

**WISENET**

# **CÁMARA DE RED**

Manual del usuario

XNP-6371RH



# Cámara de Red

## Manual del usuario

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### Marca comercial

Todas las marcas aquí mencionadas están registradas. El nombre de este producto y otras marcas mencionadas en este manual son marcas registradas de sus respectivas compañías.

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❖ El diseño y las especificaciones están sujetos a cambio sin aviso.

❖ El ID inicial del administrador es "admin" y la contraseña debe establecerse al iniciar sesión por primera vez. Por favor, cambie su contraseña cada tres meses para proteger de forma segura la información personal y evitar daños por el robo de información. Por favor, tenga en cuenta que es responsabilidad del usuario la seguridad y otros problemas causados por el mal manejo de una contraseña.

## INSTRUCCIONES DE SEGURIDAD IMPORTANTES

1. Lea estas instrucciones.
2. Consérvelas.
3. Atente para todas las advertencias.
4. Siga todas las instrucciones.
5. No utilice este aparato cerca del agua.
6. Limpie el área contaminada en la superficie del producto con un paño seco y suave o un paño húmedo. (No utilice detergente o productos cosméticos que contengan alcohol, disolventes o tensioactivos o constituyentes de aceites, ya que pueden deformar o dañar el producto).
7. No obstruya ninguna apertura de ventilación. Instale el aparato siguiendo las instrucciones del fabricante.
8. No lo instale cerca de ninguna fuente de calor como radiadores, focos de calor o cualquier otro aparato (incluidos los amplificadores) que emita calor.
9. No olvide que la finalidad de los enchufes polarizados o de toma a tierra es proporcionarle seguridad. Un enchufe polarizado tiene dos clavijas, una más ancha que la otra. Un enchufe con toma a tierra tiene dos clavijas y una tercera de toma a tierra. Tanto la clavija más ancha, en el caso del enchufe polarizado, como la clavija adicional, en el caso del enchufe con toma a tierra, tienen como objetivo aportar seguridad. Si el enchufe del aparato no encaja en su toma de corriente, póngase en contacto con un electricista para cambiar la toma de corriente obsoleta.
10. Evite pisar o doblar el cable de alimentación. Ponga especial cuidado para no hacerlo en enchufes, tomas de corriente y en los puntos en los que salen desde el aparato.
11. Utilice únicamente los dispositivos y accesorios especificados por el fabricante.
12. Utilice sólo las mesitas con ruedas, soportes, trípodes o mesas recomendadas por el fabricante o vendidas con el aparato. Cuando se utilice una mesita con ruedas, tenga cuidado al mover la mesita con ruedas junto con el aparato para evitar daños por vuelco.
13. Desenchufe este aparato durante tormentas eléctricas o cuando no se utilice durante largos períodos de tiempo.
14. Remita todas las reparaciones a personal de mantenimiento cualificado. Es necesario enviar el aparato para su reparación cuando ha sufrido cualquier tipo de daño, como, por ejemplo, que el cable o el enchufe de la alimentación está dañado, se han derramado líquidos sobre el aparato o algún objeto ha caído sobre él, el aparato ha sido expuesto a la lluvia o a humedad, no funciona correctamente o se ha caído al suelo.
15. Este producto se ha diseñado para alimentarse mediante una unidad de alimentación con marca "Clase 2" o "LPS" y con capacidad nominal de 24 VCA (50/60 Hz), mín. 4.2 A.
16. Si utiliza una fuerza excesiva al instalar el producto, es posible que la cámara pueda sufrir daños y funcione de forma incorrecta.  
Si instala el producto de forma forzada utilizando herramientas no compatibles, es posible que el producto pueda sufrir daños.
17. No instale el producto en un lugar donde exista o pueda generarse sustancias químicas o niebla de aceite. Los aceites comestibles como el aceite de soja pueden dañar o deformar el producto, por lo que no debe instalar el producto en la cocina o cerca de la mesa de la cocina. Esto podría causar daños al producto.
18. Al instalar el producto, tenga cuidado y no permita que la superficie del producto se manche con sustancias químicas. Algunos disolventes químicos como limpiadores o adhesivos pueden causar daños graves a la superficie del producto.
19. Si instala o desmonta el producto de una manera que no se ha recomendado, es posible que las funciones/ rendimiento de producción no estén garantizados.  
Instale el producto consultando "Instalación y conexión" en el manual del usuario.
20. La instalación o uso del producto en el agua puede causar daños graves al producto.



## ADVERTENCIA



PARA REDUCIR EL RIESGO DE INCENDIO O DESCARGA ELÉCTRICA, MANTENGA ESTE DISPOSITIVO LEJOS DE LLUVIA Y/O LA HUMEDAD. NO INSERTE NINGÚN OBJETO METÁLICO EN LAS REJILLAS DE VENTILACIÓN NI EN NINGUNA ABERTURA DEL EQUIPO.

No debe exponer el aparato a gotas ni salpicaduras de agua ni a objetos con líquido, como jarrones, evitando colocarlos sobre el aparato.

Para evitar daños, este aparato debe instalarse de forma adecuada en el techo o la pared de acuerdo con las instrucciones de instalación.

**Los motores con bandeja/volante/zoom y el anillo colector tienen garantía por un año bajo un funcionamiento continuo.**

## PRECAUCIÓN

	<b>PRECAUCIÓN</b> NO ABRIR RIESGO DE SUFRIR UNA DESCARGA ELÉCTRICA	
<b>PRECAUCIÓN : PARA REDUCIR EL RIESGO DE SUFRIR UNA DESCARGA ELÉCTRICA, NO RETIRE LA CUBIERTA (NI LA PARTE POSTERIOR). DENTRO NO HAY PIEZAS QUE PUEDAN SER REPARADAS POR EL USUARIO. REMITA EL APARATO A PERSONAL DE MANTENIMIENTO CUALIFICADO.</b>		

## EXPLICACIÓN DE LOS SÍMBOLOS GRÁFICOS



Un triángulo con un rayo y una punta de flecha es un símbolo de advertencia para avisar al usuario de la presencia de "voltajes peligrosos" dentro de la carcasa del producto que pueden ser lo suficientemente intensas como para constituir un peligro de descarga eléctrica.



Un triángulo con un signo de exclamación es un símbolo de advertencia para avisar al usuario de que hay instrucciones importantes de funcionamiento y mantenimiento (reparaciones) en la documentación que acompaña al aparato.

## Construcción de clase I

Un aparato con construcción de CLASE I se conectará a una toma de corriente con la conexión de protección de tierra.

## Batería

No debe exponer las baterías (paquete de batería o pilas instalados) a calor excesivo, a la luz directa del sol ni al fuego, etc.

No es posible sustituir la batería.

## Desconexión del dispositivo

Desconecte el enchufe de corriente del aparato si está defectuoso. Y llame a un servicio de reparaciones.

**Cuando lo utilice fuera de EE.UU., se puede utilizar el código HAR con acoplamiento de una agencia aprobada.**

## PRECAUCIÓN

Estas instrucciones de servicio están destinadas únicamente a personal de servicio técnico cualificado.

Para reducir el riesgo de descarga eléctrica no realice ninguna operación de servicio que no sean las indicadas en las instrucciones de funcionamiento a menos que esté cualificado para hacerlo.

Se suministra el terminal de salida CVBS del producto para facilitar la instalación, aunque no se recomienda utilizarlo con fines de gestión.

Utilice la alimentación de entrada con sólo una cámara y sin que estén conectados otros dispositivos.

**El ITE solo se debe conectar a redes PoE sin enviarlo a la red externa.**

Lea detenidamente las precauciones de seguridad recomendadas que se incluyen a continuación.

- No coloque este aparato sobre una superficie desigual.
- No lo instale en una superficie expuesta a la luz directa del sol, cerca de equipos de calefacción ni cerca de áreas frías.
- No coloque este aparato cerca de material conductivo.
- No intente reparar este aparato por sí solo.
- No coloque jarrones sobre el producto.
- No lo instale cerca de fuentes magnéticas.
- No bloquee las aberturas de ventilación.
- No coloque objetos pesados sobre el producto.
- Use guantes protectores cuando instale/desinstale la cámara.  
La alta temperatura de la superficie del producto puede causar quemaduras.

El Manual del usuario es una guía sobre cómo utilizar los productos.

El significado de los signos que se utilizan en el manual es el siguiente.

- Referencia : en caso de que se facilite información de ayuda sobre el uso del producto
- Aviso : si existe alguna posibilidad de que se produzcan daños en bienes o lesiones en personas causadas por no seguir las instrucciones
- ✘ Lea este manual por razones de seguridad antes de utilizar los productos y guárdelo en un lugar seguro.

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## CARACTERÍSTICAS RECOMENDADAS DEL ORDENADOR

- CPU : Intel(R) Core(TM) i7 a 3,4 GHz o superior
  - RAM: 8G o más
  - SO admitido : MS Windows, Mac OS X
  - **Visor web sin plug-in**  
Navegadores web compatibles: Google Chrome, MS Edge, Mozilla Firefox (Windows solo de 64 bit), Safari de Apple (solo Mac OS X)
  - **Visor web de plug-in**  
Navegadores web compatibles: MS Explorer, Apple Safari (solo Mac OS X)
- Consulte el apéndice para obtener información detallada de la versión en el OS verificado y las versiones del navegador.

## ESPECIFICACIONES DE LA TARJETA DE MEMORIA SD/SDHC/SDXC RECOMENDADA

- Capacidad recomendada : 4GB ~ 128GB (El sistema de archivos ext4 se recomienda para las tarjetas de memoria SD de 128 GB.)
- Para su cámara, le recomendamos utilizar una tarjeta de memoria de los siguientes fabricantes:  
Tarjeta de memoria SD/SDHC/SDXC (tipo MLC) : Sandisk, Transcend
- Para framerates inferiores a 30 fps, se recomienda utilizar una tarjeta de memoria de Clase 6 o superior.
- Para framerates inferiores a 31 fps, se recomienda utilizar una tarjeta de memoria de Clase 10 o superior.

## ESPECIFICACIONES RECOMENDADAS PARA NAS

- Capacidad recomendada : Se recomienda que sea de 200 GB o superior.
- Acceso simultáneo : Una unidad de NAS puede aceptar un máximo de accesos simultáneos de hasta dieciséis cámaras.
- Para esta cámara, se recomienda utilizar una unidad NAS con las siguientes especificaciones del fabricante.

Productos recomendados	Tamaños disponibles
QNAP NAS	Accesos simultáneos para un máximo de 16 cámaras.
NAS Synology	Accesos simultáneos para un máximo de 16 cámaras.



- El número de accesos a cámaras se reducirá si utiliza la unidad NAS para otros fines que no sean el de almacenamiento de vídeo.

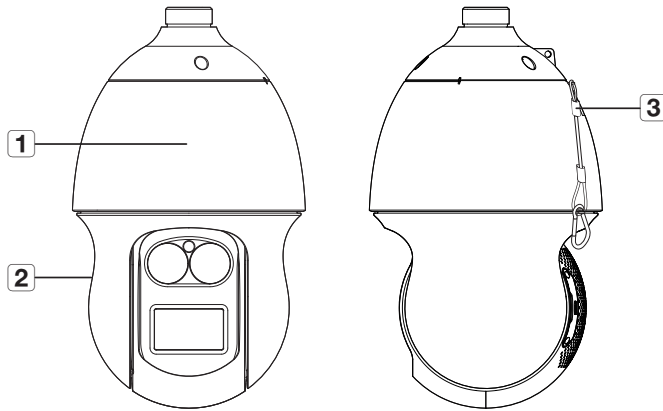
## COMPONENTES

Compruebe si la cámara y los accesorios se incluyen en el paquete del producto.  
(Debido a los diferentes países de venta, los accesorios no son los mismos.)

Aspecto	Nombre de elemento	Cantidad	Descripción
	Cuerpo principal	1	
	Manual de consulta rápida (Opcional)	1	
	Tarjeta de garantía (Opcional)	1	
	Cable para probar el monitor	1	Se utiliza para probar la conexión de la cámara en un dispositivo de visualización portátil
	Tornillo hexagonal	3	Se utiliza para acoplar la base de instalación a la cámara
	Llave en L	1	Se utiliza para fijar la base de instalación tras acoplarla en la cámara
	Base de instalación	1	Soporte para el montaje al aire libre
	Accesorio de impermeabilización	1	Instale y utilice donde haya mucha humedad.

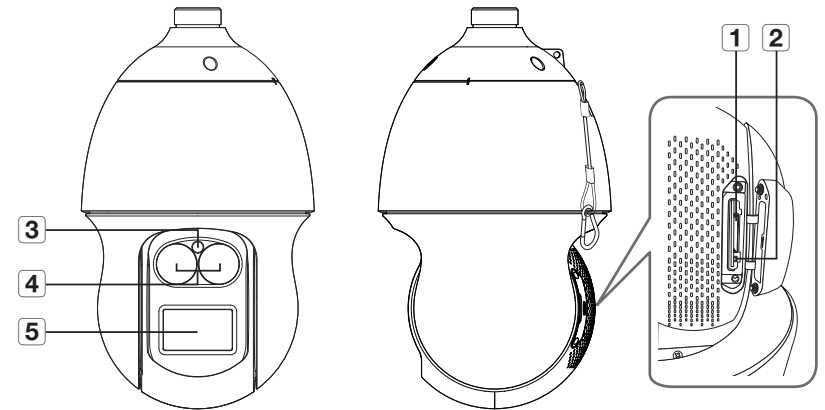
## VISTA

### Aspecto



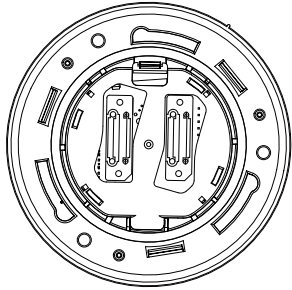
Elemento	Descripción
<b>1</b> Unidad principal	Protege el mecanismo interno de PTZ de la luz directa del sol, la lluvia o impactos externos.
<b>2</b> Tapa protectora	Tapa para protección de la lente y la unidad.
<b>3</b> Cable de seguridad	El cable evita que el producto se caiga durante la instalación.

### Interior

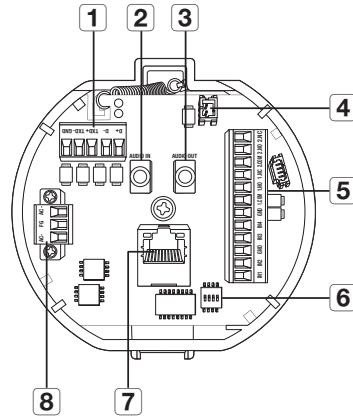


Elemento	Descripción
<b>1</b> Compartimento de la tarjeta de memoria SD	Compartimento de la tarjeta de memoria SD. ☑ Consulte <Insertar/Eliminar una Tarjeta de Memoria SD> para saber la posición de introducción/colocación de la tarjeta de memoria SD. (página 14)
<b>2</b> Botón de reinicialización	Este botón restaura los valores predeterminados de la cámara. Manténgalo pulsado durante unos 5 segundos para reiniciar el sistema. ❗ Si reinicia la cámara, los ajustes de red se ajustarán de forma que se pueda habilitar DHCP. Si no hay ningún servidor DHCP en la red, debe ejecutar el programa del Device Manager para cambiar los ajustes básicos de la red tales como la dirección IP, la máscara de subred, la puerta de enlace, etc., antes de poder conectarse a la red.
<b>3</b> Sensor de iluminación	Detecta la luz entrante para controlar el LED de infrarrojos.
<b>4</b> LED IR	Son LED de infrarrojos que se controlan mediante un sensor de iluminación.
<b>5</b> Objetivo	Objetivo de la cámara.

Vista inferior de la base de instalación



Vista interior de la base de instalación

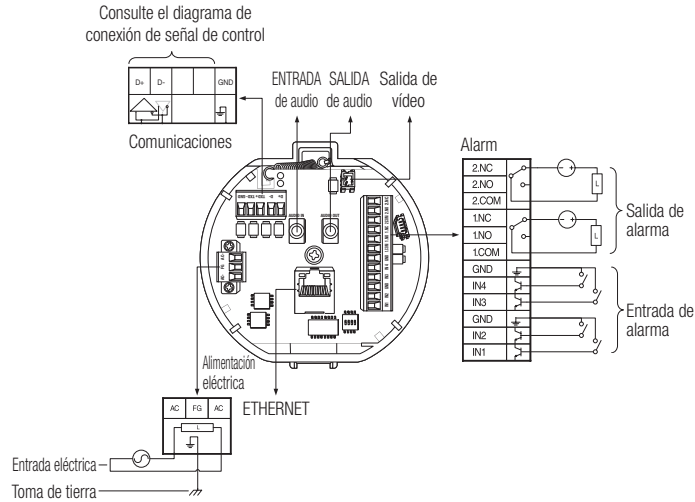


Elemento	Descripción
<b>1</b> Puertos de comunicaciones	Se utiliza para comunicaciones RS-485.
<b>2</b> Puerto de entrada de audio	Se utiliza para conectar el cable de entrada de audio.
<b>3</b> Puerto de salida de audio	Se utiliza para conectar el cable de salida de audio.
<b>4</b> Puerto de salida de vídeo	Puerto de salida de vídeo analógico. (Para instalación.)
<b>5</b> Puerto E/S de alarma	Se utiliza para conectar el cable de E/S de alarma.
<b>6</b> Interruptor de configuración de comunicaciones	Establezca protocolos de comunicación (RS-485) e indique si se debe terminar.
<b>7</b> Conexiones de red	Puerto para la conexión con la red mediante un cable Ethernet.
<b>8</b> Puerto de alimentación	Se utiliza para conectar la alimentación.



## Placa de la interfaz de cableado de la cámara

Para el cableado de la cámara, consulte la imagen que se incluye a continuación.

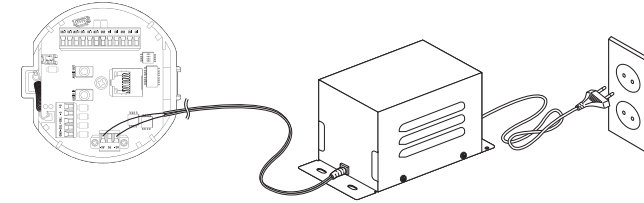


- ! Seleccione Normal Abierto en el menú de configuración.
  - La entrada del sensor se activa durante un cortocircuito para tipo contacto o cuando está en nivel "Bajo" para el tipo activo.
- Seleccione Normal Cerrado en el menú de Configuración.
  - La entrada del sensor se activa cuando está abierto para el tipo contacto o cuando está en estado de alta impedancia (colector abierto) para el tipo activo.
- La capacidad máxima del terminal de salida de la alarma es de 30 V CC/2 A, 125 V CA/0,5 A y 250 V CA/0,25 A.
- Alí conectar los cables de entrada y salida, asegúrese de conectar un cable a cada terminal.
- Para conectar productos por encima de la capacidad de la cámara, utilice un dispositivo de relé adicional.
- Si los cables de la toma de tierra y de alimentación no están conectados correctamente al puerto COM o N/NC, podría producirse un incendio o averiarse el equipo.

## CONEXIÓN CON OTROS DISPOSITIVOS

### Preparación del adaptador y el cable

- ! Conecte la cámara al adaptador de corriente. A continuación, enchufe el cable de alimentación del adaptador en la toma de corriente.



Compruebe la tensión y la corriente nominal antes de realizar las conexiones.

Potencia nominal	Tensión de entrada permitida	Consumo de corriente
24V CA	CA 22V ~ 26V	6 A

- ! El producto no se puede usar a temperatura ambiente de -50°C o inferior.
- Este producto no se puede descongelar según el área de instalación -50°C.
- Si el producto ha permanecido en un ambiente de baja temperatura, tardará unas 2 horas en volver a funcionar con normalidad.
- La velocidad de zoom del atenuador IR disminuye en ambientes de -40°C o menos.
- Si se enciende el producto antes de estar expuesto a un ambiente de -20°C o menos durante un tiempo, es necesario poner el tiempo a cero.

### Resistencia eléctrica de cable de cobre a [20°C (68°F)]

Calibre de hilo americano (AWG)	#24(0.22mm <sup>2</sup> )	#22(0.33mm <sup>2</sup> )	#20(0.52mm <sup>2</sup> )	#18(0.83mm <sup>2</sup> )
Resistencia (Ω/m)	0.078	0.050	0.030	0.018
Tensión de caída (V/m)	0.028	0.018	0.011	0.006
Distancia recomendada (m)	Menos de 20	Menos de 30	Menos de 30	Menos de 30

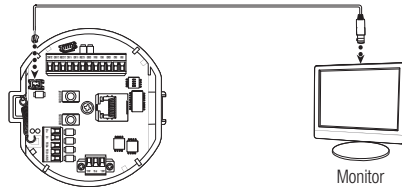
- Como se muestra en la tabla anterior, es posible que encuentre un punto de tensión baja dependiendo de la longitud del cable. Si tiene un cable excesivamente largo para la conexión de la cámara, es posible que la cámara no funcione debidamente.
  - Tensión de servicio de la cámara: 24 VCA ±10%
  - Las mediciones de caída de tensión del diagrama anterior pueden variar dependiendo del tipo y el fabricante del cable de cobre.

### Conexión Ethernet

Conecte el cable Ethernet a la red local o a Internet.

## Conexión del monitor de instalación

Conecte el cable al terminal de salida de vídeo de la parte trasera de la cámara y el terminal de entrada de vídeo del monitor de instalación.



- El cableado varía dependiendo del tipo de monitor y de los dispositivos periféricos; consulte el manual del usuario de cada dispositivo.
- Asegúrese de que el monitor y la cámara estén apagados cuando se conecten.

- !**
- El producto es una cámara de red que transfiere vídeo por una red; el terminal de salida de vídeo se utiliza para ajustar el rango de imágenes de la cámara en la instalación.
  - La utilización del terminal para vigilancia puede causar problemas como la degradación de la calidad del vídeo.
  - No apto para control profesional de 24 horas usando monitores de TRC profesionales o monitores portátiles TFT/LCD.
  - Use la pantalla de transferencia de red para el control y almacenamiento de 24 horas.

## INSTALACIÓN

### Preparación e instalación del soporte de la cámara

Para obtener instrucciones de instalación de los soportes y carcassas, consulte el manual de instalación que se incluye con los mismos.

#### Modelos de soportes disponibles

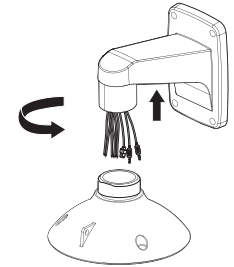
Modelo	Elemento
SBP-300WM1	Soporte de pared
SBP-300WM	
SBP-300CM	Soporte de montaje en techo
SBP-300LM	Soporte de parapeto
SBP-300KM	Soporte para esquina
SBP-300PM	Soporte para poste

- !** Consulte "Accesorios opcionales para la instalación" para ver el aspecto de cada soporte (no se incluye). (Página 12)

## Instalación mediante el soporte de pared

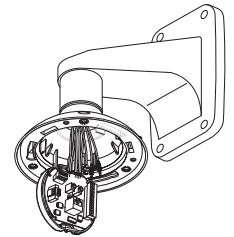
### Fije la base de instalación con la abrazadera

- Fije la base de instalación con la abrazadera girando a la derecha.



- Como se muestra en la imagen que se incluye a continuación, presione suavemente y levante la manivela de la puerta con asa situada en la parte inferior de la base de instalación. Consulte "Placa de la interfaz de cableado de la cámara" en la página 9, conecte los cables.

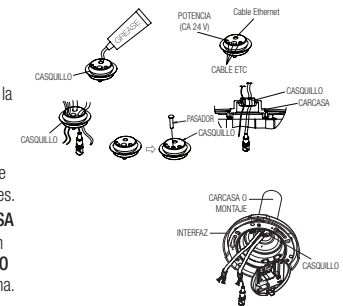
- !**
- No conecte la cámara a una toma de corriente hasta completar la instalación. El suministro de alimentación mientras se realiza la instalación puede causar un incendio o daños en el producto.



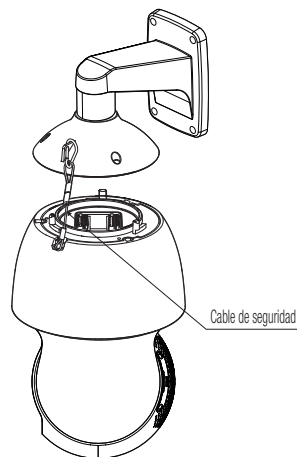
- !** Compruebe el método de conexión por cable e instale.

- Tenga en cuenta que los **CASQUILLOS** se facilitan para instalaciones exteriores donde existen condiciones de humedad a través del **TUBO o MONTAJE**, instale el **CASQUILLO** utilizando el **CASQUILLO** para impedir la entrada de humedad.

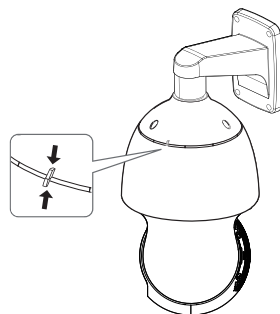
- Aplice grasa en la dosis apropiada en el **CASQUILLO** antes del montaje y dirija los cables por cada orificio de los casquillos. Utilice **PASADORES** para obstruir los orificios vacíos que no tengan cables.
- Monte el **CASQUILLO** en el lado superior del inferior de la **CARCASA** como se muestra en el diagrama que se incluye a continuación. En ese momento, aplique presión de forma uniforme en el **CASQUILLO** para fijarlo bien al **ALOJAMIENTO** como se muestra en el diagrama.



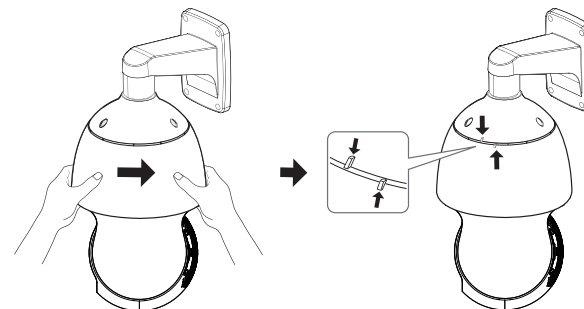
3. Conecte el cable de seguridad de la cámara a la base de instalación.



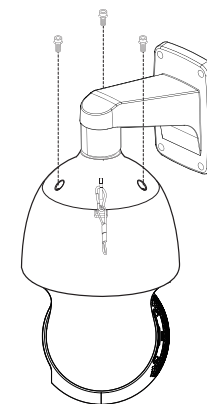
4. Montaje de la cámara y la base de instalación.  
Monte el conjunto de la cámara y la base de instalación haciendo coincidir las guías de dirección de instalación.



5. Conecte la cámara  
Gire el cuerpo principal de la cámara en sentido horario hasta la posición de la marca de referencia en la sección superior y la sección inferior como se muestra en la figura.



6. Fije la cámara y la base de instalación  
Como se muestra en la imagen a continuación, asegure la base de la instalación y la cámara con tornillos hexagonales.



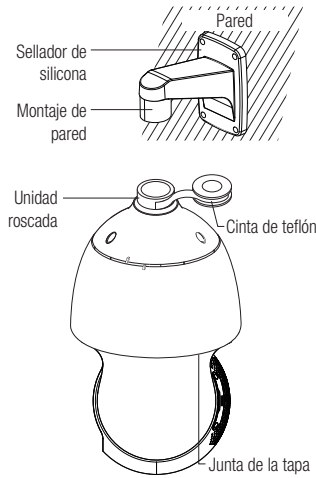
## Advertencias para la impermeabilización

Este modelo es un producto de carcasa integrada para instalación en exteriores.

### ■ Cuando se combina el cuerpo principal y el montaje para instalación en la pared

1. Instale el montaje de pared en la pared vertical. Cuando se instala en una pared inclinada la humedad puede filtrarse en el cuerpo principal a través del cable exterior.
2. Envuelva la parte roscada de la cubierta con la cantidad suficiente de cinta de teflón.
3. Comprobar que la junta no se desmonta de la tapa cuando ésta se separa y se monta en el cuerpo de la carcasa.
4. Instale el adaptador de montaje en la pared para impermeabilización, y aplique sellador de silicona por la pared y entre la pared y el montaje para sellarlo.

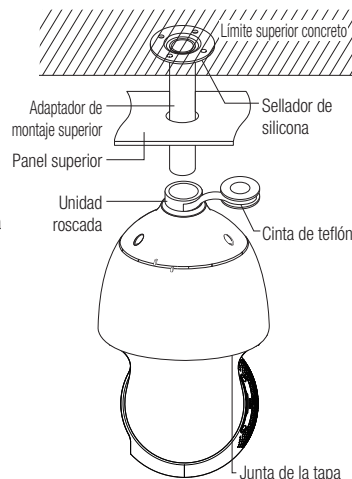
**!** ■ Asegúrese que el sellado es correcto en caso que la parte instalada no es plana.



### ■ Al combinar el cuerpo principal y el adaptador de montaje en cielo raso para instalación en la pared

1. Envuelva la parte roscada de la cubierta con la suficiente cantidad de cinta de teflón.
2. Comprobar que la junta no se desmonta de la tapa cuando ésta se separa y se monta en el cuerpo de la carcasa.
3. Instale el adaptador de montaje superior para impermeabilización, aplicando sellador de silicona por la pared y entre la pared y el montaje hasta que quede bien sellado.

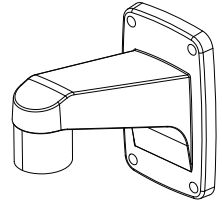
**!** ■ Asegúrese que el sellado es correcto en caso que la parte instalada no sea plana.



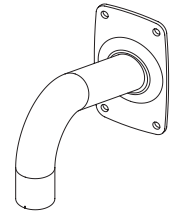
## Accesorios opcionales para la instalación

Para una instalación más sencilla, puede adquirir los accesorios opcionales apropiados disponibles.

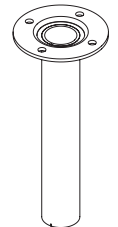
1. Si se instala la cámara en la pared
  - Soporte de pared (SBP-300WM1)



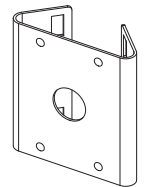
- Soporte de pared (SBP-300WM)



2. Si se instala la cámara en el techo
  - Soporte de montaje en techo (SBP-300CM)

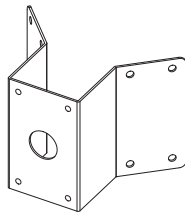


3. Si se instala en el soporte de pared (SBP-300WM/SBP-300WM1) en un cilindro de al menos 80 mm de longitud
  - Soporte para poste (SBP-300PM)



4. Si se instala en el soporte de pared (SBP-300WM /SBP-300WM1) en una esquina

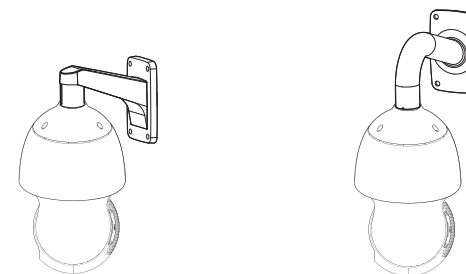
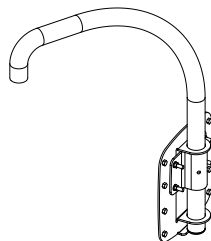
- Soporte para esquina (SBP-300KM)



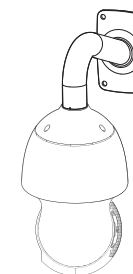
▪ Junta del montaje

5. Si se instala en el tejado de un edificio

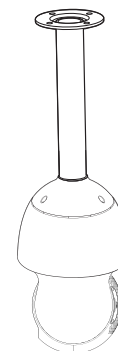
- Soporte de parapeto (SBP-300LM)



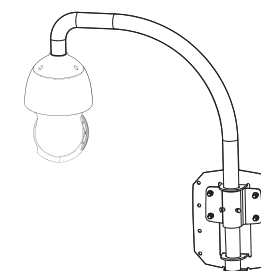
Soporte de pared (SBP-300WM1)



Soporte de pared (SBP-300WM)



Soporte de montaje en techo (SBP-300CM)



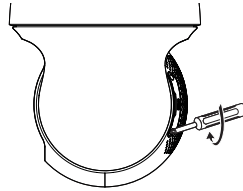
Soporte de parapeto (SBP-300LM)

## INSERTAR/ELIMINAR UNA TARJETA DE MEMORIA SD

- ❗ Desconecte el cable de alimentación de la cámara antes de insertar la tarjeta de memoria SD.
- No se recomienda retirar la tarjeta de memoria SD con tiempo lluvioso o muy húmedo.
- Ajuste los tornillos cuando monte el cuerpo de la cámara, la tapa protectora y el soporte del portador de la SD para evitar que penetre la humedad.
- Cuando se monta o desmonta una tarjeta de memoria SD, coloque primero el cuerpo principal en el suelo para evitar pérdidas de piezas o posibles caídas.

### Insertar una Tarjeta de Memoria SD

1. Con la ayuda del destornillador afloje los dos tornillos del soporte de la pieza de SD girándolos en el sentido contrario a las agujas del .



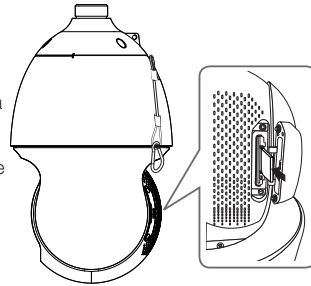
- ❗ No retire los tornillos.

2. Tire del soporte de la pieza de SD y presione la tarjeta de memoria SD en dirección de la flecha, tal y como se indica en la figura.

- ❗ No inserte al revés la tarjeta de memoria SD a la fuerza. Si lo hace, podría dañar la tarjeta de memoria SD.

3. Monte la cámara en el orden contrario al desmontaje después de introducir la tarjeta de memoria.

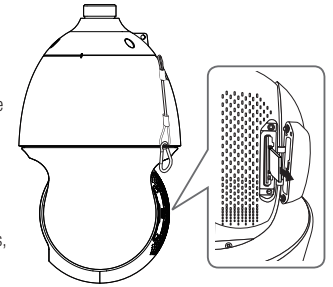
- ❗ Apriete los tornillos cuando monte la cámara para impedir que penetre la humedad.



### Eliminar una Tarjeta de Memoria SD

Presione suavemente hacia abajo en el extremo expuesto de la tarjeta de memoria como se muestra en el esquema para sacarla de la ranura.

- ❗ Si presiona muy fuerte sobre la tarjeta de memoria SD, puede hacer que la tarjeta salga disparada de la ranura cuando la libera.
- Antes de extraer la tarjeta de memoria SD, configure el dispositivo en <Des> en <Almacenamiento> menú, presione el botón [Aplicar] y apague la cámara.
- Si apaga la cámara o retira la tarjeta de memoria SD que contiene datos, puede perderlos o dañarlos.

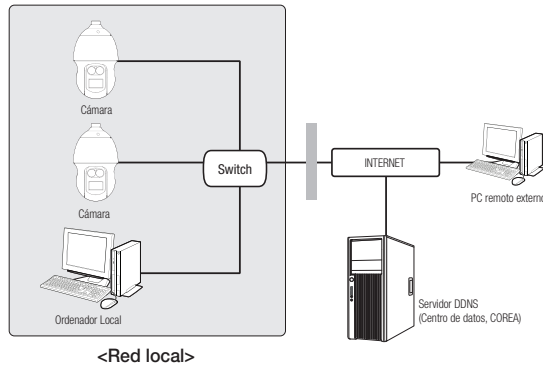


Puede fijar la configuración de red de acuerdo con sus configuraciones de red.

## CONECTAR LA CÁMARA DIRECTAMENTE A LA RED DE ÁREA LOCAL

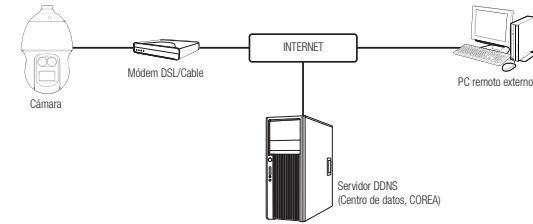
### Conectar con la cámara desde un ordenador local en la LAN

1. Abrir un navegador de Internet en su ordenador local.
2. Introduzca la dirección IP de la cámara en la barra de direcciones del navegador.



- Un ordenador remoto con una Internet externa fuera de la red LAN podría no poder conectarse a la cámara instalada en la intranet, en caso de que el reenvío de puertos no esté correctamente configurado o se haya instalado un cortafuegos. En este caso, para solucionar el problema, póngase en contacto con su administrador de red.
- En el Device Manager, puede utilizar la contraseña inicial, "4321", para configurar la dirección IP, la máscara de subred, la puerta de enlace, el puerto HTTP, el puerto VNP y el tipo de IP. Después de cambiar la interfaz de red, para mayor seguridad, acceda al visor web y cambie la contraseña.
- Como valor predeterminado de fábrica, la dirección IP se asignará automáticamente desde el servidor DHCP. Si no hay ningún servidor DHCP disponible, la dirección IP se definirá en 192.168.1.100. Para cambiar la dirección IP, utilice el Device Manager. Para obtener más información sobre el uso del Device Manager, consulte "Cómo usar el Device Manager". (página 17)

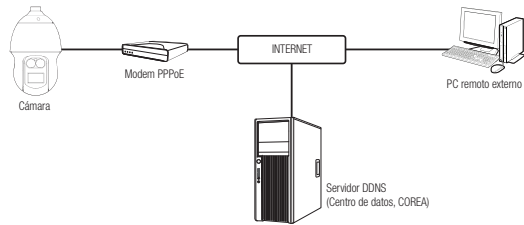
## CONEXIÓN DIRECTA DE LA CÁMARA A UN MÓDEM DSL/CABLE BASADO EN DHCP



1. Conectar el PC del usuario directamente a la cámara de red.
2. Ejecute el Device Manager y cambie la dirección IP de la cámara de tal manera que pueda usar el navegador web en su ordenador de sobremesa para conectarse a Internet.
3. Utilice el navegador de Internet para conectar a Web Viewer.
4. Vaya a la página [Config.].
5. Vaya a [Red] – [DDNS] y configure los ajustes de DDNS.
6. Vaya a [Basic] – [IP & Puerto] y establezca el tipo de IP para [DHCP].
7. Conecte la cámara, retirada del PC, directamente en el módem.
8. Reinicie la cámara.

- Para obtener información sobre cómo configurar el DDNS, consulte la ayuda en línea de Web Viewer.
- Para obtener información sobre cómo configurar el formato de IP, consulte la ayuda en línea de Web Viewer.

## CONEXIÓN DE LA CÁMARA DIRECTAMENTE AL MÓDEM PPPoE

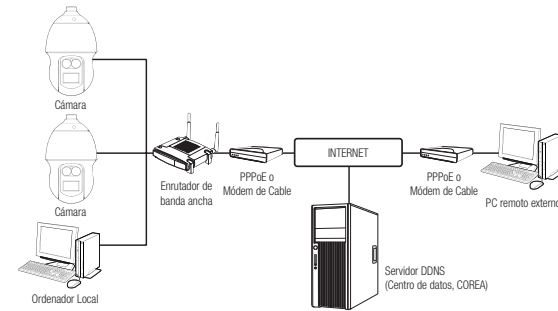


1. Conectar el PC del usuario directamente a la cámara de red.
2. Ejecute el Device Manager y cambie la dirección IP de la cámara de tal manera que pueda usar el navegador web en su ordenador de sobremesa para conectarse a Internet.
3. Utilice el navegador de Internet para conectarse a Web Viewer.
4. Vaya a la página **[Config.]**.
5. Vaya a **[Red]** – **[DDNS]** y configure los ajustes de DDNS.
6. Vaya a la página de configuración **[Basic]** – **[IP & Puerto]**, establezca el tipo de IP para **[PPPoE]** e introduzca el ID de servicio de red y la contraseña.
7. Conecte la cámara, retirada del PC, directamente en el módem.
8. Reinicie la cámara.

- Para obtener información sobre cómo configurar el DDNS, consulte la ayuda en línea de Web Viewer.
- Para obtener información sobre cómo configurar el formato de IP, consulte la ayuda en línea de Web Viewer.

## CONECTAR LA CÁMARA A UN ENRUTADOR DE BANDA ANCHA CON EL MÓDEM PPPoE/CABLE

Se utiliza para un ambiente de red pequeño como hogares, oficinas pequeñas y tiendas normales.



### Configurar la red del ordenador local conectado a un Enrutador de banda ancha

Configure la configuración de red del ordenador local conectado a un enrutador de banda ancha, siga las instrucciones siguientes.

- Selección: **<Network>** → **<Properties>** → **<Local Area Connection>** → **<General>** → **<Properties>** → **<Internet Protocol (TCP/IP)>** → **<Properties>** → **<Obtain an IP address automatically>** o **<Use the following IP address>**.
- Siga las siguientes instrucciones si selecciona **<Use the following IP address>**:
  - ej.1) Si la dirección (LAN IP) del enrutador de banda ancha es 192.168.1.1  
Dirección IP : 192.168.1.100  
Máscara de subred : 255.255.255.0  
Puerta de enlace por defecto : 192.168.1.1
  - ej.2) Si la dirección (LAN IP) del enrutador de banda ancha es 192.168.0.1  
Dirección IP : 192.168.0.100  
Máscara de subred : 255.255.255.0  
Puerta de enlace por defecto : 192.168.0.1
  - ej.3) Si la dirección (LAN IP) del enrutador de banda ancha es 192.168.xxx.1  
Dirección IP : 192.168.xxx.100  
Máscara de subred : 255.255.255.0  
Puerta de enlace por defecto : 192.168.xxx.1

- Para obtener la dirección del enrutador de banda ancha, véase la documentación del producto.
- Para obtener información adicional sobre el reinicio de puertos del enrutador de banda ancha, consulte **"Configuración de Reenvío del Rango de Puertos (Asignación de Puertos)"**. (Página 19)



## CÓMO USAR EL DEVICE MANAGER

- Puede descargar el programa del Device Manager desde el menú <Technical Guides> – <Online Tool> en el sitio web de Hanwha Techwin (<http://www.hanwha-security.com>).
- Asimismo, puede encontrar más instrucciones sobre el Device Manager en el menú <Ayuda> de la página principal.

## BÚSQUEDA AUTOMÁTICA DE LA CÁMARA

Si hay una cámara conectada a la misma red del ordenador en donde está instalado el Device Manager, puede encontrar esa cámara de la red usando la función de buscar.

1. Haga clic en <Buscar> en la página principal del Device Manager.
2. Marque la cámara de la lista.
  - Compruebe la dirección MAC en el adhesivo de la cámara.

## CÓMO CONFIGURAR LA DIRECCIÓN IP

Si desea cambiar el ajuste de la red de la cámara, el signo <Inicio de sesión Aceptar> debe aparecer en el campo <Estado>. Haga clic en el campo <Autenticación> de la página principal para iniciar sesión.

### Configuración de la IP estática

Inserte y configure manualmente la dirección IP y la información del puerto.

1. Haga clic en la cámara de la lista para la que desea cambiar el ajuste de la IP.
2. Haga clic en <IP Assign (Asignación de la IP)> en la página principal del Device Manager.
3. Seleccione <Asignar la siguiente dirección IP>.
  - La información IP de la cámara de mostrará según se ha configurado previamente.
4. Complete las categorías relacionadas con el campo IP & Puerto.

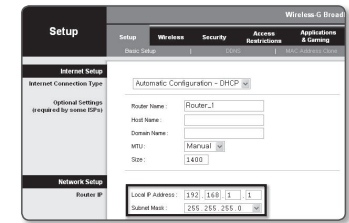
### Si no se utiliza un Enrutador de banda ancha

Pida al administrador de la red que establezca el valor de la <Dirección IP>, la <Máscara subred> y la <Gateway(Puerta de enlace)>.

- HTTP Puerto : se utiliza para acceder a la cámara utilizando el explorador de Internet, por defecto en 80.
- VNP Puerto : se utiliza para controlar la transferencia de señales de vídeo, por defecto en 4520.
- RTSP Puerto : este puerto controla la transmisión de datos en tiempo real. Su valor inicial es 554.

### Si se utiliza un Enrutador de banda ancha

- IP Address : introduzca una dirección que se encuentre en el rango de IP facilitado por el enrutador de banda ancha. ej.) 192.168.1.2~254, 192.168.0.2~254, 192.168.XXX.2~254
- Subnet Mask : La <Subnet Mask> del enrutador de banda ancha será la <Subnet Mask> de la cámara.
- Gateway : La <Local IP Address> del enrutador de banda ancha será la <Gateway> de la cámara.



- Es posible que los ajustes difieran dependiendo del modelo de enrutador de banda ancha conectado. Para obtener información adicional, consulte el manual de usuario del enrutador aplicable.
- Para obtener información adicional sobre el reenvío de puertos del enrutador de banda ancha, consulte "Configuración de Reenvío del Rango de Puertos (Asignación de Puertos)". (Página 19)

### Si el Enrutador de banda ancha tiene más de una cámara conectada

Configure los ajustes relacionados con IP y los ajustes relacionados con Port de forma distinta entre sí. ej.)

	Categoría	Cámara 1	Cámara 2
Ajustes relacionados con IP	Dirección IP	192.168.1.100	192.168.1.101
	Máscara subred	255.255.255.0	255.255.255.0
	Gateway	192.168.1.1	192.168.1.1
Ajustes relacionados con el puerto	HTTP Puerto	8080	8081
	VNP Puerto	4520	4521
	RTSP Puerto	554	555

- Si <HTTP Puerto> se define con un valor distinto a 80, debe facilitar el número de <Port> en la barra de direcciones del explorador de Internet antes de poder acceder a la cámara. ej.) <http://Dirección IP : HTTP Port>  
<http://192.168.1.100:8080>

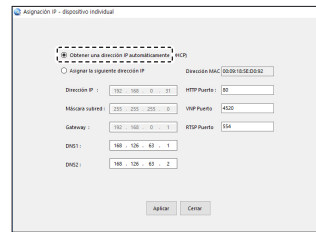
5. Haga clic en el botón [Aplicar].
6. Si aparece el mensaje de que la acción se ha realizado correctamente, haga clic en [Aceptar].

## Configuración de la IP dinámica

Reciba la dirección IP desde DHCP

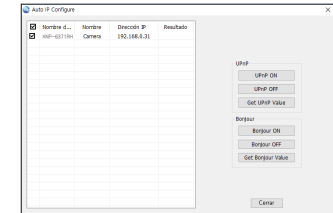
- Ejemplo de entorno de IP dinámica
  - Si a un enrutador de banda ancha, con cámaras conectadas, se le asigna una dirección IP mediante el servidor DHCP
  - Si se conecta la cámara directamente al módem utilizando los protocolos DHCP
  - Si las IP se asignan mediante el servidor DHCP interno a través de la LAN

1. Haga clic en la cámara de la lista para la que quiera cambiar la configuración de la IP.
2. Haga clic en **<IP Assign (Asignación de la IP)>** en la página principal del Device Manager.
3. Seleccione **<Obtener una dirección IP automáticamente (DHCP)>**.
4. Haga clic en botón **[Aplicar]**.
5. Si se muestra el mensaje de acción realizada correctamente, haga clic en **[Aceptar]**.



## CONFIGURACIÓN AUTOMÁTICA DE LA IP

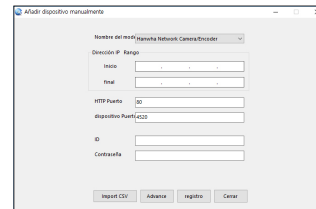
1. Haga clic en la cámara de la lista para la que quiera configurar automáticamente la IP.
2. En la página principal del Device Manager, haga clic en **< + >**.
  - Aparecerá el menú de configuración del equipo.
3. En el menú, haga clic en **<Auto IP Configure (Configuración IP automática)>**.
4. Haga clic en el botón **[Cerrar]**.



## CÓMO REGISTRAR LA CÁMARA MANUALMENTE

Si la cámara no puede encontrarse usando la función de buscar, puede registrarla remotamente insertando manualmente la información de la IP si la cámara está conectada a la red externa.

1. Haga clic en **<Add Devices (Agregar dispositivos)>** – **<Añadir dispositivo manualmente>** de la página principal del Device Manager.
2. Inserte el intervalo de la dirección IP que está buscando.
3. Seleccione el **<Nombre del modelo>** de la cámara que ha registrado e inserte el puerto HTTP, el puerto VNP, la ID y la contraseña.
4. Haga clic en el botón **[Registro]**.
5. Compruebe que la cámara esté registrada.
  - Verifique la dirección MAC en el adhesivo de la cámara.



## CONFIGURACIÓN DE REENVÍO DEL RANGO DE PUERTOS (ASIGNACIÓN DE PUERTOS)

Si ha instalado un enrutador de banda ancha con una cámara conectada, debe definir el reenvío del rango de puertos en el enrutador de banda ancha de forma que un PC remoto pueda acceder a la cámara en él.

### Reenvío manual del rango de puertos

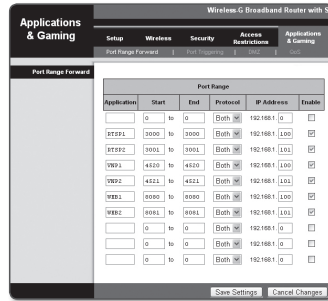
1. En el menú de configuración del enrutador de banda ancha, seleccione **<Applications & Gaming>** - **<Port Range Forward>**.

Para definir el reenvío del rango de puertos para un enrutador de banda ancha de terceros, consulte el manual del usuario de dicho enrutador de banda ancha.

2. Seleccione **<TCP>** y **<UDP Port>** por cada cámara conectada al enrutador de banda ancha.

El número de cada puerto que se configura para el router IP debe establecerse de acuerdo con el número de puerto designado en **<Config.>** - **<Basic>** - **<IP & Puerto>** en el visor web de la cámara.viewwer.

3. Una vez hecho, haga clic en **[Save Settings]**. Se guardarán los ajustes.

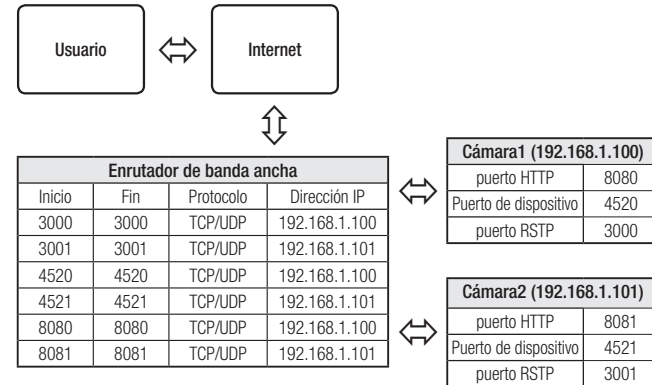


- El ajuste del reenvío del puerto es un ejemplo de configuración del router de la IP de CISCO.
- Es posible que los ajustes difieran dependiendo del modelo de enrutador de banda ancha conectado. Para obtener información adicional, consulte el manual de usuario del enrutador aplicable.

### Configuración del reenvío del rango de puertos de varias cámaras de red

- Puede definir una regla de reenvío de puertos en el dispositivo enrutador de banda ancha a través de su página Web de configuración.
- Un usuario puede cambiar los puertos usando la pantalla de configuración de la cámara.

Cuando la Cámara 1 y la Cámara 2 estén conectadas a un enrutador :




- El enrutamiento de puerto se puede hacer sin una configuración adicional del router si este está adaptado para la función UPnP (Universal Plug and Play). Después de conectar la cámara de red, seleccione la casilla de verificación del menú **<Conexión rápida>** en **<Wisenet DDNS>** en **"Configuración -> Red -> DDNS"**.

## CONEXIÓN A LA CÁMARA DESDE UN PC LOCAL COMPARTIDO

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1. Ejecute el Device Manager.  
Rastreará las cámaras conectadas y mostrará una lista de ellas.
2. Haga doble clic en una cámara para acceder a ella.  
Se inicia el explorador de Internet y se conecta a la cámara.


 ■ También puede acceder a la cámara introduciendo la dirección IP de la cámara encontrada en la barra de direcciones del explorador de Internet.

## CONEXIÓN A LA CÁMARA DESDE UN PC REMOTO A TRAVÉS DE INTERNET

---

En un ordenador remoto que no esté en el clúster de la red del router de banda ancha no está permitido, por lo que los usuarios pueden acceder a las cámaras dentro de la red de un router de banda ancha mediante el uso de la URL del DDNS de la cámara.

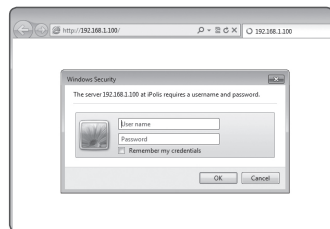
1. Antes de poder acceder a una cámara de una red de enrutador de banda ancha, debe haber definido el reenvío del rango de puertos para el enrutador de banda ancha.
2. Desde el PC remoto, inicie el explorador de Internet e introduzca la dirección URL de DDNS de la cámara, o la dirección IP del enrutador de banda ancha en la barra de direcciones.  
ej.) <http://ddns.hanwha-security.com/ID>

 ■ Para utilizar el DDNS de Wisenet, regístrese en la página de inicio del DDNS de Wisenet (<http://ddns.hanwha-security.com>) y registre el producto en **[Mi DDNS]>[Registrar producto]**.

## CONEXIÓN A LA CÁMARA

### Procedimiento normal

1. Inicie el explorador de Internet.
2. Introduzca la dirección IP de la cámara en la barra de direcciones.
  - ej.) • Dirección IP (IPv4) : 192.168.1.100 → http://192.168.1.100
  - Debe aparecer el diálogo de inicio de sesión.
  - Dirección IP (IPv6) : 2001:230:abcd:ffff:0000:0000:ffff:1111 → http://[2001:230:abcd:ffff:0000:0000:ffff:1111] - Debe aparecer el diálogo de inicio de sesión.



### Si el número de puerto HTTP no es 80

1. Inicie el explorador de Internet.
2. Introduzca la dirección IP y el número de puerto HTTP de la cámara en la barra de direcciones.
  - ej.) Dirección IP : 192.168.1.100:HTTP Port number(8080)
  - http://192.168.1.100:8080 - Debe aparecer el diálogo de inicio de sesión.

### Utilización del URL

1. Inicie el explorador de Internet.
2. Introduzca el URL de DDNS de la cámara en la barra de direcciones.
  - ej.) Dirección URL : http://ddns.hanwha-security.com/ID
  - Debe aparecer el diálogo de inicio de sesión.

 La conexión de red está desactivada en el entorno LAN.

### Conexión a través de UPnP

1. Ejecute el sistema cliente o sistema operativo para el protocolo UPnP.
2. Haga clic en el nombre de la cámara para realizar la búsqueda.
  - En el sistema operativo Windows, haga clic en el nombre de la cámara de búsqueda en el menú de red.
  - Aparece la ventana de inicio de sesión.

### Conexión a través de Bonjour

1. Ejecute el sistema cliente o el sistema operativo para el protocolo Bonjour.
2. Haga clic en el nombre de la cámara para realizar la búsqueda.
  - En el sistema operativo Mac, haga clic en el nombre de la cámara buscada desde la pestaña Bonjour de Safari.
  - Aparece la ventana de inicio de sesión.

### Para comprobar la dirección de DDNS

Si la cámara está conectada directamente al módem de cable DHCP, al módem DSL o al módem PPPoE, la dirección IP de la red cambiará cada vez que intente conectar al servidor del proveedor de servicios de Internet.

Si este es el caso, no se le informará de la dirección IP modificada por el DDNS.

Una vez que registre el dispositivo con IP dinámica en el servidor DDNS, puede fácilmente cambiar la IP modificada cuando intente acceder al dispositivo.

Para registrar el dispositivo en el servidor de <DDNS>, entre en http://ddns.hanwha-security.com y registre primero el dispositivo y, a continuación, establezca <Red> - <DDNS> de Web Viewer en <DDNS de Wisenet>, y facilite el <ID de producto> utilizado durante el registro de DDNS.

## CONFIGURACIÓN DE CONTRASEÑA

Al acceder al producto por primera vez, debe registrar la contraseña de inicio de sesión.

Cuando aparezca la ventana “Cambiar contraseña”, introduzca la contraseña nueva.

- Para una nueva contraseña que tenga entre 8 y 9 dígitos, debe utilizar por lo menos 3 mayúsculas/ minúsculas, 3 números y 3 caracteres especiales. Para una contraseña que tenga entre 10 y 15 dígitos, debe utilizar por lo menos 2 de los tipos mencionados.
  - Caracteres especiales que se permiten. : ~!@#%&^\*()\_+={}|[]?/
- Para mayor seguridad, no se recomienda repetir los mismos caracteres ni entradas consecutivas de teclado en las contraseñas.
- Si ha perdido su contraseña, puede pulsar el botón **[RESET]** para iniciar el producto. Así pues, no pierda la contraseña utilizando un bloc de notas o memoricela.

## INICIO DE SESIÓN

Siempre que acceda a la cámara, aparecerá la ventana de inicio de sesión.

Introduzca el ID de usuario y la contraseña para acceder a la cámara.

1. Introduzca “**admin**” en el cuadro de entrada <User name>. La ID del administrador, “**admin**”, es fija y no es posible cambiarla.
2. Introduzca la contraseña en el campo de entrada <Password>.
3. Haga clic en **[OK]**.  
Si ha iniciado sesión correctamente, verá la pantalla de Live Viewer.

- Al acceder al visor de la cámara web, preste especial atención a la seguridad comprobando que los datos de imagen estén encriptados.
- Si marca la opción “**Remember my credentials**” una vez realizada la entrada, la próxima vez se iniciará sesión automáticamente sin que se le pida introducir la información de inicio de sesión.
- Podrá disfrutar de la mejor calidad de vídeo si el tamaño de pantalla es del 100%. Si se reduce la relación existe el riesgo de cortar la imagen en los bordes.

## ESPECIFICACIONES DE COMPATIBILIDAD DEL PLUG-IN PARA CADA NAVEGADOR

El visor web incluye el visor web con plugins actual y el nuevo visor web libre de plugins. Por esta razón, el visor web está disponible en los últimos entornos de navegador como Chrome, EDGE, Firefox (solo Windows 64-bit) donde plugins no son compatibles. Los plugins son recomendados para los navegadores IE y Safari para en los que sí se pueden instalar plugins. Según el entorno del navegador, pueden ocurrir las siguientes diferencias.

- **Navegadores Chrome, Firefox (solo Windows 64-bit), EDGE y Safari** : Incluso si el entorno del buscador no es compatible con ningún plugin, nuestro visor web libre de plugins permite el uso del visor web.
  - El rendimiento del visor web libre de plugins puede ser más bajo que el del visor web con plugins en función del códec y resolución de vídeo.
    - Si existen retrasos en el vídeo en vivo, un perfil libre de plugins (HD de H.264 (1280x720) 20FPS) se genera automáticamente.
    - Para la reproducción, pueden ocurrir retrasos en función del códec y la resolución.
  - La función de libre de plugins se optimiza para el navegador Chrome.
- **Navegadores IE y Safari** : Puede utilizar un visor web, incluso si no instala el visor web de plug-in existente.
  - Para supervisar/reproducir vídeos guardados sin problemas, es necesario instalar un plug-in.

## INSTALACIÓN DEL PLUGIN WebViewer

Si accede al visor web libre de plugins con el buscador IE e intenta utilizar funciones, como solicitar un vídeo en vivo o reproducir un vídeo grabado, se mostrará un mensaje de instalación. Cuando aparezca, debe instalar el plugin del visor de web para poder utilizar las funciones.

1. Cuando se accede por primera vez a la página de monitorización, se muestra la página de instalación. Haga clic [**Click Here**] en iniciar instalación.

! Si el estado de la descarga del archivo plug-in de instalación se suspende en el 99% en el navegador Internet Explorer, vuelva a intentarlo tras seleccionar "Release SmartScreen filter" en "Tool → SmartScreen filter".

2. Haga clic [**Run**] en la ventana de mensaje.
3. Haga clic [**Yes**] cuando aparezca una ventana que notifica que se cerrarán todas las ventanas del navegador.

✍ Los pasos 4 y 5 se omitirán si el Plug-in Web Viewer está instalado.

4. Cuando está instalada la antigua versión del Web Viewer Plug-in, se muestra una ventana de aviso que la versión antigua se borrará la pantalla. Haga clic [**Yes**] cuando la ventana de aviso aparece en la pantalla.

5. Haga clic en [**OK**].  
La versión anterior del Plug-in Web Viewer se elimina.

6. Haga clic en [**Install**] para iniciar la instalación del Plug-in Web Viewer.

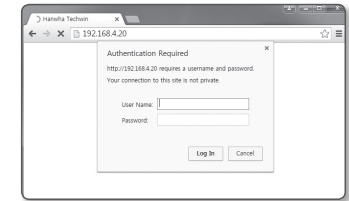
7. Haga clic en [**Finish**].  
La instalación del Plug-in Web Viewer se ha completado.

! En el explorador de Internet, si necesita pasar a la pantalla de instalación después de instalar el plugin de visor web, compruebe si `webviewer_activeplugin_lib.control` en el menú "Herramientas → Gestión de función adicional" está "Activado". Si no, y si hay un problema que persiste, a continuación, seleccione "Herramientas → Opciones de Internet → General" y borre todos los registros de búsqueda. Si todavía no funciona, ve a "Herramientas → Opciones de Internet → Seguridad → Sitios de confianza" y registre su IP o dominio de la cámara.

## USO DEL VISOR WEB SIN PLUG-IN

Si accede a la cámara a través del navegador web Google Chrome, Mozilla Firefox o MS Edge, no se instalará ningún plugin, pero aun así podrás ver el vídeo de la cámara en vivo sin instalar plugins.

1. Escriba su nombre de usuario y contraseña para iniciar sesión.
2. Cuando haya iniciado sesión en el sistema, aparecerá una pantalla de visualización en vivo de la cámara.



## CONFIGURACIÓN DEL VISOR WEB DE LA CÁMARA

1. Haga clic en el icono [**Configurar** (⚙)].
2. Aparece la ventana de Ajustes.
3. Es posible gestionar los ajustes de la información básica de la cámara, PTZ, vídeo y audio, red, evento, análisis, sistema y plataforma abierta a través de la red.
4. Haga clic en <Ayuda (🔗)> para ver descripciones detalladas de cada función.

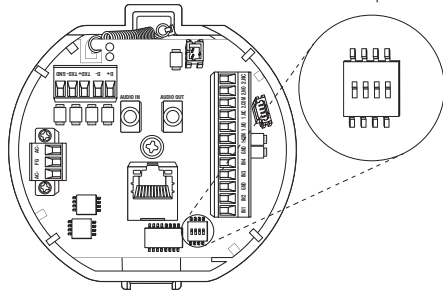
## AJUSTE DEL CONMUTADOR DIP

### Cómo configurar protocolos y conmutadores DIP de ID

Puede controlar diversos ajustes del sistema de la cámara utilizando los conmutadores de comunicación y DIP de ID. Antes de instalar el producto, configure los conmutadores DIP de acuerdo con el entorno de instalación.

1. Ajuste los conmutadores según su entorno de instalación. Para obtener información más detallada sobre la configuración, consulte el diagrama que se incluye en la página siguiente.
2. La cámara puede sufrir una avería si los conmutadores no están totalmente encendidos/apagados; vuelva a comprobar los conmutadores antes de finalizar la configuración.
3. Atención, el interruptor puede dañarse si se acciona con una herramienta afilada.
4. Atención, el interruptor puede dañarse si se acciona con demasiada fuerza.

Conmutador DIP de protocolo de comunicaciones (SW1)



### Ajustes del conmutador DIP de protocolo de comunicaciones (SW1)



Nº de patilla de SW1	Purpose
1	Reservado
2	Ajuste terminación 1
3	Ajuste terminación 2
4	Reservado

### • Ajustes de terminación

Para evitar la atenuación de señales de comunicación entre la cámara y el controlador, deben configurarse los elementos del final de la línea con los ajustes de terminación.

Posición de entrada de cámara	SW1-#2	SW1-#3
Terminación de la ruta más larga	ON	ON
En la ruta	OFF	OFF



- El valor predeterminado se resalta en cada tabla de ajustes.
- Para utilizar con este producto el controlador de otro fabricante, póngase en contacto con el Servicio postventa o con el Departamento de Tecnología.

## CABLES DE LA CÁMARA

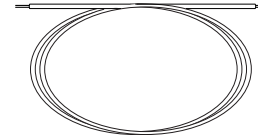
### Conexión de señal de control

- Comunicaciones RS-485



### Cable de comunicaciones

Para que la cámara comunique con el controlador, se necesita una línea de comunicaciones RS-485.



- Para la conexión, se recomienda un cable con una longitud máxima de 30m.
- El cable de comunicaciones no se incluye con la cámara.



## ESPECIFICACIONES

Opciones		Descripción
Video	Dispositivo de imágenes	1/2" 2,17M CMOS
	Píxeles totales	1952(H) x 1113(V), 2,17M
	Píxeles efectivos	1937(H) x 1097(V), 2,12M
	Sistema de barrido	Progresivo
	Iluminación mín.	Color : 0,01 Lux (1/30seg, F1,5) ByN : 0 Lux (LED IR encendido)
	Índice S/N	50dB
	Salida de vídeo	CVBS : 1,0 Vp-p / 75Ω compuesto, 720x480(N), 720x576(P) Para instalación
Objetivo	Longitud focal (índice de zoom)	6~222 mm (Óptico 37X)
	Coefficiente de apertura máx.	F1,5 (Angular) ~ F4,6 (Telescópico)
	Campo de visión angular	H : 59,3°(Angular) ~ 1,9°(Telescópico) / V : 35,8°(Angular) ~ 1,1°(Telescópico)
	Distancia mín. del objeto	Ancho 1,5 m, Tele 2 m
	Control de enfoque	Automático/Manual /EA de disparo
	Tipo de objetivo	Autom. DC
	Tipo montaje	Tipo en placa
Panorámica / Inclinación / Giro	Alcance de panorámica	360° sin final
	Velocidad de panorámica	Preaj. : 400°/seg., Manual : 0,024°/seg ~ 250°/seg
	Rango de inclinación	190°(-5° ~185°)
	Velocidad de inclinación	Preaj. : 300°/seg., Manual : 0,024°/seg ~ 250°/seg
	Secuencia	Preajuste (300ea), Oscilación, Grupo (6ea), Rastreo, Tour, Ejecución automática, Horario
	Precisión de pos. predet.	±0,2°
	Azmut	Sí (E/W/S/N/NE/NW/SE/SW OSD)
	Seguimiento automático	No / Sí

Opciones	Descripción	
Funcionamiento	Título de cámara	No / Sí (Se muestran 85 caracteres) - WW : Inglés/Numérico/Caracteres especiales - Común: Multilínea (Máx 5), color (gris / verde / rojo / azul / negro / blanco), transparencia, escala automática por resolución
	Día y noche	Autom. (ICR) / Color / ByN / Horario
	Compensación de luz de fondo	No / BLC / HLC / WDR
	Rango dinámico amplio	150dB
	Mejora de contraste	SSDR (No / Sí)
	Reducción de ruido digital	SSNR5 (Filtro de ruido 2D+3D) (No / Sí)
	Estabilizador digital de imágenes	Apagado/encendido (sensor Gyro incorporado)
	Desempeñado (Optical)	Autom. / Manual / No
	Detección de movimiento	Des/Act (8ea, rectángulo)
	Máscara de privacidad	No / Sí (24 zonas de zonas rectangulares) - Color : Gris / Verde / Rojo / Azul / Negro / Blanco - Opción de relación de zoom para el modo de máscara - Opción de mosaico
	Control de ganancia	No / Bajo / Medio / Alto
	Balance de blanco	ATW/AWC/Manual/Interior/Exterior (incluido mercurio y sodio)
	Velocidad de obturador electrónico	Mínimo / Máximo / Anti fluctuación (2 ~ 1/12.000 seg)
	Zoom digital	32x
	Rotación de imagen	Volteo / Espejo: Encendido/apagado
	Analítica de vídeo y audio	Manipulación, merodeo, detección direccional, línea virtual, entrada/salida, aparición/desaparición, detección de audio, detección de movimiento, detección de niebla, clasificación de sonido
	Interfaz en serie	RS-485 - Samsung-T, Pelco-D/P, Panasonic, Bosch, AD, GE, Vicon, Honeywell
E/S alarma	Entrada 4ea / Salida 2ea (Tipo de transmisión)	
Se activa la alarma	Entrada de alarma, Detección de movimiento, Analítica de vídeo y audio, Desconexión de red	

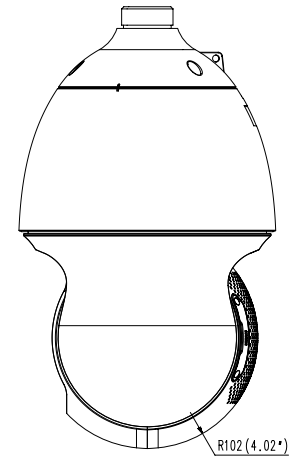
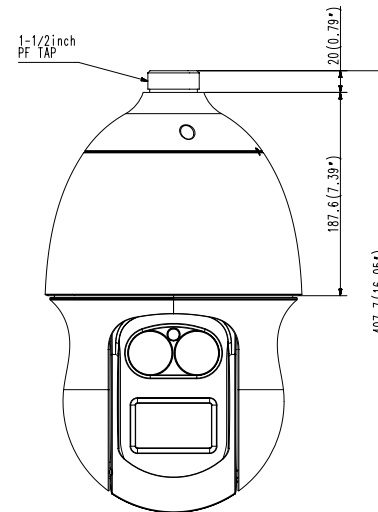
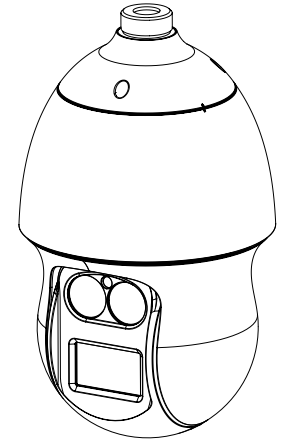
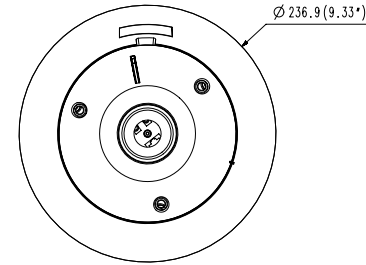
Opciones	Descripción
Funcionamiento	<b>Evento de alarma</b> <ul style="list-style-type: none"> <li>• Carga de archivos a través de FTP, correo electrónico</li> <li>• Notificación a través de E-mail, TCP y HTTP</li> <li>• Grabación con almacenamiento local (SD/SDHC/SDXC) o grabación NAS en el Evento (activación de alarmas)</li> <li>• Salida externa</li> <li>• Preconfiguración PTZ</li> </ul>
	<b>Entrada de audio</b> Seleccionable (entrada de micrófono/entrada de línea), Tensión de alimentación: 2.5 VCC (4 mA), Impedancia de entrada: aprox. 2K ohmios
	<b>Salida de audio</b> Salida de línea (cable mono de 3,5 mm), Nivel máximo de salida: 1 Vrms
	<b>Contador de píxeles</b> soporte
Red	<b>Ethernet</b> RJ-45 (10/100BASE-T)
	<b>Formato de compresión de vídeo</b> H.264 (MPEG-Parte 4 10/AVC) : H.265, Movimiento JPEG
	<b>Resolución</b> 1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
	<b>Velo. máx. de fotogramas</b> H.265/H.264: Máx. 60 fps en todas las resoluciones Movimiento JPEG: Máx. 30 fps en todas las resoluciones
	<b>Códec inteligente</b> Modo Manual (área con base: 5EA)
	<b>Ajuste de calidad de vídeo</b> H.264/H.265/MJPEG : Control de nivel de tasa de bits
	<b>Método de control de vel. de bits</b> H.264/H.265 : H.264 / H.265: CBR o VBR, con WiseStream Movimiento JPEG : VBR
	<b>Capacidad de flujo de datos</b> Flujo de datos multiple (hasta 10 perfiles)
	<b>Formato de compresión de audio</b> G.711 $\mu$ -law / G.726 Selectable G.726 (ADPCM) 8KHz, G.711 8KHz G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps AAC-LC : 48 kbps a 16 KHz
	<b>Comunicación de audio</b> Bidireccional

Opciones	Descripción
Red	<b>IP</b> IPv4, IPv6
	<b>Protocolo</b> 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
	<b>Seguridad</b> Autenticación de inicio de sesión HTTPS(SSL) Autenticación de inicio de sesión Digest Filtro de dirección IP Registro de acceso de usuarios Método de autenticación 802.1x (EAP-TLS, EAP-LEAP)
	<b>Método de flujo de datos</b> Unicast / Multicast
	<b>Acceso máx. de usuarios</b> 20 usuarios en modo Unicast
	<b>Almacenamiento Edge</b> SD/SDHC/SDXC (hasta 128 GB) - Se pueden descargar las imágenes en movimiento grabadas en la tarjeta de memoria SD/SDHC/SDXC. - La cámara puede detectar automáticamente cuando se conecta la memoria NAS (Almacenamiento conectado a la red) PC local para grabación instantánea (solo visor de plug-in)
	<b>Interfaz de programación de aplicaciones</b> ONVIF Profile S/G SUNAPI 2.0(HTTP API) WiseNet Open Platform
	<b>Idioma de página web</b> Inglés, Francés, Alemán, Español, Italiano, Chino, Coreano, Ruso, Japonés, Sueco, Portugués, Checo, Polaco, Turco, Holandés, Húngaro, Griego
	<b>Visor Web</b> SO admitido : Windows 7 / 8.1 / 10, MAC OS X 10.10, 10.11, 10.12 <b>Visor web sin plug-in</b> Navegador compatible: Google Chrome, MS Edge, Mozilla Firefox (Windows solo de 64 bit), Safari 10 de Apple (solo Mac OS X) <b>Visor web de plug-in</b> Navegador compatible: MS Explorer 11, Safari 10 de Apple (solo Mac OS X)
	<b>Software de gestión central</b> SmartViewer

Opciones	Descripción	
Ambiental	Temperatura / Humedad de funcionamiento	-50°C ~ +55°C (-58°F ~ +131°F) / Menos del 90% de HR
	Temperatura / Humedad deprzechowywania	-50°C ~ +60°C (-58°F ~ +140°F) / Menos del 90% de HR
	Protección de ingreso	IP66
	A prueba de vandalismo	IK10
Eléctrico	Tensión/corriente de entrada	AC24V±10%
	Consumo de energía	90W(calentador On, IR ON), 60W(calentador Off, IR On)
Mecánico	Color / Material	Negro (cabezal) + marfil (cuerpo) / Plástico+metal
	Dimensiones (Ø x Al)	Ø236,9 x 407,7 mm
	Peso	7,1kg

## VISTA DEL PRODUCTO

Unidad : mm (pulg.)



## SOLUCIÓN DE PROBLEMAS

PROBLEMA	SOLUCIÓN
El volumen del micrófono cambia con regularidad cuando se accede al visor web a través de Chrome o Firefox en Windows 10.	<ul style="list-style-type: none"> <li>Esto sucede cuando el driver del micrófono se configura en Realtek. Cámbialo al instalar el driver de dispositivo de audio High Definition (Driver predeterminado de Windows) o un driver de terceros.</li> </ul>
No se visualiza ningún video al acceder al visor web sin plug-in en Safari a través de HTTPS.	<ul style="list-style-type: none"> <li>En la ventana emergente de autenticación que aparece cuando se accede inicialmente a https, haga clic en "Ver certificado de autenticación" y seleccione la casilla "Confiar siempre al conectar con la IP del visor web designado".</li> <li>Si el visor web continúa sin mostrar un video después de seleccionar "Siguiente" en la ventana de mensaje siguiente, pulse la tecla de Comando + Q para salir del navegador Safari, obtenga acceso de nuevo y siga los procedimientos indicados anteriormente.</li> </ul>
No se puede acceder a la cámara desde un navegador web.	<ul style="list-style-type: none"> <li>Compruebe para asegurarse de que las configuraciones de Red de la cámara son las apropiadas.</li> <li>Compruebe para asegurarse de que todos los cables de red se han conectado bien.</li> <li>Si está conectado mediante DHCP, compruebe que la cámara puede admitir direcciones IP dinámicas sin problemas.</li> <li>Si la cámara está conectada al Enrutador de banda ancha, compruebe que el reenvío de puertos está configurado adecuadamente.</li> </ul>
El Visualizador se desconecta durante el control.	<ul style="list-style-type: none"> <li>Los Visualizadores conectados se desconectan debido a cualquier cambio en las configuraciones de cámara o de red.</li> <li>Compruebe todas las conexiones de red.</li> <li>Si la cámara está conectada por una red PPPoE, es posible que el Visualizador se desconecte con condiciones de red pobres.</li> </ul>
La cámara conectada a la red no se detecta en el programa del Device Manager.	<ul style="list-style-type: none"> <li>Apague las configuraciones de cortafuegos en su ordenador, y luego vuelva a buscar la cámara.</li> </ul>
Se superponen imágenes.	<ul style="list-style-type: none"> <li>Compruebe si dos o más cámaras están configuradas en una única dirección multicast en lugar de diferentes direcciones. Si se utiliza una única dirección para varias cámaras, las imágenes se pueden superponer.</li> </ul>
No aparece imagen.	<ul style="list-style-type: none"> <li>Si el método de transmisión está configurado como multicast, compruebe si hay un router que admita multicast en el LAN al que esté conectado la cámara.</li> </ul>

PROBLEMA	SOLUCIÓN
La grabación de audio no funciona aunque la entrada de audio está configurada.	<ul style="list-style-type: none"> <li>Ve a &lt;Básicos&gt;-&lt;Perfil de vídeo&gt; y comprobar el cuadro de la &lt;Entrada de audio&gt;.</li> </ul>
Después de configurar <Detección de movimiento> para <Activar> en <Analítica>, no se envía ningún archivo por e-mail aunque se haya producido un evento de analítica de vídeo en la cámara.	<ul style="list-style-type: none"> <li>Verifique los ajustes en la secuencia siguiente:                             <ol style="list-style-type: none"> <li>Compruebe los ajustes de &lt;Fecha y hora&gt;.</li> <li>&lt;Detección de movimiento&gt; debe definirse en &lt;Activar&gt;.</li> <li>Compruebe si la opción &lt;E-mail&gt; del menú &lt;Config. de evento&gt; está marcada para ser utilizada.</li> </ol> </li> </ul>
No se encuentra ninguna señal en el puerto de salida de alarma cuando se genera un evento de análisis de vídeo inteligente.	<ul style="list-style-type: none"> <li>Compruebe los ajustes del puerto de salida de alarma.</li> </ul>
No se puede grabar en la tarjeta de memoria SD.	<ul style="list-style-type: none"> <li>Compruebe si la tarjeta de memoria está defectuosa.</li> </ul>
La tarjeta de memoria SD está insertada pero no funciona correctamente.	<ul style="list-style-type: none"> <li>Compruebe si la tarjeta de memoria se ha insertado en la dirección correcta. En esta cámara, no se garantiza el funcionamiento de una tarjeta de memoria formateada con otros dispositivos</li> <li>Formatee de nuevo la tarjeta de memoria en el menú &lt;Config.&gt; → &lt;Evento&gt; → &lt;Almacenamiento&gt;.</li> </ul>
No se puede grabar en la NAS.	<ul style="list-style-type: none"> <li>Compruebe que la información registrada en la NAS es correcta.</li> </ul>
Se está indicando que la configuración de la NAS ha fallado.	<ul style="list-style-type: none"> <li>Compruebe que la dirección IP de NAS sea válida.</li> <li>Compruebe que el ID / contraseña de NAS sea válido</li> <li>Compruebe que puede acceder a la carpeta designada como la carpeta básica utilizando el ID de la NAS.</li> <li>Asegúrese de que los elementos SMB / CIFS de NAS estén sin marcar.</li> <li>Compruebe que la dirección IP de NAS y la dirección IP de la cámara tengan el mismo formato. Ejemplo) el valor inicial de la NAS y de la máscara de subred de la cámara es 255.255.255.0. Si la dirección IP es 192.168.20.32 entonces la dirección IP de NAS debe estar entre 192.168.20.1 y 192.168.20.255.</li> <li>Verifique si ha intentado acceder como otro usuario sin formatear la carpeta básica almacenada o usada.</li> <li>Compruebe que utilizó las unidades NAS recomendadas.</li> </ul>

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Busybox	GPL 2.0	<a href="http://www.busybox.net/downloads/snapshots">http://www.busybox.net/downloads/snapshots</a>
iproute2-4.3.0	GPL 2.0	
iptables-1.4.21	GPL 2.0	<a href="http://ftp.netfilter.org/pub/iptables">http://ftp.netfilter.org/pub/iptables</a>
ethtool-4.2	GPL 2.0	
mtd-1.5.2	GPL 2.0	<a href="ftp://ftp.infradead.org/pub/mtd-utils">ftp://ftp.infradead.org/pub/mtd-utils</a>
mi-diag-2.11	GPL 2.0	
rp-pppoe-3.11	GPL 2.0	<a href="http://www.roaringpenguin.com/pppoe/">http://www.roaringpenguin.com/pppoe/</a>
wpa_supplicant-2.5	GPL 2.0	
bash-4.3.30	GPL 3.0	
zeroconf	GPL 2.0	

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Component Name	License	URL
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inetutils	LGPL 3.0	
neon-0.29.6	LGPL 2.0	<a href="http://www.webdav.org/neon/">http://www.webdav.org/neon/</a>

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- Version 1.1

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

#### 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.

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1. "T-Kernel" means a real-time operating system controlled and distributed by T-Engine Forum on behalf of the copyright holder thereof.
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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.
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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.
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**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.

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3. to distribute a copy of a work to the general public or a large number of specific persons.

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1. to perform any and all acts set forth in the Article 4.3 above.
2. to develop and manufacture the Embedded Product containing the Binary Code, and, whether with or without payment, provide the End User with the same and make the Binary Code available to the End User on the Embedded Product.

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#### **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.

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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

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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.

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.

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1. The member shall confirm that the object hardware is the T-Engine Hardware or the Similar Hardware to T-Engine Hardware.
2. The member shall provide T-Engine Forum with a complete set of operational environment for the object hardware and T-Kernel free of charge when requesting the distribution.
3. The member shall submit test results of the Ported Source Code to T-Engine Forum when requesting the distribution.

4. In the event that T-Engine Forum accepts the request mentioned in Article 6.2, T-Engine Forum shall register and distribute the Ported Source Code as the Source Code for T-Kernel. Provided, however, that the Ported Source Code may be treated in the same way as the Modified Source Code until the time of registration hereunder.

5. The provision set forth in Article 3 shall apply to the Ported Source Code registered in accordance with this Article.

#### **Article 7. Use for Other Purpose**

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

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2. In case of breach of this License Agreement by a member of T-Engine Forum, T-Engine Forum may take appropriate measures against the member; for example, the member is disqualified from membership, depending on what kind of breach has been committed by it.

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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1. This License Agreement shall be governed by and interpreted under the laws of Japan.

2. This License Agreement is executed in both Japanese text and English text provided that the Japanese text shall govern the interpretation and performance of this License Agreement.

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Julian Seward, [jseward@bzip.org](mailto:jseward@bzip.org)

bzip2/libbzip2 version 1.0.5 of 10 December 2007

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iperf performance test

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Component Name	License	URL
zlib-1.2.8	zlib / libpng	<a href="http://zlib.net/">http://zlib.net/</a>

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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).



Hanwha Techwin respeta el medio ambiente durante todo el proceso de fabricación de sus productos y realiza una serie de procedimientos orientados a ofrecer productos ecológicos.

El símbolo Eco representa el compromiso de Hanwha Techwin de fabricar productos que respeten el medio ambiente e indica a la vez que este equipo cumple con la Directiva de la Unión Europea EU RoHS.



### Eliminación correcta de este producto (Residuos de aparatos eléctricos y electrónicos)

(Aplicable en la Unión Europea y en países europeos con sistemas de recogida selectiva de residuos)

La presencia de este símbolo en el producto, accesorios o material informativo que lo acompañan, indica que al finalizar su vida útil ni el producto ni sus accesorios electrónicos (como el cargador, cascos, cable USB) deberán eliminarse junto con otros residuos domésticos. Para evitar los posibles daños al medio ambiente o a la salud humana que representa la eliminación incontrolada de residuos, separe estos productos de otros tipos de residuos y reciclelos correctamente. De esta forma se promueve la reutilización sostenible de recursos materiales.

Los usuarios particulares pueden contactar con el establecimiento donde adquirieron el producto o con las autoridades locales pertinentes para informarse sobre cómo y dónde pueden llevarlo para que sea sometido a un reciclaje ecológico y seguro.

Los usuarios comerciales pueden contactar con su proveedor y consultar las condiciones del contrato de compra. Este producto y sus accesorios electrónicos no deben eliminarse junto a otros residuos comerciales.



### Eliminación correcta de las baterías de este producto

(Aplicable en la Unión Europea y en otros países europeos con sistemas de recogida selectiva de baterías.)

La presencia de esta marca en las baterías, el manual o el paquete del producto indica que cuando haya finalizado la vida útil de las baterías no deberán eliminarse junto con otros residuos domésticos. Los símbolos químicos Hg, Cd o Pb, si aparecen, indican que la batería contiene mercurio, cadmio o plomo en niveles superiores a los valores de referencia admitidos por la Directiva 2006/66 de la Unión Europea. Si las baterías no se desechan convenientemente, estas sustancias podrían provocar lesiones personales o dañar el medioambiente.

Para proteger los recursos naturales y promover el reciclaje, separe las baterías de los demás residuos y reciclelas mediante el sistema de recogida gratuito de su localidad.

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