# **WISE**NET

# СЕТЕВАЯ КАМЕРА

Руководство пользователя

PNM-9320VQP SLA-2M2400P/2M2800P/2M3600P/2M6000P/ 2M1200P/5M3700P/5M4600P/5M7000P



# Сетевая Камера

# Руководство пользователя

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# 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.)
- Не загораживайте 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.



- 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 РоЕ , 1.5A. (PNM-9320VQP)
- 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 ВЕНТИЛЛЯЦИОННЫЕ РЕШЕТКИ ИЛИ ДРУГИЕ ОТВЕРСТИЯ В ОБОРУДОВАНИИ.

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

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

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

# **ВНИМАНИЕ**



# ВНИМАНИЕ

ОПАСНОСТЬ ПОРАЖЕНИЯ ЭЛЕКТРИЧЕСКИМ ТОКОМ. НЕ ОТКРЫВАТЬ



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

# ОПИСАНИЕ ГРАФИЧЕСКИХ ОБОЗНАЧЕНИЙ



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



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

# **Класс Конструкции** I

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

# Батарея

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

# 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 НАR.

# 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 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.

- К изделию подсоединен влагонепроницаемый компонент. Вследствие особенностей данного изделия после подключения питания на нем могут образовываться капли воды, которые исчезнут через 2–3 часа.
- Поскольку изделие оснащено водонепроницаемой системой вентиляции, не рекомендуется устанавливать его в местах, подверженных резким неестественным изменениям температуры.
- 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.

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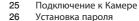


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# ХАРАКТЕРИСТИКИ УСТРОЙСТВА

### • Вид объектива зависит от фокусного расстояния

Можно выбрать объектив, который вам нужен, и закрепить его на камере.

#### • Защита от пыли/влаги

Пыле- и влагонепроницаемая конструкция обеспечивает защиту устройства от дождя и пыли в случае установки вне помещения (стандарт IP66)

### • 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

Когда происходит событие, видео отправляется по электронной почте и на FTP-сервер, зарегистрированный пользователем, или сохраняется на карту памяти microSD, либо на разъем сигнализации поступает 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.

### • 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.

#### • Соответствие ONVIF

Данное устройство поддерживает ONVIF Profile S. Be6-сайт www.onvif.org.



# РЕКОМЕНДУЕМАЯ КОНФИГУРАЦИЯ ПК

- Процессор: Intel(R) Core(TM) і7 3.4 Ггц или больше
- Поддерживаемые ОС: MS Windows, Mac OS X
- Поддерживаемые веб-браузеры: Google Chrome, MS Edge, Mozilla Firefox(который поддерживается только Windows 64bit). Apple Safari (который поддерживается только Mac OS X), MS Explorer

※ Подробную информацию о поддерживаемых ОС и браузерах см. в приложении. Некоторые функции могут быть ограничены даже в поддерживаемых браузерах.

# PEKOMEHДУЕМЫЕ ХАРАКТЕРИСТИКИ КАРТ ПАМЯТИ MИКРO 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
- Рекомендуется применять карту памяти на 16 ГБ или более, которая отвечает спецификации UHS-3 класс (тип MLC).

# КОМПЛЕКТ ПОСТАВКИ (PNM-9320VQP)

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	
<b>©</b>	Руководство пользователя, Установщик ПО на диске CD	1	
	Краткое Руководство (необязательно)	1	
	Гарантийный талон (необязательно)	1	
	Адаптер НРоЕ	1	Соединяет источник питания с сетью
	Кабель для тестирования монитора	1	Используется для подключения камеры к портативному устройству отображения
	Шнур питания	1	Подключается к НРОЕ
	Клеммная колодка	1	Позволяет подключить кабели через входные и выходные разъемы сигнализации
	Шестигранный ключ	1	Используется для затягивания гаек после соединения установленной базы с корпусом камеры
	Ключ «звездочка»	1	Используется для установки и демонтажа купола и крышки SD-карты

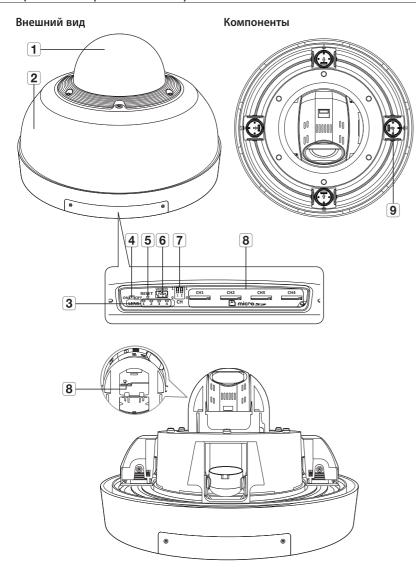
Внешний вид	Название элемента	Количество	Описание
	Винт с шестигранным шлицем	3	Используется для соединения установленной базы с корпусом камеры
	Установленная база	1	Кронштейн для установки устройства
-5K	Водонепроницаемые дополнительные принадлежности	1	Используются для установки в зонах повышенной влажности
	Насадка к дрели	1	Используется для установки и демонтажа купола и крышки SD-карты (для электроинструмента)
	Ферритовый сердечник	1	Используется для блокирования высокочастотных компонентов, содержащихся в блоке питания, и излучения оконечного сигнала наружу.  ■ Перед использованием рекомендуется обмотать его 2 раза вокруг кабеля питания и кабеля локальной сети.



# КОМПЛЕКТ ПОСТАВКИ (МОДУЛЬ ОБЪЕКТИВА-ДОПОЛНИТЕЛЬНЫЙ)

Внешний вид	Название элемента	Количество	Описание	Название модели
	Модуль объектива	1		SLA-2M2400P
		1		SLA-2M2800P
		1		SLA-2M3600P
			V DNM 2008/07	SLA-2M6000P
		1	Крепится к PNM-9320VQP	SLA-2M1200P
		1		SLA-5M3700P
		1		SLA-5M4600P
		1		SLA-5M7000P

# ОБЩИЙ ОБЗОР (PNM-9320VQP)

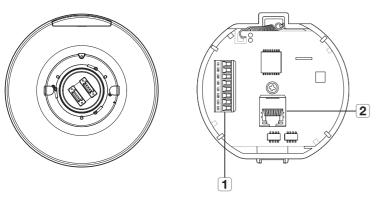


	Элемент	Описание
1	Крышка купола	V
2	Крышка объектива	Крышка корпуса, предназначенная для защиты объектива и основного устройства.
3	Световой индикатор модуля объектива (норма:зеленый, отклонение от нормы: красный)	Если модуль объектива подсоединен правильно, зеленый светодиод будет светиться, а затем, приблизительно через 40 секунд, погаснет. (для предотвращения нежелательных отражений)
4	Переключатель включения/ отключения питания	Используется для включения/выключения аппарата.  Ш Используйте только для замены модуля объектива.
5	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 сервер DHCP отсутствует, необходимо запустить программу IP Installer, чтобы изменить основные настройки сети IP-адрес, маска подсети, шлюз и проч., прежде чем подключаться к сети.
6	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.
7	DIP-переключатель для изменения канала	Переведите DIP-переключатели для задания канала, который нужно использовать для просмотра видео с установки.  ■ Вы можете проверять только изображение с модуля объективов, но не с модуля PTZ.
8	Отсек для карты памяти Micro SD	Отсек для карты памяти Micro SD.
9	Крепежная часть модуля объектива	Это соединитель для подключения модуля объектива.



# Установка сбоку

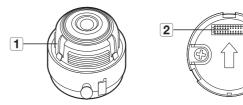
# Внутренняя часть установленной базы



Элемент	Описание
Входные и выходные разъемы сигнализации	Входные и выходные разъемы, через которые подключаются кабели сигнализации.
<b>2</b> Разъем для подключения питания и сети	Разъем для подключения питания и сети через кабель RJ-45.

# ОБЩИЙ ОБЗОР (МОДУЛЬ ОБЪЕКТИВА)

# Внешний вид



Элемент	Описание
1 Модуль объектива	Это модуль объектива, через который записывается видео.
2 Соединитель камеры	Это соединитель для подключения к камере.

# **УСТАНОВКА**



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

### Меры предосторожности, принимаемые перед установкой

Прежде чем устанавливать камеру, обязательно прочтите приведенные далее инструкции.

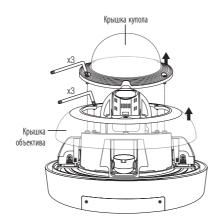
- Выберите место для установки, которое сможет выдержать вес, минимум в 5 раз превышающий вес самой камеры.
- Кабели с поврежденной или снятой изоляцией могут стать причиной повреждения устройства или возгорания.
- С целью предосторожности попросите посторонних лиц покинуть место установки. На всякий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

# Разборка

С помощью ключа «звездочка» или отвертки ослабьте затянутые винты против часовой стрелки и снимите купол и крышку объектива.

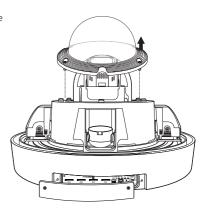


- Полностью выкручивать винты не требуется.
- Снимать купол требуется только при установке карты microSD для модуля PTZ. Во всех остальных случаях этого делать не следует.
- Снимать крышку объектива требуется при установке модуля объектива.
   Купол снимать не нужно.
- Так как купол и крышка объектива прозрачные, страховочный трос отсутствует. Будьте осторожны и не уроните оборудование.

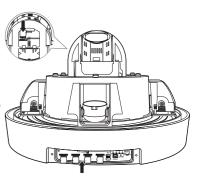


## Установка карты памяти microSD

1. С помощью ключа «звездочка» или отвертки снимите купол и крышку SD-карты.

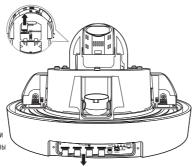


- **2.** Вставьте карту памяти Микро SD в направлении стрелки, как показано на рисунке.
- - Перед установкой карты Микро SD отключите кабель питания от камеры.
  - Попытки неправильно вставить карту памяти microSD в гнездо могут привести к повреждению карты и всего устройства.
  - Не рекомендуется вставлять или вынимать карту памяти Микро SD во время дождя или при высокой влажности.
  - Снятие крышки изделия спедует закончить в течение 5 минут, поскольку в противном случае возникает опасность конденсации росы внутри изделия.
  - При установке карты microSD для модуля PTZ следует снять купол

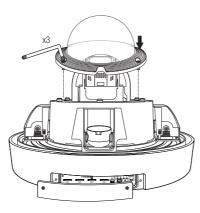


## Извлечение карты памяти microSD

- 1. Мягко нажмите на выступающий конец карточки как показано на диаграмме, чтобы извлечь карточку из гнезда
- Для каждого канала требуется отдельная карта памяти.
  - Заметьте, что если во время извлечения сильно нажать на карту памяти Micro SD, а затем отпустить ее, она может выскочить.
  - Перед извлечением карты памяти 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.

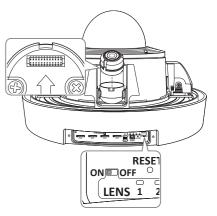


- 2. С помощью ключа «звездочки» или отвертки присоедините купол и крышку SD-карты.
- Плотно затяните винты, чтобы влага не могла попасть внутрь.



# Установка модуля объектива

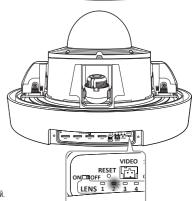
- 1. Совместите соединитель модуля объектива с соединителем корпуса камеры и закрепите его.
- Не подключая питание (HPoE), установите модуль объектива
  - Убедитесь, что тумблер питания находится в положении "**OFF**" перед тем, как установить модуль объективов. При замене модуля в режиме "ОN" может возникнуть неисправность.
  - Не рекомендуется прикасаться к отделенному объективу, поскольку он отгружен с завода с настроенным при производственной проверке фокусным расстоянием.



 Вставьте модуль объективов до "Щелчка" верхнего и нижнего зацепов.



- 2. Завершите процедуру установки объектива
- 3. Подключите устройство к источнику питания (НРоЕ).
- Если модуль объектива подсоединен неправильно, световой индикатор состояния модуля объектива будет светиться красным, как показано на рисунке. Если это произошло, отключите питание выключателем и повторно подсоедините модуль объектива. При нормальном подсоединении индикатор засветится зеленым и приблизительно через 40 секунд погаснет.
  - Если необходимо заменить модуль объектива, не отключая устройство от источника питания (НРоЕ), переведите выключатель в положение «OFF», а после замены верните в положение «ON».
  - Не используйте острые инструменты, так как они могут повредить
  - Для изменения положения выключателя не нужно прилагать усилий. В противном случае это может повредить его.



# Подготовка и установка кронштейна камеры

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

### Доступные модели кронштейнов

Модель	Позиция
SBP-390WM1	Настенное крепление
SBP-300CM	Установка на потолке
SBP-300LM	Крепление на парапет
SBP-300KM	Угловое крепление
SBP-300PM	Крепление к опоре



 Внешний вид каждого кронштейна (продаются отдельно) можно посмотреть в разделе "Дополнительные принадлежности для установки". (стр. 17)

# Подсоединение к адаптеру (продается отдельно)

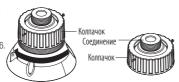
Выберите и приобретите любой из следующих вариантов адаптеров (продаются отдельно), который оптимально подойдет для места установки или покажется вам более удобным.

Продукты, которые продаются отдельно, см. в разделе «**Дополнительные принадлежности для установки**» (стр. 17).

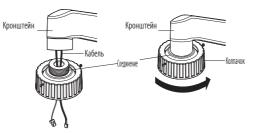
 Поверните колпачок в направлении, указанном стрелкой, для отделения колпачка от стыка.



■ Если вы не используете SFP-модуль, то можете пропустить шаги с 1 по 6

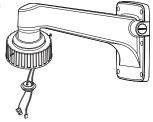


- 2. Пропустите открывшийся кабель наружу от кронштейна или стойки через стык.
- Поверните стык в направлении, указанном стрелкой, для соединения двух частей.



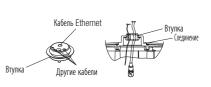


- Если изделие устанавливается в месте, где возможно проникновение влаги через кронштейн или стойку, для предотвращения затекания влаги извне используйте втулку из числа принадлежностей.
  - Нанесите на втулку смазку и пропустите кабель в нужное отверстие втулки.
     Остальные отверстия заглушите пробками.
  - Равномерно надавите на втулку, чтобы точно попасть в соединение, как показано на изображении поперечного разреза.







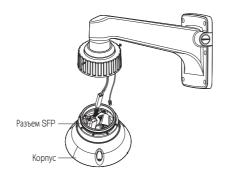


4. Подключите оптический кабель к SFP-модулю.

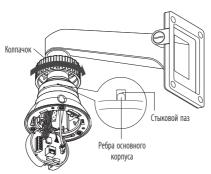


# установка и подключение

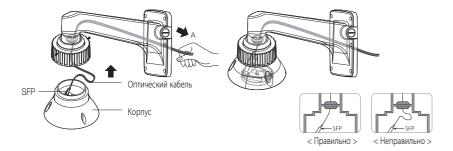
**5.** Закрепите SFP-модуль в гнезде для SFP в основном корпусе.



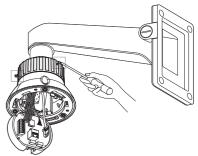
 Совместите выступ на основном корпусе и канавку стыка, затем закрепите их вместе, повернув колпачок в направлении, указанном стрелкой.



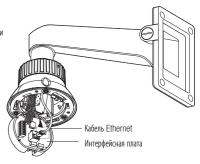
После закрепления двух частей пропустите оптический кабель снаружи внутрь так, чтобы не было изгибов.



- 7. Затяните винты на обеих сторонах колпачка для предотвращения ослабления колпачка при его повороте в противоположном направлении. Эти винты заходят внутрь не полностью, а только на определенную длину.
- Даже если подключать SFP-модуль не требуется, сильно затяните колпачок, чтобы обеспечить герметичность.
   Перед поставкой он закручивается неплотно.



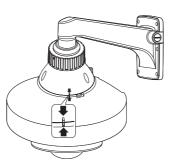
- 8. Подключите кабель Ethernet к интерфейсной плате.
- Для правильного соединения с камерой РТZ будьте аккуратны при монтаже.
  - (После присоединения камеры кабель может запутаться, так как интерфейсная плата поворачивается.)



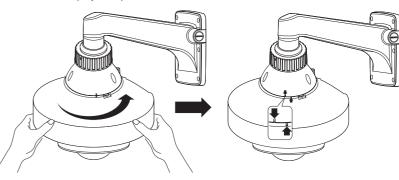
**9.** Прикрепив интерфейсную плату к корпусу, присоедините страховочный трос камеры к установленной базе.



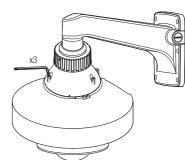
 Соедините установленное основание и основной корпус камеры, совместив указатели направления.



**11.** Поверните камеру в направлении, указанном стрелкой, так, чтобы указатели сверху и снизу совпали, как показано на рисунке справа.



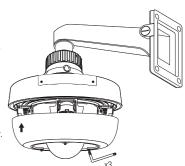
**12.** Используйте шестигранный ключ, чтобы закрепить установленную базу и камеру.



- Отрегулируйте объектив на желаемое направление, обратившись к разделу "Регулировка направления наблюдения камеры". (стр. 18).
  - Если наклонить объектив, может понадобиться его регулировка, поскольку при этом может произойти блокировка экрана.
- **14.** Используйте ключ «звездочка» или отвертку, чтобы присоединить крышку объектива.



- Плотно затяните винты, чтобы влага не могла попасть внутрь.
- Так как крышка объектива прозрачная, страховочный трос отсутствует.
   Будьте осторожны и не уроните оборудование.



# Настройка каналов на мониторе для установки

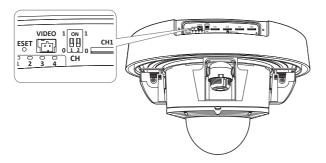
На корпусе камеры имеется DIP-переключатель каналов, показанный на рисунке.

С помощью канальных DIP-переключателей можно изменить канал камеры.

CH1	CH2	CH3	CH4
00	01	10	11

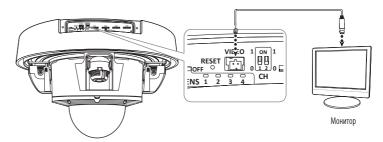


- Если DIP-переключатель неполностью перевести во включенное/отключенное положение, возможны нарушения в работе изделия. После установки проверьте DIP-переключатели сзади.
- Будьте осторожны, DIP-переключатель можно повредить, если оперировать им с помощью острого инструмента.
- Будьте осторожны, DIP-переключатель можно повредить, если оперировать им с чрезмерным усилием.



# Подключение монитора

Подключите выходной видеоразъем камеры к входному видеоразъему монитора.



- = Тип проводов зависит от типа монитора и набора периферийных устройств; см. руководство пользователя к каждому из устройств.
- При выполнении подключения проверьте, выключено ли питание монитора и камеры.



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

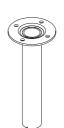
# Дополнительные принадлежности для установки

Для упрощения установки можно приобрести дополнительные принадлежности.

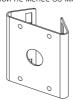
- 1. Если камера устанавливается на стене
  - Настенное крепление (SBP-390WM1)



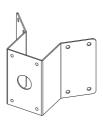
- 2. Если камера устанавливается на потолке
  - Установка на потолке (SBP-300CM)
    При использовании потолочного крепежа рекомендуется разместить оборудование на расстоянии как минимум 30 см от стены.



- 3. Если настенное крепление (SBP-390WM1) устанавливается на цилиндре длиной не менее 80 мм
  - Крепление к опоре (SBP-300PM)



- 4. Если настенное крепление (SBP-390WM1) устанавливается в углу стены
  - Угловое крепление (SBP-300KM)



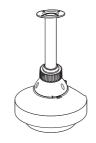
- 5. Если установка выполняется на крыше здания
  - Крепление на парапет (SBP-300LM)



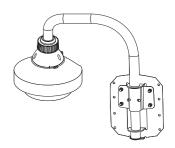
# • Монтажное соединение



Настенное крепление (SBP-390WM1)



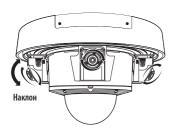


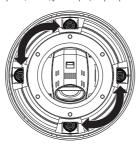


Крепление на парапет (SBP-300LM)

# Регулировка направления наблюдения камеры

Перемещение модуля камеры (панорамирование)





### Настройка направления мониторинга

Направление камеры можно регулировать, только когда она закреплена на потолке. Движение модуля камеры называется панорамированием, настройка угла — наклоном, а вращение объектива вокруг своей оси — поворотом.

- Угол вращения при панорамировании: от -90° до +90° для каждого модуля.
- Угол вращения при повороте: от -180° до +180°.
- Угол вращения при наклоне зависит от объектива. См. таблицу ниже.



- Изображение может быть закрыто корпусом камеры в зависимости от угла.
- Не допускайте поворота камеры при панорамировании на угол, превышающий указанный. Это может привести к повреждению кабеля и неправильной работе устройства.

### Способы регулировки

- После установки камеры с учетом направления для мониторинга настройте угол панорамирования по нижней направляющей.
- 2. Отрегулируйте горизонтальный угол так, чтобы во время вращения не появлялось обратное изображение.
- 3. Отрегулируйте угол наклона, установив его в направлении наблюдения.

# • Для каждого модуля объективов используется свой угол наклона.

Название модуля объектива	SLA- 2M2400P	SLA- 2M2800P	SLA- 2M3600P	SLA- 2M6000P	SLA- 2M1200P	SLA- 5M3700P	SLA- 5M4600P	SLA- 5M7000P
Нормальная установка	52°~56°	26°~80°	22°~84°	10°~95°	10°~97°	36°~73°	21°~85°	12°~93°
Для функции Hallway View	Не поддерживается	37°~70°	33°~73°	17°~88°	12°~92°	45°~62°	38°~74°	21°~85°

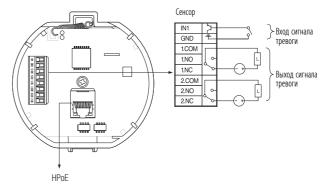


■ Если оборудование установлено без учета допустимого угла наклона, это может частично заблокировать обзор в углах монитора

# ПОДКЛЮЧЕНИЕ К ДРУГОМУ УСТРОЙСТВУ

# Плата проводного интерфейса камеры

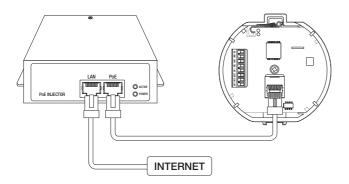
Детали электропроводки камеры представлены на рисунке ниже.



- - Когда клеммы сигнализации подключены как нормально разомкнутые:
    - датчик срабатывает, если он замкнут в случае точечного контакта или при низком уровне сигнала в случае активности.
  - Максимальная емкость разъема выхода тревоги составляет 30 В пост. тока/2 А, 125 В пер. тока/0,5 А и 250 В пер. тока/0,25 А.
  - При подключении входных и выходных сигнальных кабелей убедитесь, что каждый их них подключен к соответствующему разъему.
  - Для подключения продуктов, мощность которых выше мощности камеры, используйте дополнительное релейное устройство.
  - Неправильное подключение заземления к порту NC/NO и COM может привести к пожару или повреждению устройства.

# Питание и сеть

Подключите устройство РоЕ к разъему РоЕ камеры.



Используйте совместимый адаптер для питания устройства.

# Спецификация сетевого кабеля

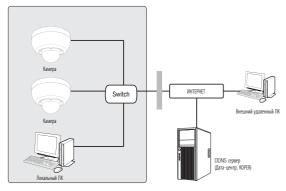
Пункт	Содержание	Примечание
Разъем	RJ45 (10/100/1000BASE-T)	
Ethernet	10/100/1000BASE-T	При работе с 1000BASE-Т для гигабайтного концентратора следует использовать кабель UTP-6 или более высокой категории.
Кабель	UTP категории 6	
Макс. расстояние	100 м	Сопротивление по постоянному току ≤ 0.125 Ом/м
Поддержка питания по НРоЕ	HPoE	

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.

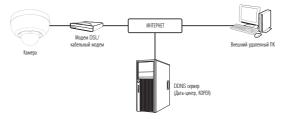


<Локальная сеть>



- Удаленный ПК во внешней сети или в Интернете не может подключиться к камере, установленной в интранет, если не задана правильная переадресация портов или установлен файрвол. В этом случае обратитесь к системному администратору для устранения проблемы.
- Для задания IP-адреса, маски посети, шлюза, порта HTTP, порта VNP и типа IP в установщике IP можно использовать первоначальный пароль "4321". Для лучшей защиты после изменения сетевого интерфейса войдите в web viewer и поменяйте
- 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, используйте программу IP Installer. Для получения дополнительных сведений о программе IP Installer см. раздел "Настройка статического IP-адреса". (Стр. 21)

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

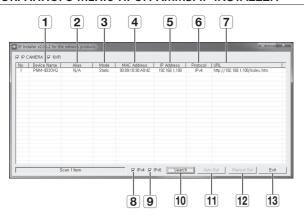


- 1. Подсоедините напрямую ПК пользователя с сетевой камерой.
- 2. Запустите программу IP Installer и измените IP-адрес камеры, чтобы использовать веб-браузер на рабочем столе для подключения к Интернету.
- 3. Установите подключение к интерактивной программе просмотра в веб-браузере.
- 4. Перейдите на 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 онлайновой справке программы Web Viewer.
- За информацией о задании формата IP-адреса обратитесь к онлайновой справке программы Web Viewer.

# ЭЛЕМЕНТЫ ЭКРАННОГО МЕНЮ ПРОГРАММЫ IP INSTALLER



Элемент	Описание
1 Device Name	Название модели подключенной камеры. Щелкните этот столбец, чтобы отсортировать список по названиям моделей. Поиск прекратится, если щелкнуть мышью до его окончания.
2 Alias	Эта функция сейчас недоступна.
3 Mode	Текущее состояние сетевого соединения: <static> или <dynamic>.</dynamic></static>
4 MAC(Ethernet) Address	Адрес Ethernet для подключенной камеры. Щелкните этот столбец, чтобы отсортировать список по адресам Ethernet. Поиск прекратится, если щелкнуть мышью до его окончания.
5 IP Address	IP-адрес. Щелкните этот столбец, чтобы отсортировать список по IP-адресам. Поиск прекратится, если щелкнуть мышью до его окончания.
6 Protocol	Настройка сети для конкретной камеры. Заводская настройка по умолчанию "IPv4". Камера с настройкой IPv6 отображается как "IPv6".
7 URL	DDNS URL-адрес для доступа из внешней сети Интернет. Этот адрес будет заменен на <b><ip address<="" b="">&gt; камеры, если произойдет сбой регистрации DDNS.</ip></b>
<b>8</b> IPv4	Поиск камер с настройкой IPv4.

Элемент	Описание
9 IPv6	Поиск камер с настройкой IPv6. Активируется в среде, где имеется поддержка IPv6.
10 Search	Поиск камер, подключенных в данный момент к сети. Эта кнопка будет неактивной, если ни IPv4, ни IPv6 не выбраны.
11 Auto Set	Программа IP Installer автоматически настраивает параметры сети.
12 Manual Set	Настройка сети вручную.
13 Exit	Выход из программы IP Installer.



- При использовании программы IP Installer используйте только версию, представленную на диске установки CD, или используйте последнюю версию этой программы, если доступно. Последнюю версию можно загрузить с веб-сайта Harnwha Techwin.
- Если поддерживающей ОС является Windows 8.1, рекомендуется вместо IP Wisenet использовать Диспетчер устройств Wisenet. Программу Диспетчер устройств Wisenet можно загрузить, посетив веб-сайт Hanwha Techwin (http://www.hanwha-security.com) из меню < Технический справочник> < Онлайновый инструмент>.

# НАСТРОЙКА СТАТИЧЕСКОГО ІР-АДРЕСА

### Настройка сети вручную

Запустите <IP Installer\_v2.XX.exe>, чтобы получить доступ к списку поиска камеры. Кнопки [Auto Set] и [Manual Set] будут неактивны при первом запуске программы.



- Для обнаруженных камер с настройкой IPv6 эти кнопки также будут неактивны, так как эти камеры не поддерживают данную функцию.
- Выберите камеру в списке поиска.
   Проверьте MAC-адрес, указанный на наклейке видеокамеры.
   Кнопки [Auto Set] и [Manual Set] станут активными.
   Нажмите кнопку [Manual Set].
- Нажмите кнопку [Manual Set].
  Появится диалоговое окно Manual Setting.
   IP Address>, <Subnet Mask>, <Gateway>, <HTTP Port> и <VNP Port> камеры отображаются в заданных величинах.
- **3.** В разделе **Address**> укажите необходимую информацию.
  - MAC (Ethernet) Address: Указанный на наклейке MACадрес отображается автоматически и не требует установки дополнительных пользовательских настроек.



 Соответствующие параметры IP устанавливаются только, когда DHCP не проверена.





### В случае отсутствияШирокополосный маршрутизатор

Узнайте значения параметров <IP Address>, <Subnet Mask> и <Gateway> у своего сетевого администратора

- 4. В разделе <Port> укажите необходимую информацию.
  - 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.
- Введите пароль. Укажите пароль учетной записи "admin", которая использовалась для доступа к камере.





- По соображениям безопасности для пароля рекомендуется использовать сочетание цифр. строчных и прописных букв. а также
- За информацией об изменении пароля обратитесь к онлайновой справке программы Web Viewer.
- Нажмите кнопку [OK].

Ручная настройка сети завершена

### В случае использования Широкополосный маршрутизатор

- IP Address : введите адрес, который соответствует IPдиапазону, 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.

(ап

Категория		Камера №1	Камера №2	
Hастройки, связанные c IP Address Subnet Mask Gateway		192.168.1.100 255.255.255.0 192.168.1.1	192.168.1.101 255.255.255.0 192.168.1.1	
Настройки, связанные с портами	HTTP Port VNP Port	8080 4520	8081 4521	



Если для параметра <htp>Port</h>> выбрано значение свыше 80, необходимо указать номер Port в адресной строке вебобозревателя, прежде чем получить доступ к камере.

пр) http://IP-адрес : Порт HTTP http://192.168.1.100:8080

# Автоматическая настройка сети

Запустите <IP Installer v2.XX.exe>, чтобы получить доступ к списку поиска камеры. Кнопки [Auto Set] и [Manual Set] будут неактивны при первом запуске программы.



Для обнаруженных камер с настройкой IPv6 эти кнопки также будут неактивны, так как эти камеры не поддерживают данную функцию.

1. Выберите камеру в списке поиска. Проверьте МАС-адрес, указанный на наклейке видеокамеры. Кнопки [Auto Set] и [Manual Set] станут активными.

2. Нажмите кнопку [Auto Set]. Появится диалоговое окно Auto Setting. Значения параметров <IP Address>, <Subnet Mask> и <Gateway> будут установлены автоматически.



3. Введите пароль.

Укажите пароль учетной записи "admin", которая использовалась для доступа к камере.



- По соображениям безопасности для пароля рекомендуется использовать сочетание цифр, строчных и прописных букв, а также специальных
- За информацией об изменении пароля обратитесь к онлайновой справке программы Web Viewer.
- **4.** Нажмите кнопку [**OK**]. Автоматическая настройка сети завершена.



# НАСТРОЙКА ДИНАМИЧЕСКОГО ІР-АДРЕСА

# Настройка динамического ІР-окружения

- Примеры динамического ІР-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.

#### Просмотр динамического IP-адреса

- Запустите программу IP Installer на локальном компьютере.
   В списке отобразятся видеокамеры с адресами, заданными в поле < Dynamic IP>.
- 2. Выберите видеокамеру в результатах поиска.
- 3. Нажмите кнопку [Manual Set] и проверьте данные в поле <Dynamic IP>.

Если снять флажок **<DHCP**>, то значение параметра IP можно изменить на **<Static**>.





# 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

- 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.



Затем нажмите кнопку [Save Settings].
 Заданные настройки будут сохранены.

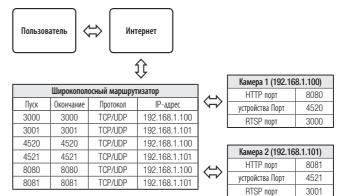


- Выше приведены инструкции для Широкополосный маршрутизатор CISCO.
- Параметры могут различаться в зависимости от модели Широкополосный маршрутизатор.
   Для получения дополнительных сведений см. руководство пользователя соответствующего маршрутизатора.

### 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** -> **Ceть** -> **DDNS"**.

# ПОДКЛЮЧЕНИЕ К КАМЕРЕ С ЛОКАЛЬНОГО КОМПЬЮТЕРА ОБЩЕГО ДОСТУПА

- Запустите программу IP Installer.
   Она выполнить поиск подключенных камер и составит список найденных.
- 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 вебобозревателя.

# ПОДКЛЮЧЕНИЕ К КАМЕРЕ С УДАЛЕННОГО КОМПЬЮТЕРА ЧЕРЕЗ ИНТЕРНЕТ

Поскольку программа IP Installer запущена на удаленном компьютере, который находится вне сетевого кластера Широкополосный маршрутизатор, доступ к камерам в сети Широкополосный маршрутизатор можно получить, используя URL-адрес DDNS 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 IPадрес Широкополосный маршрутизатор в адресную строку. np) http://ddns.hanwha-security.com/ID



За информацией о регистрации DDNS обратитесь к онлайновой справке программы Web Viewer.

# 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 НТТР 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 систму 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 
DNS, посетите веб-сайт http://ddns.hanwha-security.

com. Сначала зарегистрируйте камеру, а затем задайте 
Ceть> - - DNS
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 З 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 [ОК]. 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.



The server 192.168.1.100 at iPolis requires a username and password.

ОК

Cancel

# **HACTPOЙKA WEB VIEWER**

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

# ХАРАКТЕРИСТИКИ (PNM-9320VQP)

	Элементы	Описание			
	элементы	Multi-directional (CH 1 ~ 4)	PTZ (CH 5)		
	Устройство обработки изображения	(см. дополнительные объективы)	1/2.8" 2.4M CMOS		
	Общее/эффективное число пикселей	(см. дополнительные объективы)	1,981(Г) x 1,288(В), 2.55M / 1,944(Г) x 1,212(В), 2.35M		
	Система сканирования	(см. дополнительные объективы)	Построчная развертка		
Видео	Мин. освещенность	(см. дополнительные объективы)	Цветное изображение: 0,05 лк (1/30 с, F1.6, 30IRE), ч/6: 0,005 лк (1/30 с, F1.6, 30IRE)		
	Соотношение сигнал/шум	(см. дополнительные объективы)	50dB		
	Видеовыход	CVBS : 1,0 Vp-p / 75Ω композитный, 720х480(N), 720х576(P), Для установки	-		
	Фокусное расстояние (коэффициент трансфокации)	(см. дополнительные объективы)	4,44~142,6 мм (оптическое увеличение 32x)		
	Макс. относительное отверстие	(см. дополнительные объективы)	F1,6(широкоуг.) / F4,4(теле)		
	Угловое поле зрения	(см. дополнительные объективы)	Г : 61,8°(широкоуг) ~ 2,19°(теле) / В : 36,2°(широкоуг) ~ 1,24°(теле)		
Объектив	Мин. расстояние до объекта	(см. дополнительные объективы)	Широкоуг: 1,5 м, теле: 2 м		
	Регулятор фокусировки	(см. дополнительные объективы)	Автоматически/вручную/покадровая фокусировка (One shot AF)		
	Объектив/тип подключения	(см. дополнительные объективы)	Автоматическая регулировка диафрагмы по постоянному току (DC Auto Iris)/тип подключени источника питания/сигнал (Board-in type)		
	Диапазон панорамирования/ наклона/поворота	(см. дополнительные объективы)	$360^{\circ}$ до бесконечности / $190^{\circ}$ (- $5^{\circ}$ $\sim$ $185^{\circ}$		
	Скорость панорамирования/ наклона	-	Предуст.: 700°/сек, Вручную: 0,024°/сек - 200°/сек		
Панорама/Наклон/ Поворот	Чередование	-	Предустановки (300 шт.), качание, группа (128 шт.), слежение (4 шт.), тур, автозапуск расписание		
	Точность предустановки	-	±0.2 °		
	Автоматическое слежение	-	Выкл. / Вкл.		
Рабочие характеристики	Выкл. / Вкл (отображается до 85 знаков)  - Общемировые: Английские/Цифровые/Специальные символы  - Общие: Многострочный (до 5), цвет (серый/зеленый/красный/синий/черны белый), прозрачность, автоматическое масштабирование по разрешению		ый/зеленый/красный/синий/черный/		
	День/Ночь	Электронно	Авто (ICR)/Цветное/Ч/Б/Расписание		

	Элементы	Описание		
	JIEWEN IDI	Multi-directional (CH 1 ~ 4)	PTZ (CH 5)	
	Компенсация подсветки	Выкл./ BLC / HLC (Маскирование/Затемнен	ne) / WDR	
	WDR	150dB (SLA-2M), 120dB (SLA-5M)	150dB	
	Улучшение контрастности	SSDR (Выкл / Вкл)		
	Цифровое шумоподавление	SSNR5 (фильтр шумов 2D+3D) (Выкл / Вкл)		
	Цифровая стабилизация изображения	Выкл./Вкл.	Выкл./Вкл. (встроенный гироскоп)	
	Защита от зпотевания	Авто/Вручную/Выкл.		
	Детектор движения	Выкл./Вкл. (х8, восьмиугольные зоны), перед	дача наблюдения	
	Зоны маскирования	Выкл. / Вкл. (32 зон, многоугольных областей) - Цвет: серый, зеленый, красный, синий, черный, белый - Мозаика		
	Регулировка усиления	Выкл. / Низкий / Средний / Высокий		
	Баланс белого	ATW / AWC / Средний/Внутри / Снаружи (включая металлик и матовый)		
	Контраст	Регулировка Уровня		
Рабочие	LDC	Вкл./Откл. (5 уровней с мин/макс.)	-	
характеристики	Скорость электронного затвора	Минимум / Максимум / Защита от мерцания (2 ~ 1/12 000 c)		
	Увеличение	-	32X (Optical)	
	Переворот/Отражение	Вкл./Выкл., Вид вестибюля: 90°/270°	Вкл./Выкл.	
	Анализ видео	Взлом, блуждание, определение направления, обнаружения тумана, виртуальная линия, приход/уход, появление/исчезновение, определение лиц, обнаружение движения, Обнаружение расфокусировки	Взлом, блуждание, определение направления, обнаружения тумана, виртуальная линия, приход/уход, появление/исчезновение, определение лиц, обнаружение движения	
	Ввод-вывод сигнализации	Один ввод/два вывода (реле)		
	Триггеры сигналов тревоги	Обнаружение движения, Анализ видео, отключение от локальной сети.		
	События тревоги	3arpyзка файлов через FTP, электронную почту     Уведомление по электронной почте     Mecrное хранилище данных (SD/SDHC/SDXC) с записью при отключенной сети наступлении события (срабатывание сигнала тревоги)     B		
	Счетчик пикселей	Поддержка		

	<b>&gt;</b>	Описание		
	Элементы	Multi-directional (CH 1 ~ 4)	PTZ (CH 5)	
	Ethernet	RJ-45 (10/100/1000BASE-T)		
	SFP	Разъем SFP (100/1000 Мбит/с)		
	Формат сжатия видео	H.264 (MPEG-4 часть 10/AVC): Главная/Базовая л Motion JPEG	пиния/Высокий	
		[5MP]		
	Разрешение	2560x1920, 2560x1440, 1920x1080, 1600x12 1280x720, 1024x768, 800x600, 800x448, 720 320x240		
		[2MP]		
-		1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x60i 720x576, 720x480, 640x480, 640x360, 320x240		
	Макс. частота кадров	H.265/H.264: макс. 2M 60 кадр/сек, 5M 30 кадр/сек при любом разрешении		
	mana nationa mappos	Motion JPEG : Макс. 30кадр/с		
	Кодек Smart	Ручной режим (по зонам: 5 шт.)		
Сеть	WiseStream II	Поддерживается		
	Настройка качества видео	для H.264/H.265/MJPEG : Заданной скорости би	IT	
	Способы управления скоростью	для H.264/H.265 : CBR или VBR		
	передачи бит	для MJPEG : VBR		
	Возможности потоковой передачи	Многопотоковая (до 10 профилей)		
	IP	IPv4, IPv6		
	Протокол	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP,RTSP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), UPnP, Bonjour		
		Проверка подлинности при входе HTTPS (SSL)		
		проверка подлинности при входе Digest		
	Безопасность	фильтрация IP-адресов		
		регистрация доступа пользователей		
		Способ проверки подлинности 802.1X (EAP-TLS	S, EAP-LEAP)	

	<b>&gt;</b>	Описание		
	Элементы	Multi-directional (CH 1 ~ 4)	PTZ (CH 5)	
	Способ потоковой передачи	Одноадресная / многоадресная		
пол	Макс. количество пользователей	20 пользователей в одноадресном режим	e	
	Функция Edge Store	5 слота SD/SDHC/SDXC (каждый канал) - Можно загрузить изображения движения, записанные на карте памяти SD/SDHC Локальный ПК для быстрой записи		
Сеть	Программируемый интерфейс	ONVIF Profile S SUNAPI(HTTP API)		
	Язык веб-страницы	Английский, Корейский, Французский, Немец Русский, Японский, Шведский, Португальский Венгерский, Греческий	кий, Испанский, Итальянский, Китайский, і, Чешский, Польский, Турецкий, Голландский,	
Be	Веб-обозреватель	Поддерживаемые 0C : Windows 7 / 8.1 / 10, MAC OS X 10.10, 10.11, 10.12 Поддерживаемые веб-браузеры: Google Chrome 67, MS Edge 41, Mozilla Firefox 61 (голько 64-битная Windows) , Apple Safari 11 (только Mac OS X), MS Explorer 11		
	ПО для центрального управления	SSM		
	Рабочая температура/влажность	-35°C ~ +55°C (-31°F ~ +131°F) / Относительная влажность менее 90%.		
Условия	Температура хранения/ влажность	-50°C ~ +60°C (-58°F ~ +140°F) / Отно	осительная влажность менее 90%.	
	Пыле- и влагозащита	IP66		
	Защита от умышленной порчи	IK10		
Электропитание	Входное напряжение/сила тока	НРоЕ		
·	Потребляемая мощность	Не более 65W		
Физические	Дополнительные объективы	SLA-2M2400P / SLA-2M2800P / SLA- 2M3600P / SLA-2M6000P / SLA- 2M1200P SLA-5M3700P / 5M4600P / 5M7000P	-	
характеристики	Цвет/материал	Слоновая кость/Металл		
	Размеры (ØxB)	Ø367.8 x B381.5mm (Ø144.49" x B150.2	20")	
	Bec	7.75 кг		

# ХАРАКТЕРИСТИКИ (МОДУЛЬ ОБЪЕКТИВА)

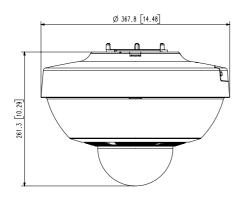
	<b>3</b>	Описание					
	Элементы	SLA-2M2400P	SLA-2M2800P	SLA-2M3600P	SLA-2M6000P	SLA-2M1200F	
	Устройство обработки изображения	1/2.8" 2M CMO	1/2.8" 2M CMOS				
	Общее количество пикселов	1945(Г) x 1109	1945(Г) x 1109(В) 2.16M				
	Количество эффективных пикселов	1945(Г) x 1097	1945(Г) x 1097(В) 2.13M				
	Система сканирования	Прогрессивная р	азвертка				
	Мин. освещенность	Цветное : 0,055Lux(F2.0, 1/30sec, 30IRE) Ч/Б : 0,055Lux(F2.0, 1/30sec, 30IRE)					
	Соотношение сигнал/шум	50дБ					
	Широкий динамический диапазон	150dB					
	День/Ночь	Электронное					
	Фокусное расстояние (коэффициент трансфокации)	2.4мм	2.8мм	3.6мм	6мм	12мм	
	Макс. относительное отверстие	F2.0					
Объектив	Угловое поле зрения	Γ:135.4°, B:71.2°, D:161.6°	Γ:107.4°, B:62.2°, D:122.0°	Γ:94.8°, B:49.3°, D:114.3°	Γ:50.4°, B:28.8°, D:58.1°	Γ:26.3°, Γ:14.9°, D:30.0°	
	Тип объектива	Фиксированная ф	окальная точка	,		,	
	Тип крепления	М12 Модуль объектива с главным модулем					
Панорамирование/ наклон/поворот	Диапазон панорамирования/ наклона/поворота	-90°~+90° / +52~+56° / -180°~+180°	-90°~+90° / +26~+80° / -180°~+180°	-90°~+90° / +22~+84° / -180°~+180°	-90°~+90°/ +10~+95°/ -180°~+180°	-90°~+90° / +10~+97° / -180°~+180°	
	Цвет/материал	Черный/пластик					
Физические характеристики	Размеры	Ø35,5 x Д35,9м	1M				
mpun spreimin	Bec	30 r					

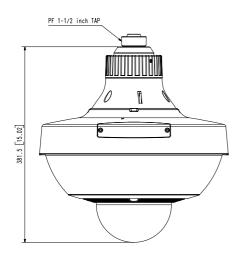
		Описание					
	Элементы	SLA-5M3700P	SLA-5M4600P	SLA-5M7000P			
	Устройство обработки изображения	1/1.8" 5M CMOS					
	Общее количество пикселов	3096(I) x 2094(B)					
	Количество эффективных пикселов	2616(Г) x 1976(В)	2616(T) x 1976(B)				
	Система сканирования	Прогрессивная развертка					
Соот	Мин. освещенность		Цветное : 0,16Lux(F1.6, 1/30sec, 30IRE) Ч/Б : 0,16Lux(F1.6, 1/30sec, 30IRE)				
	Соотношение сигнал/шум	50дБ	50дБ				
	Широкий динамический диапазон	120dB					
	День/Ночь	Электронное					
	Фокусное расстояние (коэффициент трансфокации)	3.7мм	4.6мм	7мм			
Объектив	Макс. относительное отверстие	F1.6					
Ооъектив	Угловое поле зрения	Γ:97.5°, Β:71.9°, D:126.2°	Γ:77.9°, B:57.9°, D:98.7°	Γ:50.7°, Β:37.8°, D:63.8°			
	Тип объектива	Фиксированная фокальная точка					
	Тип крепления	М12 Модуль объектива с гла	вным модулем				
Панорамирование/ наклон/поворот	Диапазон панорамирования/ наклона/поворота	-90°~+90° / +36~+73° / -180°~+180°	-90°~+90° / +21~+85° / -180°~+180°	-90°~+90° / +12~+93° / -180°~+180°			
	Цвет/материал	Черный/пластик	1				
Физические характеристики	Размеры	Ø35,5 x Д35,9мм					
лараптеристипи	Bec	35 r					

# ПРИЛОЖЕНИЕ

PNM-9320VQP

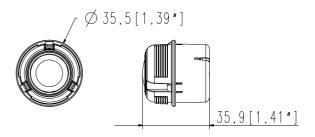
Единицы измерения: мм (дюймы)





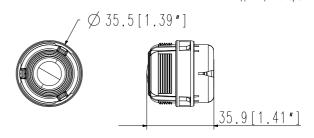
# **SLA-2M SERIES**

Единицы измерения: мм (дюймы)



# **SLA-5M SERIES**

Единицы измерения: мм (дюймы)



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ПРОБЛЕМА	РЕШЕНИЕ
Если доступ производится через подключаемый программный модуль Free webviewer на Safari через HTTPS, видео не отображается.	<ul> <li>При первоначальном доступе к https во всплывающем окне с предложением аутентификации выберите "Просмотр сертификата подлинности" и установите флажок "Всегда доверять при соединении по IP, назначенному программе веб-просмотра".</li> <li>Если модуль веб-просмотра по-прежнему не отображает видео после выбора "Далее" в окне сообщения внизу, намжите командную кнопку + Q, чтобы выйти из браузера Safari, вновь войдите в систему и следуйте процедуре, приведенной выше.</li> </ul>
	• Проверьте на правильность сетевые настройки камеры.
	• Убедитесь в правильности подключения всех сетевых кабелей.
Нет доступа к камере через веб-браузер.	<ul> <li>Убедитесь в том, что камера получает динамический IP-адрес при использовании DHCP- технологии.</li> </ul>
	• Если камера подключена к Широкополосный маршрутизатор, убедитесь в том, что переадресация портов настроена правильно.
Происходит разрыв соединения по время мониторинга видео в экране	<ul> <li>При любом изменении настроек камеры или сети происходит разрыв соединения с наблюдательными терминалами.</li> </ul>
просмотра.	• Проверьте все сетевые соединения.
Программа IP Installer не находит камеру, подключенную к сети.	• Отключите файрвол 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.
•	• Проверка нормальной работы модуля объектива.

ПРОБЛЕМА	РЕШЕНИЕ	
<Детектор движения> в меню <Аналитика> установлено в <Активировать>, но уведомления по электронной почте не приходят, даже когда произошло событие аналитики.	<ul> <li>Проверьте настройки в следующей последовательности:</li> <li>А. Проверьте настройки параметра «Дата и время».</li> <li>В. Для параметра «Детектор движения» необходимо задать значение «Активировать».</li> <li>С. Проверьте, выбран ли в меню «Настройка событий» параметр «Настройка событий».</li> </ul>	
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.	<ul> <li>Проверьте, в правильном ли направлении вставлена карта памяти. Возможность использования карт памяти, отформатированных на других устройствах, не гарантируется.</li> <li>Снова отформатируйте карту памяти в меню &lt;Настройка&gt; → &lt;Событие&gt; → &lt;Накопитель&gt;.</li> </ul>	

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

### LGPL SW

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

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#### T-License [License Agreement for Source Code of T-Kernel]

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

#### Article 1. Scope of License Agreement

1. This License Agreement sets forth copyrights and the terms and conditions of use applicable to the source code of T-Kernel distributed by T-Engine Forum and any derivative work created therefrom.

#### Article 2. Definition

- 1. "T-Kernel" means a real-time operating system controlled and distributed by T-Engine Forum on behalf of the copyright holder thereof.
- 2. "Source Code" means a source program, including related comments and documentations, for the T-Kernel and the Ported Source Code defined in Article 2.8 which is registered with T-Engine Forum.
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- 4. "Compiler-dependent Part" means the part of the Source Code which depends on compiler and needs to be changed when the Source Code is ported and operated on the target hardware, and is designated and separated as such part.
- 5. "Header File" means the part of the Source Code which contains definitions necessary to develop application programs.
- 6. "T-Engine Hardware" means the hardware which is manufactured in accordance with the T-Engine Hardware specifications or the μT-Engine Hardware specifications issued by T-Engine Forum, and registered with T-Engine Forum.
- 7. "Similar Hardware to T-Engine Hardware" means any hardware (including software which emulates hardware) other than that defined in Article 2.6 above, on which the T-Kernel can be operated.
- 8. "Ported Source Code" means a source program produced from the Source Code by modifying only its Hardwaredependent Part and/or Compiler-dependent Part to enable it to be operated on the T-Engine Hardware or the Similar Hardware to T-Engine Hardware. The Ported Source Code which is registered with T-Engine Forum shall be included in the Source Code.
- 9. "Modified Source Code" means a source program modified from the Source Code for the purpose of improving its performance, increasing or decreasing its function, and the like. The Ported Source Code shall not be included in the Modified Source Code.
- 10. "Binary Code" means an executable code form which is created by compiling programs, which include all or part of the Source Code or the Modified Source Code.
- 11. "Derivative Work" means the Modified Source Code or the Binary Code.
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- 13. "End User" means a consumer who uses the Embedded Product.
- 14. "System Developer" means any person who develops the Embedded Product by itself or has a third party develop the same, and provides, whether with or without payment, the End User with the Embedded Product.
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- 16. "Patch for Modification" means a difference, program, system, or the like in order to create the Modified Source Code from the Source Code or the Binary Code thereof
- 17. "Vicarious Execution of Patch Processing" means vicarious execution service to create the Modified Source Code applying the Patch for Modification to the Source Code or the Binary Code thereof.
- 18. "Source Code User" means a person who uses the Source Code.
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- 2. to transmit a work to the general public through the Internet communication, broadcasting, and the like automatically in response to a request from the public: and
- 3. to distribute a copy of a work to the general public or a large number of specific persons.

#### Article 3. Copyrigh

1. The copyrights of the Source Code shall be owned by Ken Sakamura.

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- 1. As provided for in this Article, T-Engine Forum shall provide, and grant a license to use, the Source Code free of charge to any person who has taken the necessary procedure for registration as prescribed by T-Engine Forum and agreed to the T-License.
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- 4. In accordance with the license granted under Article 4.1 above, the System Developer may perform the following acts:
- 1. to perform any and all acts set forth in the Article 4.3 above.
- to develop and manufacture the Embedded Product containing the Binary Code, and, whether with or without payment, provide the End User with the same and make the Binary Code available to the End User on the Embedded Product.
- 5. The Source Code User and the System Developer shall be obligated to give a notice that the Source Code is used, in such a way as separately specified by T-Engine Forum, when they use the Source Code or the Binary Code, or make the Binary Code available for the End User on the Embedded Product.

#### Article 5. Distribution of Modified Source Code

- 1. Any of A- members of T-Engine Forum may become the Distributor of Modification by obtaining the approval of T-Engine Forum through the registration procedure as prescribed by the Forum provided that only the department of the A- member which has taken the registration procedure may distribute the Modified Source Code in such a way as provided for in this Article as long as it holds the Amembership.
- 2. The Distributor of Modification may create the Modified Source Code based on the Source Code provided by T-Engine Forum and the Patch for Modification to be applied to create such Modified Source Code from the Source Code.
- 3. The Distributor of Modification shall, prior to the distribution, inform T-Engine Forum of and register a name and description of the Modified Source Code in such a way as specified by T-Engine Forum.
- 4. The Distributor of Modification shall determine the name of the Modified Source Code subject to the rules separately established by T-Engine Forum and publish an appropriate notice as required by the rules on the Patch for Modification and the Modified Source Code.
- 5. The Distributor of Modification may distribute the Modified Source Code to a third party, whether with or without payment, provided that the Distributor of Modification shall take the necessary measures to prohibit the third party from making the re-Distribution of the Modified Source Code.
- 6. Developer with the Patch for Modification. Provided, however, that the Distributor of Modification shall be obligated to confirm that the System Developer is the Source Code User duly licensed under Article 4.1.
- 7. The Distributor of Modification may perform the Vicarious Execution of Patch Processing for the System Developer.
- 8. The System Developer shall not distribute the Modified Source Code in further modified form to any third party as a stand-alone software product.
- 9. The System Developer may, under the same obligation as imposed in Article 4.5, make the Embedded Product available for the End User through use of the Patch for Modification distributed by the Distributor of Modification or the Derivative Works obtained through the Vicarious Execution of Patch Processing.

#### Article 6. Distribution and Registration of the Ported Source Code

1. The Source Code User and the System Developer may, whether with or without charge, distribute to any third party only the following parts of the Ported

Source Code on the T-Engine Hardware or the Similar Hardware to T-Engine Hardware:

- 1. The Hardware-dependent Part and/or Compiler-dependent Part; provided that the Source Code User and the System Developer shall inform T-Engine Forum of, and T-Engine Forum may publish, a method for distributing said Part(s) to third parties.
- 2. The Header File; provided that the Header File shall be distributed together with the Binary Code of the Ported Source Code.
- 2. Any member of T-Engine Forum may request T-Engine Forum to register and distribute, as an original source code for T-Kernel, the Ported Source Code on the T-Engine Hardware or the Similar Hardware to T-Engine Hardware.
- 3. Any member of T-Engine Forum who requests the distribution mentioned in the preceding paragraph shall accede to the following conditions:
- 1. The member shall confirm that the object hardware is the T-Engine Hardware or the Similar Hardware to T-Engine Hardware.
- The member shall provide T-Engine Forum with a complete set of operational environment for the object hardware and T-Kernel free of charge when requesting the distribution.
- 3. The member shall submit test results of the Ported Source Code to T-Engine Forum when requesting the distribution.
- 4. In the event that T-Engine Forum accepts the request mentioned in Article 6.2, T-Engine Forum shall register and distribute the Ported Source Code as the Source Code for T-Kernel. Provided, however, that the Ported Source Code may be treated in the same way as the Modified Source Code until the time of registration hereunder.
- 5. The provision set forth in Article 3 shall apply to the Ported Source Code registered in accordance with this Article.

#### Article 7. Use for Other Purpose

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

#### Article 8. Limited Warranty

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- 3. Any legal dispute which may arise in relation to any breach of this License Agreement shall be subject to the exclusive jurisdiction of the Tokyo District Court.

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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/ffc1950.txt (zlib format), rfc1951.txt (deflate format) and rfc1952.txt (gzip format).



Komnahuя Hariwha Techwin заботится об окружающей среде и прилагает усилия для ее сохранения на всех этапах производства и предоставляет потребителям экологически безопасную продукцию.

Знак Есо демонстрирует цель компании Hanwha Techwin по созданию экологически безопасной продукции и указывает на соответствие изделия директиве EC RoHS.



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