камеры.
- Распознавание аудио**
Распознавание звука, уровень громкости которого выше заданного пользователем.
- Smart Codec**
Адаптивное применение кодеков к части областей угла обзора камеры для повышения качества выбранной пользователем зоны.
- Автоматическое обнаружение отключенной сети**
Обнаружение отключения сети перед запуском события.
- Обнаружение тумана**
Обнаруживается туман, более плотный, чем установленный уровень.
- Распознавание лица**
В заданной зоне на видео с камеры обнаруживаются лица.
- Интеллектуальная видео аналитика (IVA)**
Определяется движение или ситуация, которая соответствует заданным правилам наступления событий.

- Классификация источника звука**
Определяется источник звука, указанный пользователем.
- Соответствие ONVIF**
Данное устройство поддерживает ONVIF Profile S&G.
Веб-сайт www.onvif.org.



РЕКОМЕНДУЕМАЯ КОНФИГУРАЦИЯ ПК

- Процессор : Intel(R) Core(TM) i7 3,4 Ггц или больше
 - ОЗУ: 8 Гб или больше
 - Поддерживаемые ОС : MS Windows, Mac OS X
 - Дополнительный программный модуль Free web viewer**
Поддерживаемые веб-браузеры : Google Chrome, MS Edge, Mozilla Firefox (только 64-битная Windows), Apple Safari (который поддерживается только Mac OS X)
 - Webviewer с дополнительным программным модулем**
Поддерживаемые веб-браузеры : MS Explore, Apple Safari (который поддерживается только Mac OS X).
- ※ Подробные данные о версиях проверенных ОС и браузера см. в приложении.

РЕКОМЕНДУЕМЫЕ ХАРАКТЕРИСТИКИ КАРТ ПАМЯТИ МИКРО SD/SDHC/SDXC

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

РЕКОМЕНДУЕМЫЕ ТЕХНИЧЕСКИЕ ХАРАКТЕРИСТИКИ NAS

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

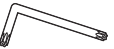
Рекомендуемые продукты	Доступные размеры
QNAP NAS	Максимальное количество камер для одновременного доступа - 16.
Synology NAS	Максимальное количество камер для одновременного доступа - 16.



■ Если предполагается использование оборудования NAS не только для хранения видеоматериалов, количество одновременно доступных камер может быть сокращено.

КОМПЛЕКТ ПОСТАВКИ

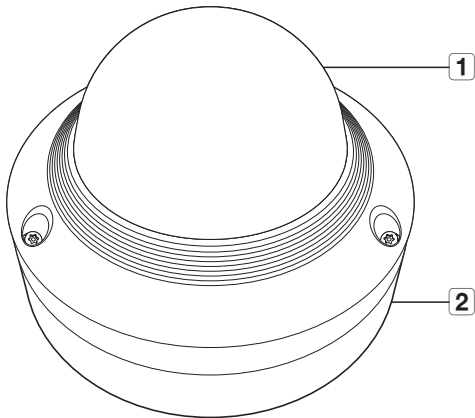
Проверьте наличие всех принадлежностей в комплекте поставки камеры.
(У изделий, продаваемых в разных странах, принадлежности могут отличаться.)

Внешний вид	Название элемента	Количество	Описание
	Камера	1	
	Краткое Руководство (необязательно)	1	
	Гарантийный талон (необязательно)	1	
	Кабель для тестирования монитора	1	Используется для подключения камеры к портативному устройству отображения
	Крепёжная пластина	1	Руководство по установке устройства
	Клеммник питания	1	Вставлен в разъем электропитания
	Самонарезающий винт	4	Используются для установки на стену или потолок
	Звездобразный ключ	1	Используется для снятия и замены крышки купола

Внешний вид	Название элемента	Количество	Описание
	Шнур питания	1	Вставляется в разъем питания
	Звуковой кабель/кабель тревоги	1	Подключается в звуковой разъем и разъем тревоги
	Кабельная втулка	1	Обычные вводные втулки для всех кабелей
	Пластиковый дюбель	4	Используется для фиксации винта, вставляется в отверстие (повышенная прочность фиксации)
	Крепёжные винты	3	Используются для сборки купольного корпуса при установке устройства на трубе, стене, и т.д., или для блокировки отверстий.
	Влагопоглотитель в виде карты	1	Вставляется при установке.
	Колпачковое монтажное приспособление	1	Используется при подключении кабеля RJ45

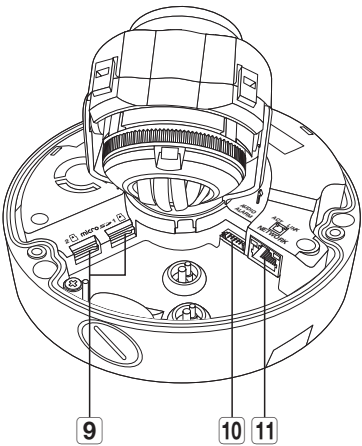
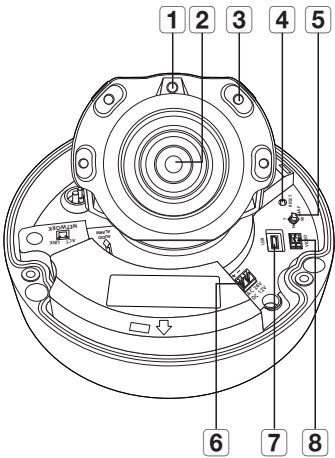
ОБЩИЙ ОБЗОР (XNV-6080RS/XNV-8080RS)

Внешний вид



Элемент	Описание
1 Крышка купола	Крышка корпуса, предназначенная для защиты объектива и основного устройства.
2 Корпус камеры	Защитный кожух корпуса видеокамеры.

Компоненты

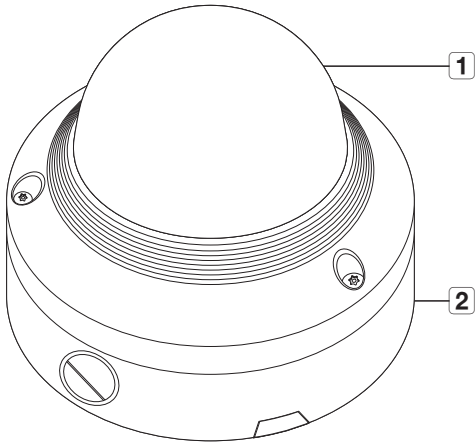


Элемент	Описание
1 Светочувствительный датчик	Обнаруживает поступающий свет для управления инфракрасным светодиодом.
2 Объектив	Объектив видеокамеры.
3 Инфракрасный светодиод	Инфракрасные светодиоды управляются светочувствительным датчиком.
4 Кнопка сброса	Восстановление заводских настроек по умолчанию 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 Кнопка управления увеличением/фокусом	T Увеличение (теле)
	W Уменьшение (широко)
	N Фокусировка на близком объекте (ближе)
	F Фокусировка на удаленном объекте (дальше)
	Управление фокусировкой Нажмите эту кнопку для автоматического управления фокусировкой.
6 Порт питания	Разъем для клеммника питания.
7 Порт Micro-USB	Порт для подключения адаптера Wi-Fi. Можно просмотреть видео об установке через приложения, установленные на смартфоне. См. "Подключение к адаптеру Wi-Fi" на стр. 16. ■ Аппаратный ключ Wi-Fi и переходник OTG продаются отдельно.
8 Порт тестирования выходного сигнала монитора	Порт вывода для тестирования выходного видеосигнала наблюдения. Подсоедините мобильный дисплей к порту с помощью кабеля для тестирования видеонаблюдения и проверьте видео.
9 Отсек для карты памяти Микро SD	Отсек для карты памяти Микро SD.

Элемент	Описание
10 Разъем аудио и кабеля сигнала тревоги	Порт для подключения аудиокабеля и кабеля сигнализации.
	ARM-IN Используется для подключения сенсора входного сигнала тревоги или наружного сенсора день/ночь.
	ARM-OUT Используется для передачи выходных сигналов тревоги.
	GND Это общие порты для подключения входа/выхода тревожной сигнализации.
	MIC Используется для подключения к микрофону.
	SPEAKER Используется для подключения к динамикам.
11 Порт Сеть	Подсоединение кабеля PoE или Ethernet для установки сетевого подключения.

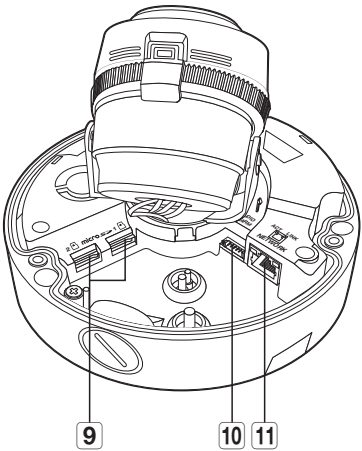
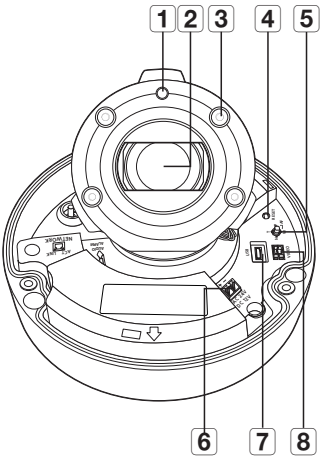
ОБЩИЙ ОБЗОР (XNV-6120RS)

Внешний вид



Элемент	Описание
1 Крышка купола	Крышка корпуса, предназначенная для защиты объектива и основного устройства.
2 Корпус камеры	Защитный кожух корпуса видеокамеры.

Компоненты



Элемент	Описание
1 Светочувствительный датчик	Обнаруживает поступающий свет для управления инфракрасным светодиодом.
2 Объектив	Объектив видеокамеры.
3 Инфракрасный светодиод	Инфракрасные светодиоды управляются светочувствительным датчиком.
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 Кнопка управления увеличением/фокусом	T Увеличение (теле)
	W Уменьшение (широко)
	N Фокусировка на близком объекте (ближе)
	F Фокусировка на удаленном объекте (дальше)
	Управление фокусировкой Нажмите эту кнопку для автоматического управления фокусировкой.
6 Порт питания	Разъем для клеммника питания.
7 Порт Micro-USB	Порт для подключения адаптера Wi-Fi. Можно просмотреть видео об установке через приложения, установленные на смартфоне. См. "Подключение к адаптеру Wi-Fi" на стр. 16. ■ Аппаратный ключ Wi-Fi и переходник OTG продаются отдельно.
8 Порт тестирования выходного сигнала монитора	Порт вывода для тестирования выходного видеосигнала наблюдения. Подсоедините мобильный дисплей к порту с помощью кабеля для тестирования видеонаблюдения и проверьте видео.
9 Отсек для карты памяти Микро SD	Отсек для карты памяти Микро SD.

Элемент	Описание
10 Разъем аудио и кабеля сигнала тревоги	Порт для подключения аудиокабеля и кабеля сигнализации.
	ARM-IN Используется для подключения сенсора входного сигнала тревоги или наружного сенсора день/ночь.
	ARM-OUT Используется для передачи выходных сигналов тревоги.
	GND Это общие порты для подключения входа/выхода тревожной сигнализации.
	MIC Используется для подключения к микрофону.
	SPEAKER Используется для подключения к динамикам.
11 Порт Сеть	Подсоединение кабеля PoE или Ethernet для установки сетевого подключения.

УСТАНОВКА

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

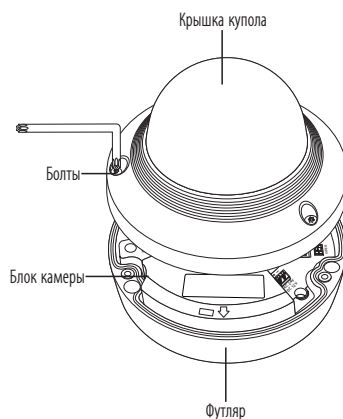
Меры предосторожности, принимаемые перед установкой

Прежде чем устанавливать камеру, обязательно прочтите приведенные далее инструкции.

- Установку необходимо выполнять в таком месте (на потолке или стене), которое может выдержать вес в пять раз превышающий вес камеры, включая установочный кронштейн.
- 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 при установке аппарата прилагать чрезмерное усилие, возможно повреждение камеры с нарушением работы. Приложение силы при сборке с использованием неподходящих инструментов может привести к повреждению аппарата.

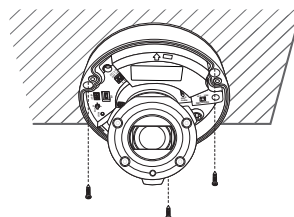
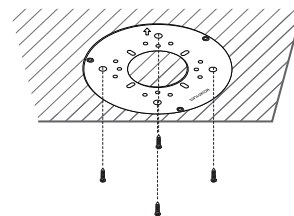
Разборка

1. Прилагаемым звездообразным ключом отверните крепежный болт купольной крышки, поворачивая его против часовой стрелки, и снимите купольную крышку.



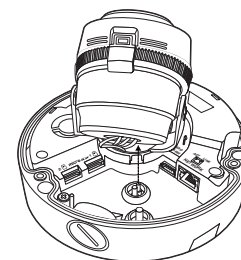
Установка

1. Просверлите отверстия в соответствии с четырьмя точками D монтажной пластины, прилагаемой в качестве принадлежности.
 - Сориентируйте метку [↑] в направлении, в котором требуется наблюдение.
2. Полностью вставьте пластиковый дюбель.
3. Совместите установочное отверстие камеры с отверстием, в которое вставлен пластиковый дюбель, затем вверните самонарезной винт.
4. Сняв монтажную пластину и кожух камеры, как показано на рисунке.
 - Сориентируйте метку [↑] в направлении, в котором требуется наблюдение.
5. Подсоедините и проложите нужные кабели таким образом, чтобы не повредить и не перекрутить их при установке камеры.
6. Отрегулируйте направление объектива см. раздел **“Регулировка направления наблюдения камеры”**. (стр. 15)
7. Закройте крышку купола.
 - Для предотвращения просачивания воды плотно затяните крепежный болт с помощью углового гаечного ключа.

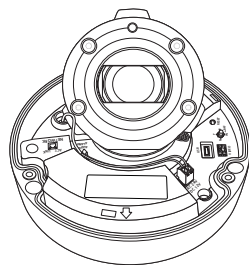


Соединение водонепроницаемого шнура питания и кабеля LAN

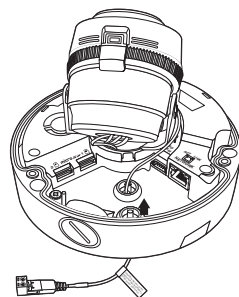
1. Снимите крышку купола и корпус.
2. Потяните за длинную выступающую часть резиновой пробки на дне корпуса и извлеките ее, как показано на рисунке.



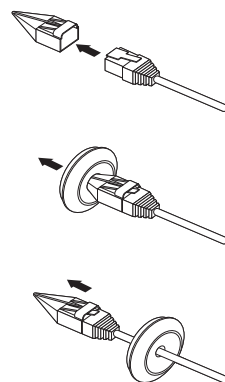
3. Вставьте шнур питания в маленькое отверстие, возникшее при извлечении выступающей части резиновой пробки на шаге 2, описанном выше, и уложите кабель в длинную канавку.
4. Соедините шнур питания с клеммником питания.



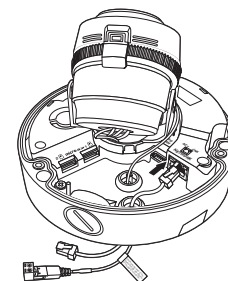
5. Вытяните на пол резиновый стопор, как показано на рисунке.



6. Для сквозного пропускания кабеля RJ45 используйте колпачковое приспособление.

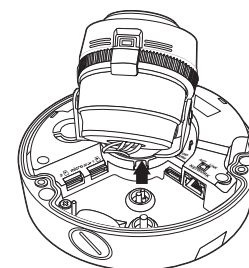


7. Вставьте резиновый стопор обратно и подключите кабель локальной сети к соединителю Ethernet.

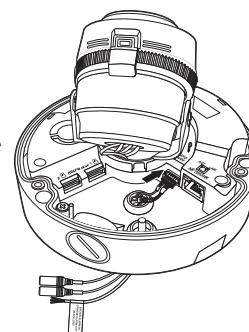


Подключение кабеля аудио и сигнализации

1. Снимите крышку купола и корпус.
2. Вытащите резиновую пробку на дне, как показано на рисунке.



3. Вставьте кабель аудио/сигнализации через отверстие, образующееся при снятии резинового колпачка №2, и подключите кабель к соединителю сигнализации.
4. Выверните кабель таким образом, чтобы он не повредился и не пережимался во время установки камеры.
5. Введите в отверстие резиновый колпачок, расположенный на кабеле аудиосигнала/сигнализации.
6. Отрегулируйте направление объектива см. раздел **“Регулировка направления наблюдения камеры”**. (стр. 15)
7. Наденьте крышку купола.



Подсоединение к адаптеру (продается отдельно)

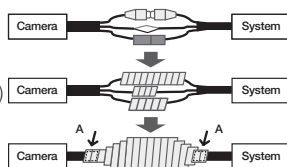
Выберите и приобретите любой из следующих вариантов адаптеров (продаются отдельно), который оптимально подойдет для места установки или покажется вам более удобным.

1. Снимите крышку купола с корпуса, следуя шагам, описанным в разделе **"Разборка"**. (стр. 12)
2. Чтобы прикрепить корпус камеры к адаптеру, используйте прилагаемый крепежный винт.
3. Подсоедините и проложите нужные кабели таким образом, чтобы не повредить и не перекрутить их при установке камеры.
4. Установите блок камеры в порядке, обратном **"Разборка"**.
5. Отрегулируйте направление объектива см. раздел **"Регулировка направления наблюдения камеры"**. (стр. 15)
6. Закройте крышку купола.
 - Плотно затяните крепежные болты звездобразным ключом во избежание протечки воды.

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. Подсоедините силовой кабель, кабели ввода/вывода, BNC-соединителя и кабели локальной сети передачи данных.
2. Оберните черный кабельный кожух (Зона А) и зону присоединения кабеля водонепроницаемой лентой (бутылкачук) так, чтобы лента бутылкачука перекрывалась больше чем на половину.

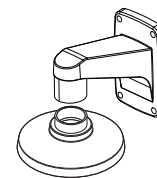


- ! ■ Если не обеспечена надлежащая водонепроницаемость кабельного кожуха, это может стать причиной течи. Удостоверьтесь, что кабель обмотан толстым слоем ленты.
- Водонепроницаемая лента сделана из бутылкачука, который может растягиваться по длине более чем в два раза.

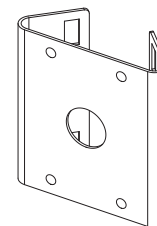
Дополнительные принадлежности для установки

Для упрощения установки можно приобрести дополнительные принадлежности.

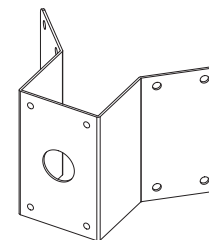
1. УСТАНОВКА НА РАМЕ (SBP-300WMS)/ПОДВЕСНАЯ УСТАНОВКА (SBP-HMS6)
Этот адаптер используется для установки купольной камеры на стену.



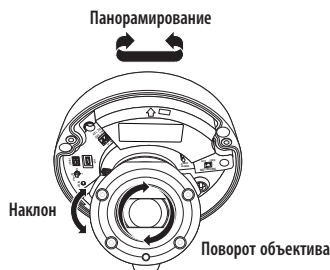
2. АДАПТЕР ДЛЯ УСТАНОВКИ НА СТОЛБЕ (SBP-300PMS)
Этот адаптер (SBP-300WMS или SBP-300WMS1) предназначен для установки на столбе диаметром более 80 мм.



3. АДАПТЕР ДЛЯ УСТАНОВКИ В УГЛУ (SBP-300KMS)
Это адаптер (SBP-300WMS или SBP-300WMS1) предназначен для настенной установки в углу.



Регулировка направления наблюдения камеры



■ Настройка направления мониторинга

Направление камеры можно регулировать, только когда она закреплена на потолке. Поворот блока видеокамеры влево или вправо называется панорамированием, регулировка наклона – наклоном, а осевое перемещение объектива – вращением.

- Эффективный диапазон панорамирования составляет 354 градусов.
- Эффективный диапазон вращения - 355 градусов.
- Угол поворота при наклоне 67° у XNV-6080RS/8080RS и 75° у XNV-6120RS.



- Изображение может быть закрыто корпусом камеры в зависимости от угла.
- Не нужно с силой поворачивать объектив фокус/увеличение, когда кожух купола снят. В противном случае фокусировка может выполняться неправильно из-за сбоя в работе привода.

■ Способы регулировки

1. После установки камеры отрегулируйте угол панорамирования с учетом направления наблюдения.
2. Установите горизонтальный угол таким образом, чтобы изображение не переворачивалось.
3. Отрегулируйте угол поворота таким образом, чтобы камера была направлена на наблюдаемый объект.

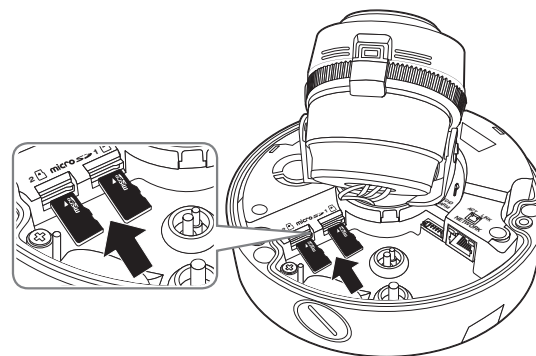
УСТАНОВКА/ИЗВЛЕЧЕНИЕ КАРТЫ ПАМЯТИ МИКРО SD



- 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.
- Снятие крышки изделия следует закончить в течение 5 минут, поскольку в противном случае возникает опасность конденсации росы внутри изделия.

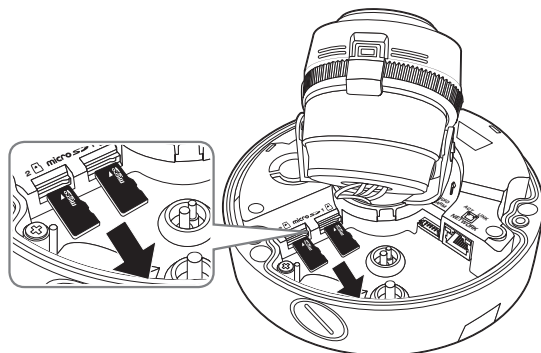
Установка карты памяти Микро SD

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



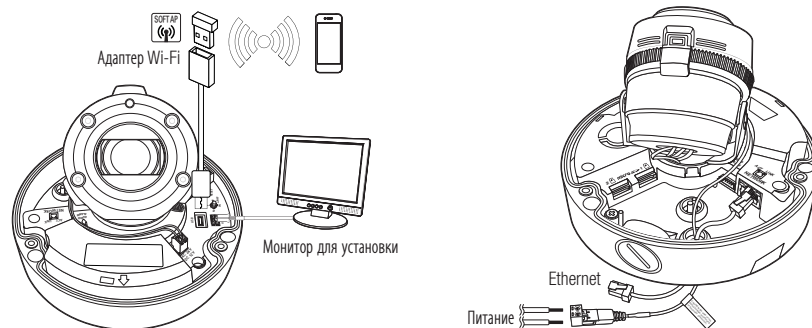
Извлечение карты памяти Микро SD

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



- При слишком сильном нажатии на карту памяти Микро SD она может “выстрелить” из разъема при отпуске пальца.
- 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.

ПОДКЛЮЧЕНИЕ К ДРУГОМУ УСТРОЙСТВУ



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

Подключение к сети Ethernet

Подключите кабель Ethernet к локальной сети или к Интернету.

Подключение Wi-Fi

Настройка камеры

1. Подключите переходник OTG (5-контактный) и аппаратный ключ Wi-Fi к соединителю micro USB.

Smartphone Setup

1. Установите приложение для установки Wisenet.
2. После включения Wi-Fi выберите SSID камеры.
3. Запустите приложение для установки Wisenet.
4. После входа в камеру будет подключено видео (первоначальный пароль: 4321)
 - Во время первоначального подключения без входа в систему видео будет воспроизводиться.
5. Угол обзора камеры можно регулировать во время просмотра видео на смартфоне.

Рекомендуемый производитель адаптеров

Производитель	Модель
NETIS	WF2123 n300
EDIMAX	EW-7811Un
IP Time	N100mini
TP-LINK	TL-WN823N V1
ASUS	USB-N13
NETGEAR	WNA3100M

Источник питания

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

- При одновременной подаче питания PoE и 12 В постоянного тока либо PoE и 24 В переменного тока оборудование будет использовать питание от внешнего источника (переменный ток 24 В, постоянный ток 12 В).
 - Также для подачи питания к видеокамере используется маршрутизатор с поддержкой PoE.
 - Применяемая технология PoE должна быть совместима с протоколами IEEE 802.3af.
 - Для питания оборудования рекомендуется использовать один источник из следующих: PoE, постоянный ток 12 В, переменный ток 24 В.
- Подключая кабель питания, будьте очень внимательны, чтобы не перепутать полярность.
- Неполлярное подключение переменного тока 24 В.
- Если необходимо подключить внешнее устройство, перед началом работы его необходимо выключить.
- Сначала соедините устройство и шнур адаптера питания, а затем включите кабель питания в стенную розетку.

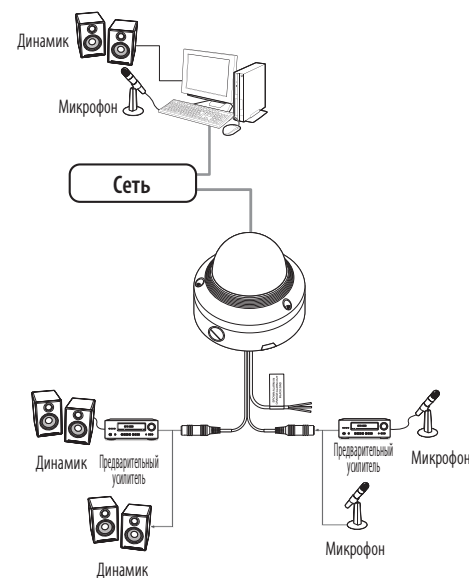
Спецификация на силовой кабель для каждой модели

Модели	Входная мощность	Тип проводов (AWG)	Длина кабеля (макс.)
XNV-6080RS/8080RS/6120RS	DC 12V	#18	19m
		#16	30m
	AC 24V	#20	26m
		#18	40m

Спецификация сетевого кабеля

Пункт	Содержание	Примечание
Разъем	RJ45	
Ethernet	10/100BASE-T	
Кабель	UTP категории 5e	
Макс. расстояние	100 м	Сопротивление по постоянному току ≤ 0,188 Ом/м
Поддержка питания по Ethernet	IEEE 802.3af	

Подсоединение звукового ввода/вывода



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

• Аудиокодек

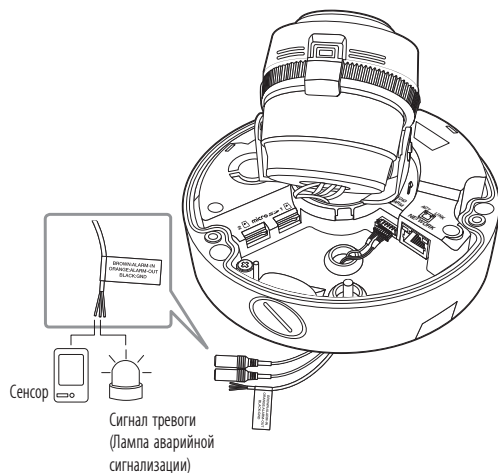
- Аудио вход : G.711 PCM (скорость передачи: 64кбит/с / частота дискретизации: 8кГц), G.726 АДИКДМ (скорость передачи: 16кбит/с , 24кбит/с , 32кбит/с , 40кбит/с / частота дискретизации: 8кГц), AAC (скорость передачи: 48кбит/с / частота дискретизации: 16кГц)
- Аудио выход : G.711 PCM (скорость передачи: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

• Дуплексное аудио

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

Подключение к блоку портов ввода-вывода

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



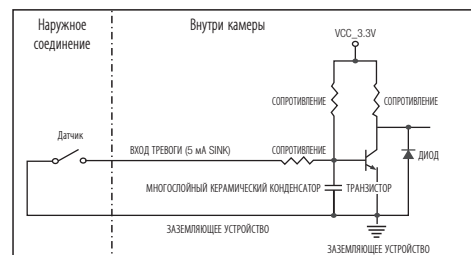
- ALARM-IN : Используется для подключения сенсора входного сигнала тревоги или наружного сенсора день/ночь.
- ALARM-OUT : Используется для передачи выходных сигналы тревоги.
- GND : Общий порт для ввода/вывода тревожной сигнализации.

❗ 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». (Стр. 18)

Подключение к внешнему датчику

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

Монтажная схема входа тревоги

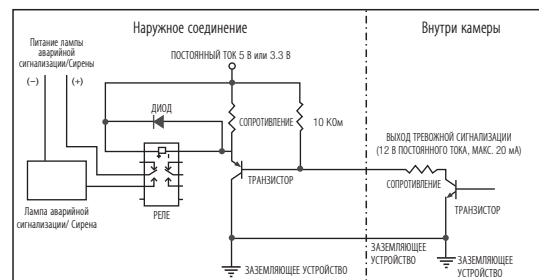


Подключение выхода тревоги

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.

Монтажная диаграмма выхода тревоги

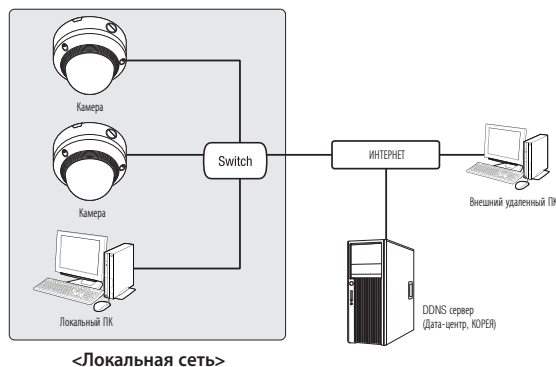


Можно выставить сетевые настройки согласно сетевой конфигурации.

ПОДКЛЮЧЕНИЕ КАМЕРЫ НАПРЯМУЮ К ЛОКАЛЬНОЙ СЕТИ

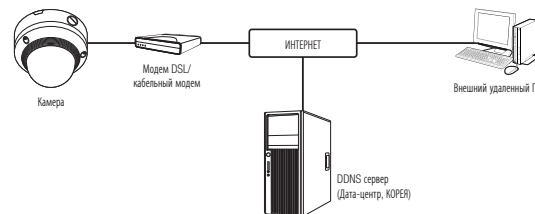
Подключение к камере через локальный ПК в локальной сети

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 перенадресация портов или установлен фаервол. В этом случае обратитесь к системному администратору для устранения проблемы.
- В Device Manager для установки IP-адреса, маски подсети, шлюза, порта HTTP, порта VNP и типа IP можно использовать исходный пароль «4321». Для лучшей защиты после изменения сетевого интерфейса войдите в web viewer и поменяйте пароль.
- Согласно заводским настройкам по умолчанию, IP-адрес назначается сервером DHCP автоматически. Если сервер DHCP отсутствует, будет задан следующий IP-адрес: 192.168.1.100. Чтобы изменить IP-адрес, нужно использовать Device Manager. Для получения дополнительной информации об использовании Device Manager см. раздел «Использование Device Manager». (Стр. 21)

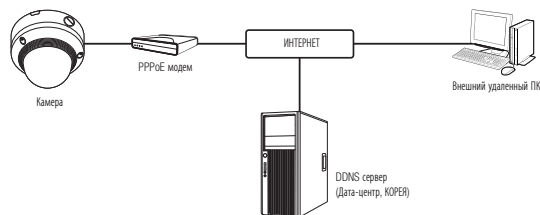
ПРЯМОЕ ПОДКЛЮЧЕНИЕ КАМЕРЫ К МОДЕМУ DSL/КАБЕЛЬНОМУ МОДЕМУ С ПОДДЕРЖКОЙ ПРОТОКОЛА DDNS



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.

ПОДКЛЮЧЕНИЕ КАМЕРЫ НАПРЯМУЮ К МОДЕМУ PPPoE

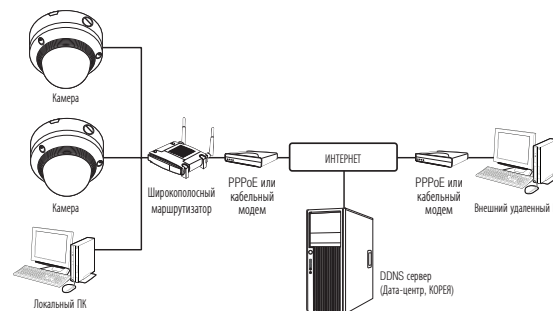


1. Подсоедините напрямую ПК пользователя с сетевой камерой.
2. Запустите Device Manager и измените IP-адрес камеры, чтобы можно было для подключения к Интернету использовать веб-браузер вашего компьютера.
3. Установите подключение к интерактивной программе просмотра в веб-браузере.
4. Перейдите на страницу **[Настройка]**.
5. Перейдите на страницу **[Сеть]** - **[DDNS]** и настройте параметры DDNS.
6. Перейдите по меню **[Basic]** - **[IP & Порт]** на страницу настроек, задайте тип IP для **[PPPoE]** и введите ID и пароль сетевой службы.
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.

ПОДКЛЮЧЕНИЕ КАМЕРЫ К ШИРОКОПОЛОСНЫЙ МАРШРУТИЗАТОР ЧЕРЕЗ PPPoE/КАБЕЛЬНЫЙ МОДЕМ

Используется в небольших сетях внутри домов, в маленьких офисах и обычных магазинах.



Настройка сетевых параметров локального ПК, подключенного к Широкополосный маршрутизатор

При настройке сетевых параметров локального ПК, подключенного к Широкополосный маршрутизатор, руководствуйтесь нижеследующей инструкцией.

- Выберите : **<Network>** → **<Properties>** → **<Local Area Connection>** → **<General>** → **<Properties>** → **<Internet Protocol (TCP/IP)>** → **<Properties>** → **<Obtain an IP address automatically>** или **<Use the following IP address>**.
- Следуйте данным инструкциям, если было выбрано **<Use the following IP address>**:
 - пр1) Если адрес (LAN IP) Широкополосный маршрутизатор 192.168.1.1
IP-адрес : 192.168.1.100
Маска подсети : 255.255.255.0
Основной шлюз : 192.168.1.1
 - пр2) Если адрес (LAN IP) Широкополосный маршрутизатор 192.168.0.1
IP-адрес : 192.168.0.100
Маска подсети : 255.255.255.0
Основной шлюз : 192.168.0.1
 - пр3) Если адрес (LAN IP) Широкополосный маршрутизатор 192.168.xxx.1
IP-адрес : 192.168.xxx.100
Маска подсети : 255.255.255.0
Основной шлюз : 192.168.xxx.1
- Чтобы узнать адрес Широкополосный маршрутизатор, обратитесь к документации изделия.
- Дополнительную информацию о переадресации портов на широкополосном маршрутизаторе см. в разделе **"Настройка Переадресации Диапазона Портов (Распределение Портов)"**. (Стр. 23)

ИСПОЛЬЗОВАНИЕ DEVICE MANAGER



- Программу Device Manager можно загрузить с веб-сайта Hanwha Techwin через меню <Technical Guides> – <Online Tool>. (<http://www.hanwha-security.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.
- VNP Port : используется для управления передачей видеосигнала. Значение по умолчанию - 4520.
- 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. 23)

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
	Subnet Mask	255.255.255.0
	Gateway	192.168.1.1
Настройки, связанные с портами	Порт HTTP	8080
	Порт VNP	4521
	Порт RTSP	555



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

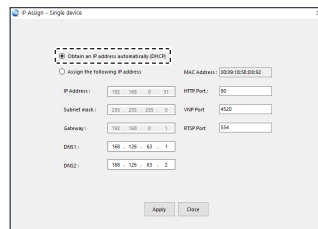
5. Нажмите кнопку [Применить].
6. Если появится сообщение об успешной настройке, нажмите [OK].

Настройка динамического IP-адреса

Получите IP-адрес от DHCP

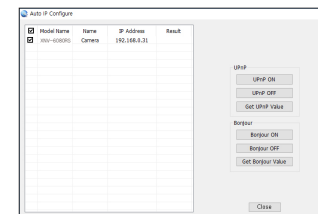
- Примеры динамического IP-окружения
 - Сервер DHCP назначает IP-адрес Широкополосный маршрутизатор с подключенными камерами.
 - Прямое подключение камеры к модему с помощью протоколов DHCP
 - Внутренний сервер DHCP назначает IP-адреса по локальной сети.

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

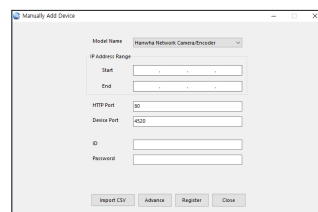
1. Выберите из списка камеру, для которой необходимо автоматически настроить параметры IP.
2. На главной странице Device Manager нажмите **< + >**.
 - Появится меню настроек оборудования.
3. Выберите в меню **<Auto IP Configure (Автоматическая настройка IP)>**.
4. Нажмите кнопку **[Close (Закрыть)]**.



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

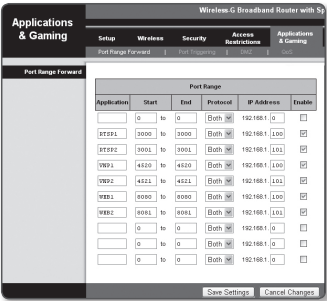


НАСТРОЙКА ПЕРЕАДРЕСАЦИИ ДИАПАЗОНА ПОРТОВ (РАСПРЕДЕЛЕНИЕ ПОРТОВ)

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.

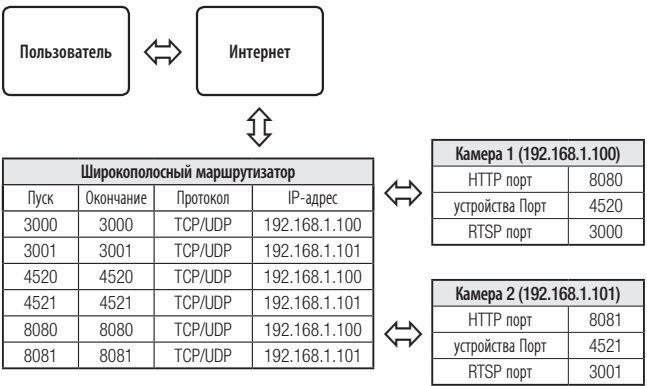


- Настройка переадресации портов является примером настройки IP-маршрутизатора CISCO.
- Параметры могут различаться в зависимости от модели Широкополосный маршрутизатор. Для получения дополнительных сведений см. руководство пользователя соответствующего маршрутизатора.

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 <Wisenet 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>

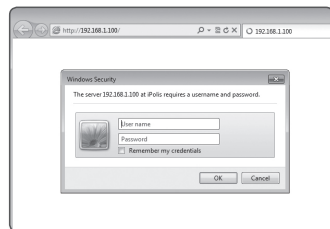


- Чтобы использовать Wisenet DDNS, зарегистрируйтесь на домашней странице Wisenet DDNS (<http://ddns.hanwha-security.com>) и зарегистрируйте продукт через меню **[Мой DDNS]> [Зарегистрировать продукт]**.

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 напрямую к кабельному модему DHCP, модему DSL или модему PPPoE, то IP-адрес вашей сети будет изменяться при каждом подключении к серверу поставщика услуг Интернета. В этом случае вам не будет сообщаться об изменении IP-адреса, выполненном DDNS.

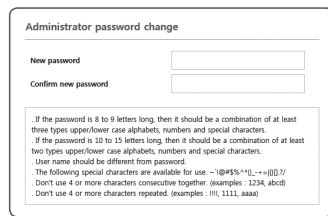
Если вы зарегистрируете устройство с динамическим IP-адресом на сервере DDNS, то во время доступа к этому устройству вы всегда можете проверить, как изменился его IP-адрес. Чтобы зарегистрировать устройство на сервере <DDNS>, посетите веб-сайт <http://ddns.hanwha-security.com>. Сначала зарегистрируйте камеру, а затем задайте <Сеть> - <DDNS> для <Wisenet DDNS> в программе Web Viewer, а также укажите <Код продукта>, который использовался для регистрации DDNS.

УСТАНОВКА ПАРОЛЯ

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

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

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

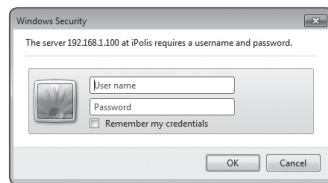


ВХОД

При каждом доступе к камере будет появляться окно входа.

Укажите идентификатор пользователя и пароль для доступа к камере.

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



- При доступе к камере через модуль Web viewer уделите внимание безопасности и проверьте, зашифрованы ли данные, содержащие изображение.
- Если установить флажок **“Remember my credentials”** во время ввода данных, то в следующий раз и далее вход в систему будет выполняться автоматически без запроса данных.
- Лучшее качество видео обеспечивается при размере экрана 100%. При уменьшении экрана изображение может быть обрезано по краям.

СПЕЦИФИКАЦИИ ПОДКЛЮЧАЕМЫХ ПРОГРАММНЫХ МОДУЛЕЙ ДЛЯ ВСЕХ БРАУЗЕРОВ

Имеющийся Web viewer с подключаемым программным модулем и новый веб-просмотр без встраиваются программного модуля встраиваются совместно.

Это позволяет использовать Web viewer в среде более новых браузеров, таких как Chrome, EDGE и FireFox (только 64-битная Windows), которые не поддерживают подключаемые программные модули.

Для браузеров, допускающих установку подключаемого программного модуля, таких как IE и Safari, рекомендуется установка этого модуля.

В зависимости от программной среды браузера могут наблюдаться следующие отличия.

- **Браузеры Chrome, FireFox (только 64-битная Windows), EDGE и Safari** : Среда браузера не позволяет использовать подключаемый программный модуль, но при установленном бесплатном модуле веб-просмотра можно пользоваться веб-просмотром.
 - Бесплатный программный модуль веб-просмотра может иметь более низкие характеристики, чем базовые подключаемые программные модули веб-просмотра, это зависит от видеокodeка и разрешения.
 - Если на прямом видео имеется задержка, автоматически создается профиль бесплатного программного модуля (HD (1280x720) и 20 кадр/с при H.264).
 - В зависимости от codeка и разрешения могут возникать задержки при воспроизведении.
 - Функция бесплатного подключаемого программного модуля оптимизирована для браузера Chrome.
- **Браузер IE, Safari** : Даже если не установлен программный модуль из имеющегося программного модуля веб-просмотра, можно пользоваться веб-просмотром с ограниченной функциональностью.
 - Для бесперебойного наблюдения/воспроизведения сохраненного видео необходимо установить подключаемый программный модуль.

УСТАНОВКА ДОПОЛНИТЕЛЬНОГО МОДУЛЯ WebViewer

При попытке входа в бесплатный программный модуль веб-просмотра и запросе просмотра прямого видео с кодеком, отличным от текущего кодека воспроизведения, либо при попытке использовать функцию воспроизведения записанного видео появится установочное сообщение.

При этом для нормального использования функций необходимо установить программный модуль веб-просмотра.

1. При самом первом обращении к странице монитора отображается страница установки. Кликните на **[Download plugin]**, чтобы начать установку.



■ Если статус загрузки установочного файла плагина приостанавливается на 99% в браузере Internet Explorer, попробуйте еще раз после выбора "Оключить фильтр SmartScreen" в "Инструменты → фильтр SmartScreen".

2. Кликните **[Run]** в окне сообщений.

3. Кликните **[Yes]** когда в окне-примечании появится сообщение о том, что все окна браузеров будут закрыты.



■ Шаги 4 и 5 будут пропущены, если плагин Web Viewer не установлен.

4. Если установлена старая версия плагина Web Viewer, отобразится сообщение в окне-примечании, что старая версия будет удалена.

Кликните **[Yes]** когда появится окно-примечание.

5. Кликните **[OK]**.

Старая версия плагина Web Viewer удалена.

6. Кликните **[Install]**, чтобы начать установку плагина Web Viewer.

7. Кликните **[Finish]**.

Установка плагина Web Viewer завершена.

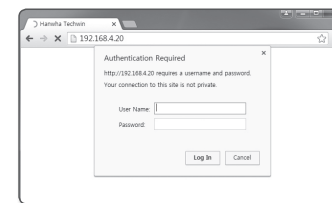


■ В веб-браузере после установки подключаемого модуля webviewer проверьте, установилась ли кнопка webviewer_activeplugin_1ib.control из меню "Инструменты → Управление дополнительными функциями" в состояние "Активировано". Если нет, и если имеется неустранимая проблема, выберите "Инструменты → Опции Интернет → Общие" и удалите все записи поиска. Если проблема не устраняется, зарегистрируйте IP-адрес или домен своей камеры в "Инструменты → Опции Интернета → Безопасность → Доверенные сайты".

ИСПОЛЬЗОВАНИЕ ПОДКЛЮЧАЕМОГО ПРОГРАММНОГО МОДУЛЯ ВЕБ-ПРОСМОТРА

Если доступ к камере производится из веб-браузера Google Chrome, Mozilla Firefox или MS Edge, то, хотя установить программный модуль отдельно невозможно, можно просматривать видео и управлять им и без установки модулей.

1. Для входа в систему введите свои имя пользователя и пароль.
2. После входа в систему появится экран с прямым изображением от камеры.



Настройка камеры

1. Щелкните по значку **[Настройка (⚙)]**.
2. Откроется окно настроек.
3. Можно управлять по сети настройками базовой информации о камере, PTZ, видео и аудио, сети, событий, анализа, системы и открытой платформы.
4. Выберите **<Справка (ℹ)>** для просмотра подробного описания каждой функции.

ХАРАКТЕРИСТИКИ

Элементы		Описание		
		XNV-6080RS	XNV-8080RS	XNV-6120RS
Видео	Устройство обработки изображения	1/2.8" 2M CMOS	1/1.8" 6M CMOS	1/2.8" 2M CMOS
	Общее количество пикселей	1945(Г) x 1109(В) 2.16M	3096(Г) x 2094(В)	1945(Г) x 1109(В) 2.16M
	Количество эффективных пикселей	1945(Г) x 1097(В) 2.13M	2616(Г) x 1976(В)	1945(Г) x 1097(В) 2.13M
	Система сканирования	Прогрессивная развертка		
	Мин. освещенность	Цветное : 0.015 lux(F1.4, 1/30sec), Ч/Б : 0 lux(ИК светодиод включен)	Цветное : 0.07 lux(F1.3, 1/30sec), Ч/Б : 0 lux(ИК светодиод включен)	Цветное : 0.03 lux(F1.6, 1/30sec), Ч/Б : 0 lux(ИК светодиод включен)
	Соотношение сигнал/шум	50дБ		
	Видеовыход	CVBS : 1.0 Vp-p / 75Ω композитный, 720x480(N), 720x576(P), Для установки USB : Micro USB, тип B, 1280X720, для установки		
Объектив	Фокусное расстояние (коэффициент трансфокации)	2.8~12мм(4.3x) Переменное фокусное расстояние, сервопривод	3.9~9.4мм(2.4x) Переменное фокусное расстояние, сервопривод	5.2~62.4 мм (оптическое увеличение 12X)
	Макс. относительное отверстие	1.4(широкоугольный) ~ 3.6(телескопический)	F1.3	1.6(широкоугольный) ~ 3.0(телескопический)
	Угловое поле зрения	Г: 119.5°, В: 62.8°, D: 142.1° Г: 27.9°, В: 15.7°, D: 32.0°	Г: 92.1°, В: 67.2°, D: 119.9° Г: 38.7°, В: 29.0°, D: 48.6°	Н : 54.58°(широкоугольный) ~ 5.30°(телескопический) / V : 32.19(широкоугольный) ~ 3.00°(телескопический) / D : 61.40°(широкоугольный) ~ 6.06°(телескопический)
	Мин. расстояние до объекта	0,5м (1,64 фута)		2,1м (6,89 фута)
	Регулятор фокусировки	Простой фокус (Механизированный вариофокальный) / Вручную - дистанционное управление через сеть (вручную, простой фокус)		Авто/Вручную/ Автофокусировка в одно касание
	Тип объектива	DC Auto Iris, P-iris		DC Auto Iris
	Тип крепления	Встроенное		
	Панорама/Наклон/ Поворот	Диапазон панорамирования/ наклона/поворота 0° ~ 354° / 0° ~ 67° / 0° ~ 355°		0° ~ 354° / 0° ~ 75° / 0° ~ 355°

Элементы	Описание		
	XNV-6080RS	XNV-8080RS	XNV-6120RS
Зона видимости	50м (164,04 фута)		70м (229,66 фута)
Название камеры	Выкл. / Вкл (отображается до 85 знаков) - Общепринятые: Английские/Цифровые/Специальные символы - Общие: Многострочный (до 5), цвет (серый/зеленый/красный/синий/черный/белый), прозрачность, автоматическое масштабирование по разрешению		
День/Ночь	Авто (ICR) / Цвет / В/В / Внешний / Расписание		
Компенсация подсветки	Выкл. / BLC / HLC (Маскирование/Затемнение) / WDR		
Широкий динамический диапазон	150dB	120dB	150dB
Улучшение контрастности	SSDR (Выкл / Вкл)		
Цифровое шумоподавление	SSNR5 (фильтр шумов 2D+3D) (Выкл / Вкл)		
Цифровая стабилизация изображения	Выкл./Вкл.		Выкл./Вкл. (встроенный гироскопический датчик)
Защита от зловреда	Авто/Вручную/Выкл.		
Детектор движения	Выкл./Вкл. (8 многоугольных областей с 8 вершинами), функция Hand over		
Зоны маскирования	Выкл. / Вкл. (32 зон, многоугольных областей) - Цвет: серый, зеленый, красный, синий, черный, белый - Мозаика		
Регулировка усиления	Выкл. / Низкий / Средний / Высокий	Выкл. / Низкий / Средний / Высокий / Вручную	Выкл. / Низкий / Средний / Высокий
Баланс белого	ATW / AWC / Средний/Внутри / Снаружи (включая металл и матовый)		
Контраст	Регулировка Уровня		
LDC	Вкл./Откл. (5 уровней с мин/макс.)		
Скорость электронного затвора	Минимум / Максимум / Защита от мерцания (2 ~ 1/12 000 с)		
Цифровое PTZ	24x, цифровое PTZ (предустановка, группы)		24x
Предустановка	-		300 шт.

Элементы		Описание		
		XNV-6080RS	XNV-8080RS	XNV-6120RS
Рабочие характеристики	Переворот/Отражение	Переворот: Вкл. / Выкл. Зеркальное отображение: Вкл./Выкл. Вид вестибуля: 90°/270°		
	Анализ видео и аудио	Взлом, блуждание, направленное обнаружение, обнаружение расфокусировки, обнаружение тумана, виртуальная линия, приход/уход, появление/исчезновение; обнаружение звука, Распознавание лица, обнаружение движения, цифровое автоматическое слежение, классификация звука		
	В/В сигнала	Ввод 1 шт / Вывод 1 шт		
	Триггеры сигналов тревоги	Вход тревожного сигнала, обнаружение движения, анализ видео и аудио, отключение от локальной сети.		
	События тревоги	- Загрузка файлов через FTP, электронную почту - Уведомление по электронной почте - Местное хранилище данных (SD/SDHC/SDXC) или NAS с записью при отключенной сети и наступлении события (срабатывание сигнала тревоги) - Внешний вывод - Предустановка DPTZ		
	Счетчик пикселей	Поддержка		
Сеть	Ethernet	RJ-45 (10/100BASE-T)		
	Формат сжатия видео	H.264 (MPEG-4 часть 10/AVC): Главная/Базовая линия/Высокий Motion JPEG		
	Разрешение	XNV-6080RS/XNV-6120RS : 1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240 XNV-8080RS : 2560x1920, 2560x1440, 1920x1080, 1600x1200, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240		
	Макс. частота кадров	H.265/H.264 : Макс. 60кадр/с при любых разрешениях Motion JPEG : Макс. 30кадр/с	H.265/H.264 : Макс. 30кадр/с при любых разрешениях Motion JPEG : Макс. 30кадр/с	H.265/H.264 : Макс. 60кадр/с при любых разрешениях Motion JPEG : Макс. 30кадр/с
	Кодек Smart	Ручной режим (по зонам: 5 шт.)		

Элементы		Описание		
		XNV-6080RS	XNV-8080RS	XNV-6120RS
Сеть	WiseStream II	Поддерживается		
	Настройка качества видео	для H.264/H.265 : Заданной скорости бит для MJPEG : Заданной скорости бит		
	Способы управления скоростью передачи бит	для H.264/H.265 : CBR или VBR Motion JPEG : VBR		
	Возможности потоковой передачи	Многопотоковая (до 10 профилей)		
	Аудио вход	На выбор (вход Mic IN /вход Line IN) Сетевое напряжение: 2,5 В постоянного тока (4 мА), входное сопротивление: приблизительно 2 кОм		
	Аудио выход	Линейный выход, максимальный сигнал: 1 В действ.		
	Формат сжатия звука	G.711 μ-law /G.726 выбираемый G.726 (ADPCM) 8 КГц, G.711 8 КГц G.726 : 16 Кбит/с, 24 Кбит/с, 32 Кбит/с, 40 Кбит/с AAC-LC: 48 кбит/с при 8/16/32/48 кГц		
	Аудиосвязь	Двунаправленная		
	IP	IPv4, IPv6		
	Протокол	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour		
	Безопасность	Проверка подлинности при входе HTTPS (SSL) проверка подлинности при входе Digest фильтрация IP-адресов регистрация доступа пользователей Способ проверки подлинности 802.1X (EAP-TLS, EAP-LEAP)		
	Способ потоковой передачи	Одноадресная / многоадресная		
	Макс. количество пользователей	20 пользователей в одноадресном режиме		

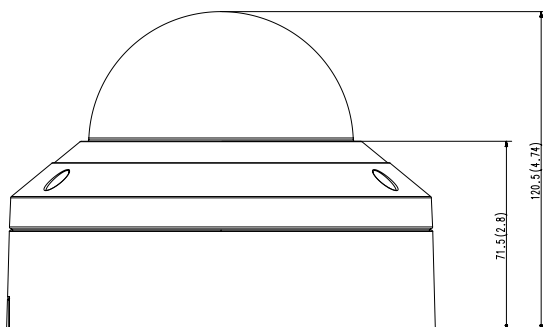
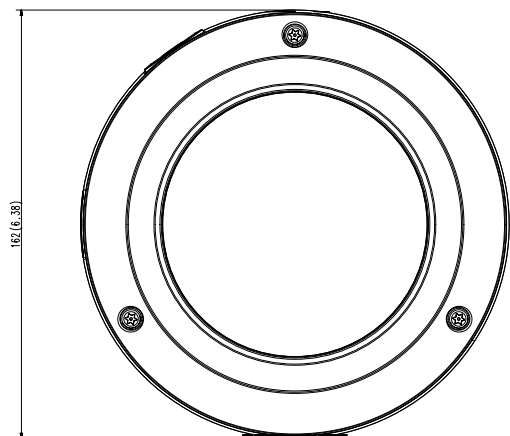
Элементы		Описание		
		XNV-6080RS	XNV-8080RS	XNV-6120RS
Сеть	Функция Edge Store	SD/SDHC/SDXC (до 512 Гбайт) - Непрерывная запись (с 1-го слота на 2-й) - Можно загрузить изображения движения, записанные на карте памяти SD/SDHC/SDXC. NAS (сетевое хранилище данных) Локальный ПК для быстрой записи		
	Программируемый интерфейс	ONVIF Profile S/G SUNAPI(HTTP API) Открытая платформа		
	Язык веб-страницы	Английский, Корейский, Французский, Немецкий, Испанский, Итальянский, Китайский, Русский, Японский, Шведский, Португальский, Чешский, Польский, Турецкий, Голландский, Венгерский, Греческий		
	Веб-обозреватель	Поддерживаемые ОС : Windows 7 / 8.1 / 10, MAC OS X 10.10, 10.11, 10.12 Дополнительный программный модуль Free web viewer Поддерживаемые веб-браузеры: Google Chrome, MS Edge, Mozilla Firefox (только 64-битная Windows) , Apple Safari 10 (только Mac OS X) Webviewer с дополнительным программным модулем Поддерживаемые веб-браузеры: MS Explore 11, Apple Safari (Который поддерживается только Mac OS X)		
	ПО для центрального управления	SmartViewer, SSM		
Условия	Рабочая температура/влажность	-40°C ~ +55°C (-40°F ~ +131°F) / Относительная влажность менее 90%.		-40°C ~ +55°C (-40°F ~ +131°F) / Относительная влажность менее 90%. *Пуск следует производить при температуре выше -35°C (-31°F)
	Температура хранения/влажность	-50°C ~ +60°C (-58°F ~ +140°F) / Относительная влажность менее 90%.		
	Пыле- и влагозащита	IP66, NEMA 4X		
	Защита от умышленной порчи	IK 10+(50J)		

Элементы		Описание		
		XNV-6080RS	XNV-8080RS	XNV-6120RS
Электропитание	Входное напряжение/сила тока	24VAC ± 10%, 12VDC ± 10%, PoE (IEEE802.3af)		
	Потребляемая мощность	Не более 11.5W (12VDC), Не более 12.95W (PoE), Не более 14W (24VAC)		
Физические характеристики	Цвет/материал	Серебристый/Нерж. сталь SUS316L		
	Размеры (ØxГ)	Ø 162 X Г120.5mm (Ø6.38" x 4.74")		Ø 162 X Г134.5mm (Ø6.38" x 5.3")
	Вес	2.8Kg		2.7Kg

ПРИЛОЖЕНИЕ

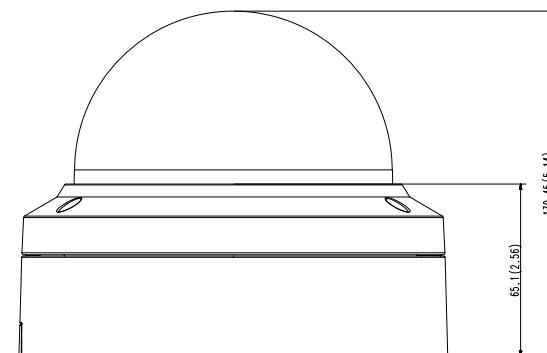
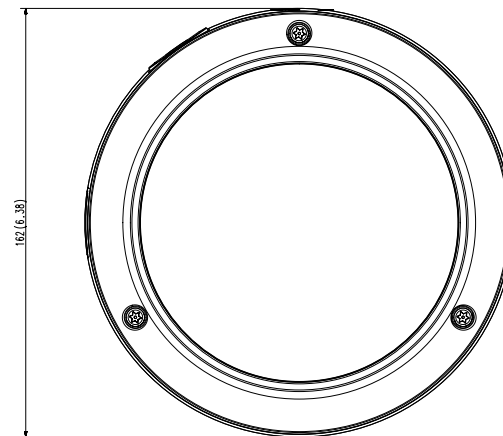
XNV-6080RS/XNV-8080RS

Единицы измерения: мм (дюймы)



XNV-6120RS

Единицы измерения: мм (дюймы)



ПОИСК И УСТРАНЕНИЕ НЕПОЛАДОК

ПРОБЛЕМА	РЕШЕНИЕ
Если пользователь Windows 10 получает доступ к Web viewer через Chrome или Firefox, громкость микрофона периодически изменяется.	• Это происходит, когда для микрофона установлен драйвер Realtek. Установите в качестве драйвера микрофона драйвер Windows по умолчанию для звукового устройства с поддержкой High Definition Audio, либо драйвер стороннего поставщика.
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. • Может произойти разрыв соединения при плохой связи, если камера подключена к PPPoE.
Подключенная к сети камера не обнаружена в программе Device Manager.	• Отключите фаервол на своем ПК и заново запустите поиск камеру.
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 картинки.	• Если задан метод передачи на группу адресов, убедитесь, что в локальной сети, к которой подключена камера, есть роутер, поддерживающий технологию multicast.

ПРОБЛЕМА	РЕШЕНИЕ
Голос не записывается, даже если заданы настройки входа аудио.	• Установите флажок <Аудиовход> в пункте <Basic> - <Профиль видео>.
<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>.
Сигнал тревоги не выводится на соответствующий порт даже при регистрации события анализа интеллектуального видео.	• Проверьте настройки для выходных портов сигналов.
Не удается записать данные на карту памяти Micro SD.	• Проверьте, исправна ли карта памяти.
Карта памяти Micro SD установлена, однако камера работает неверно.	• Проверьте, в правильном ли направлении вставлена карта памяти. Возможность использования карт памяти, отформатированных на других устройствах, не гарантируется. • Снова отформатируйте карту памяти в меню <Настройка> → <Событие> → <Накопитель>.
Не удается произвести запись в NAS.	• Убедитесь в том, что информация, зарегистрированная в NAS, указана верно.
Это сообщение о том, что настройка NAS не удалась.	• Убедитесь в том, что IP-адрес NAS введен правильно. • Убедитесь в том, что ID/пароль NAS введены правильно. • Убедитесь в том, что доступ к папке, установленной в качестве основной папки с использованием ID номера NAS, открыт. • Убедитесь в том, что с элементов NAS SMB/CIFS сняты флажки (выделения). • Убедитесь в том, что IP-адрес NAS и IP-адрес камеры имеют одинаковый формат. Ex) Начальное значение маски подсети для NAS и камеры 255.255.255.0. Если IP-адрес 192.168.20.32, то IP-адрес NAS должен быть в диапазоне 192.168.20.1~192.168.20.255. • Проверьте, не осуществлялась ли попытка получения доступа под другим пользователем без форматирования основной папки (сохраненной или используемой). • Убедитесь в том, что используется рекомендуемое оборудование NAS.

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

GPL SW

Component Name	License	URL
Base Kernel	GPL 2.0	
Busybox	GPL 2.0	http://www.busybox.net/downloads/snapshots
iproute2-4.3.0	GPL 2.0	
iptables-1.4.21	GPL 2.0	http://ftp.netfilter.org/pub/iptables
ethtool-4.2	GPL 2.0	
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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Version 2, June 1991

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1. The Hardware-dependent Part and/or Compiler-dependent Part; provided that the Source Code User and the System Developer shall inform T-Engine Forum of, and T-Engine Forum may publish, a method for distributing said Part(s) to third parties.
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 2. The member shall provide T-Engine Forum with a complete set of operational environment for the object hardware and T-Kernel free of charge when requesting the distribution.
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5. The provision set forth in Article 3 shall apply to the Ported Source Code registered in accordance with this Article.

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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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