

**WISeNET**

# **CÁMARA DE RED**

Manual del usuario

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



# 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 aportarle 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 está destinado a ser suministrado por una Unidad de Alimentación de la Lista con la marca "Clase 2" o "LPS" y clasificado de 24 Vac (50/60 Hz) 1.1 A o 12 Vdc, 1.0 A. (XNV-6080RS/XNV-8080RS/XNV-6120RS)
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.

## 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.

## 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

Existe un riesgo de explosión si la batería se sustituye por otra que no sea adecuada. Tire las baterías usadas como se indica en las instrucciones.

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.

## ÍNDICE GENERAL

<b>DESCRIPCIÓN</b>	<b>3</b>	Instrucciones de Seguridad Importantes	<b>25</b>	Conexión a la Cámara
	6	Características del Producto	<b>25</b>	Configuración de contraseña
	6	Características Recomendadas del Ordenador	<b>26</b>	Inicio de Sesión
	6	Especificaciones de la Tarjeta de Memoria Micro SD/SDHC/SDXC Recomendada	<b>26</b>	Especificaciones de compatibilidad del plug-in para cada navegador
	6	Especificaciones recomendadas para NAS	<b>27</b>	Instalación del Plugin WebViewer
	7	Componentes	<b>27</b>	Uso del visor web sin plug-in
	8	Vista (XNV-6080RS/XNV-8080RS)		
	10	Vista (XNV-6080RS/XNV-8080RS)		
<b>INSTALACIÓN Y CONEXIÓN</b>	<b>12</b>	Instalación	<b>28</b>	Especificaciones
	15	Inserción/Extracción de una Tarjeta de Memoria Micro SD	<b>31</b>	Vista del Producto
	16	Conexión con otros Dispositivos	<b>32</b>	Solución de Problemas
			<b>33</b>	Open Source Announcement
<b>CONEXIÓN Y CONFIGURACIÓN DE LA RED</b>	<b>19</b>	Conectar la Cámara Directamente a la Red de Área Local		
	19	Conexión Directa de la Cámara a un Módem DSL/Cable Basado en DHCP		
	20	Conexión de la Cámara Directamente al Módem PPPoE		
	20	Conectar la Cámara a un Enrutador de Banda Ancha con el Módem PPPoE/Cable		
	21	Cómo usar el Device Manager		
	21	Búsqueda automática de la cámara		
	21	Cómo configurar la dirección IP		
	22	Cómo registrar la cámara manualmente		
	22	Configuración automática de la IP		
	23	Configuración de Reenvío del Rango de Puertos (Asignación de Puertos)		
	24	Conexión a la Cámara desde un PC local Compartido		
	24	Conexión a la Cámara desde un PC remoto a Través de Internet		

## CARACTERÍSTICAS DEL PRODUCTO

- **Material: acero inoxidable**

El exterior de la cámara está hecho de acero inoxidable, con lo cual se puede instalar en diversos entornos especiales debido a sus propiedades anticorrosión y su facilidad de manejo.

- **Antipolvo/Impermeable**

El diseño a prueba de polvo/impermeable protege el producto contra la lluvia y el polvo cuando se instala al aire libre.

- **Modo IR**

Si se enciende el indicador de IR, el producto cambia al modo de IR para impedir que un objeto se vea demasiado brillante, lo cual ayuda a identificar el objeto a una distancia corta.

- **Compatible con vídeos de resolución de píxeles de 2 M (XNV-6080RS/XNV-6120RS)**

- **Compatible con vídeos de resolución de píxeles de 5 M (XNV-8080RS)**

- **Flujo de datos múltiple**

Esta cámara de red puede mostrar simultáneamente vídeos en diferentes resoluciones y calidades utilizando CÓDEC diferentes.

- **Supervisión basada en el Explorador Web**

Utilización de un explorador web de Internet para mostrar la imagen en un entorno de red local.

- **Alarma**

Cuando se produce un evento, el vídeo se envía a la dirección de E-mail registrada por el usuario, se envía al servidor FTP, se almacena en una tarjeta Micro SD o NAS (Network Attached Storage - Almacenamiento en la Red), o se envía una señal al terminal de salida de alerta.

- **Detección de sabotaje**

Detecta intentos de sabotaje en la vigilancia del vídeo.

- **Función de detección de desenfoque**

Detecta el fenómeno de desenfoque en la lente de la cámara.

- **Detección de movimiento**

Detecta movimiento en la entrada de vídeo de la cámara.

- **Detección de audio**

Detecta sonido por encima del nivel concreto especificado por el usuario.

- **Códec inteligente**

Aplica de forma adaptativa códecs para una parte del campo de visión de la cámara para mejorar la calidad de dicha área especificada por el usuario.

- **Detección automática de la red desconectada**

Detecta la desconexión de red antes de activar un evento.

- **Detección de neblina**

Detecta neblina que sea más densa que el nivel de detección.

- **Detección de rostro**

Detecta las caras en el área especificada de la entrada de vídeo de la cámara.

- **Función AVI (Análisis de vídeo inteligente)**

Detecta un movimiento o una situación que cumple las reglas de evento configuradas.

- **Clasificación de la fuente de sonido**

Detecta una fuente de sonido especificada por el usuario.

- **Compatibilidad con ONVIF**

Este producto es compatible con ONVIF Profile-S&G.

Para más información, consulte [www.onvif.org](http://www.onvif.org).



## CARACTERÍSTICAS RECOMENDADAS DEL ORDENADOR

- CPU : Intel(R) Core(TM) i7 a 3,4 GHz o superior

- RAM : 8G o superior

- SO admitido : MS Windows, Mac OS X

- **Visor web sin plug-in**

Navegadores web compatibles: Google Chrome, MS Edge, Mozilla Firefox(sólo compatible con Windows 64bit), Apple Safari (sólo compatible con Mac OS X)

- **Visor web de plug-in**

Navegadores web compatibles: MS Explore, Apple Safari (sólo compatible con Mac OS X)

※ Consulte el apéndice para obtener información detallada de la versión del sistema operativo y el navegador.

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

- Capacidad recomendada : De 16 GB a 256 GB (tipo MLC)

- Para esta cámara se recomiendan los siguientes tipos de tarjetas de memoria de los siguientes fabricantes.

- Fabricante : SanDisk, Transcend

- Familia de productos : High endurance

## 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.








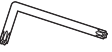
Productos recomendados	Tamaños disponibles
QNAP NAS	Accesos simultáneos para un máximo de 16 cámaras.
NAS Synology	Accesos simultáneos para un máximo de 16 cámaras.










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.)

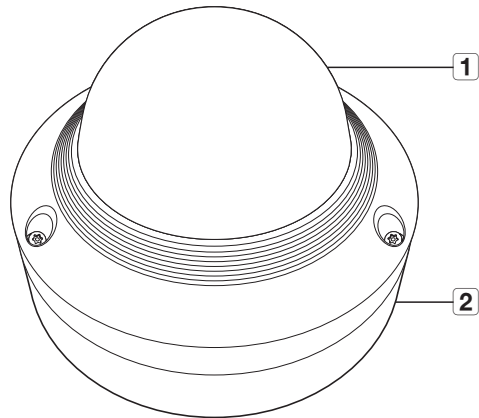
Aspecto	Nombre de elemento	Cantidad	Descripción
	Cámara	1	
	Manual de consulta rápida (Opcional)	1	
	Tarjeta de garantía (Opcional)	1	
	Cable para probar el monitor	1	Se utiliza para probar la conexión de la cámara en un dispositivo de visualización portátil
	Placa de montaje	1	Guía de instalación del producto
	Bloque de terminales de energía	1	Conectado al enchufe
	Tornillo de rosca cortante	4	Se utiliza para la instalación en pared o en techo
	Llave en forma de estrella	1	Se utiliza para quitar y sustituir la tapa del domo

Aspecto	Nombre de elemento	Cantidad	Descripción
	Cable de alimentación	1	Se utiliza para conectar al puerto de alimentación
	Cable de audio/alarma	1	Se utiliza para conectar al puerto de audio y alarma
	Pasacables	1	Bujes comunes para todos los cables
	Anclaje de plástico	4	Para fijar un tornillo, insertado en un orificio (fuerza de anclaje reforzada)
	Tornillos de rosca	3	Se utilizan para montar la cubierta del domo al instalar el producto en un tubo, en un soporte de montaje de pared, etc. o para bloquear un orificio.
	Tipo de tarjeta que absorbe la humedad	1	Se adjunta cuando se instala.
	Instalador de tapa	1	Se usa cuando se conecta un cable RJ45

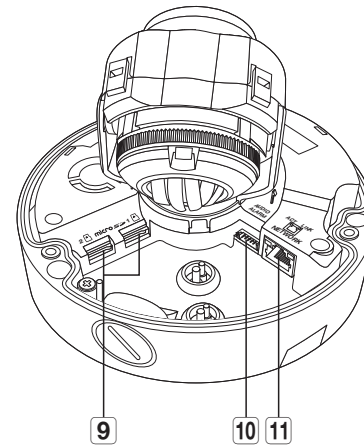
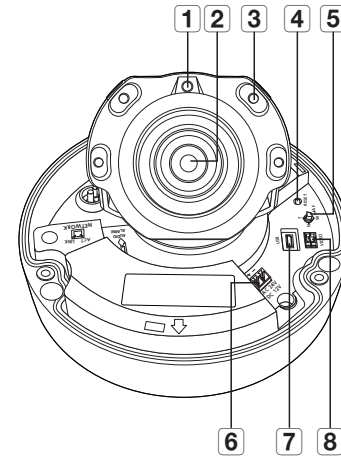
VISTA (XNV-6080RS/XNV-8080RS)

Componentes

Aspecto



Elemento	Descripción
<b>1</b> Tapa curvada	Cubierta utilizada para proteger el objetivo y la unidad principal.
<b>2</b> Caja de la cámara	Parte del alojamiento que cubre la carcasa de la cámara.





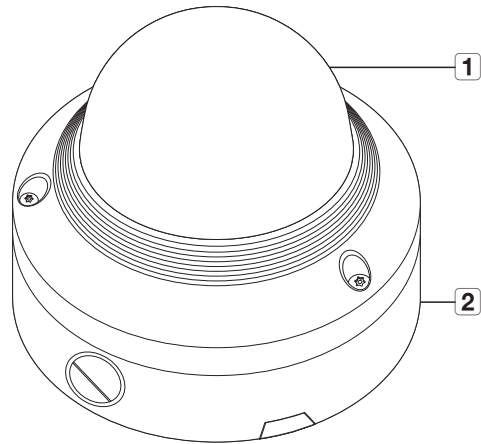
Elemento	Descripción	
<b>1</b> Sensor de iluminación	Detecta la luz entrante para controlar el LED de infrarrojos.	
<b>2</b> Objetivo	Objetivo de la cámara.	
<b>3</b> LED IR	Son LED de infrarrojos que se controlan mediante un sensor de iluminación.	
<b>4</b> Botón de reinicialización	Este botón restaura los valores predeterminados de la cámara. Manténgalo pulsado durante unos 5 segundos para reiniciar el sistema. <b>!</b> 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>5</b> Botón de control de zoom/ enfoque	T	Acercar (Tele)
	W	Alejar (Wide)
	N	Enfoque de un objeto cercano (Near)
	F	Enfoque de un objeto lejano (Far)
	Control del enfoque	Pulse este botón para un control automático del enfoque.
<b>6</b> Puerto de Alimentación	Puerto para el bloque de terminales de alimentación.	
<b>7</b> Puerto USB MICRO	Puerto para conectar el dongle Wi-Fi. Puede comprobar el vídeo de instalación a través de las aplicaciones instaladas en el teléfono inteligente. Consulte " <b>Conectar al dongle WiFi</b> " en la página 16. <ul style="list-style-type: none"> <li>■ Wifi dongle y adaptador OTG se venden por separado.</li> </ul>	
<b>8</b> Prueba de salida de monitor	Puerto de salida para monitorizar la prueba de la salida de vídeo. Utilice el cable del monitor de prueba para conectarlo a una pantalla móvil y realizar la prueba de vídeo.	
<b>9</b> Compartimento de la tarjeta de memoria Micro SD	Compartimento de la tarjeta de memoria Micro SD.	

Elemento	Descripción	
<b>10</b> Puerto del cable de audio y alarma	Puerto para conectar cables de audio y alarma.	
	ARM-IN	Se utiliza para conectar el sensor de entrada de la alarma o el sensor externo de día/noche.
	ARM-OUT	Se utiliza para conectar la señal de salida de alarma.
	GND	Estos son los puertos comunes para conectar las señales de entrada/salida de la alarma.
	MIC	Se utiliza para conectar un micrófono.
	SPEAKER	Se utiliza para conectar altavoces.
<b>11</b> Puerto Red	Se utiliza para conectar el cable PoE o Ethernet para la conexión de red.	

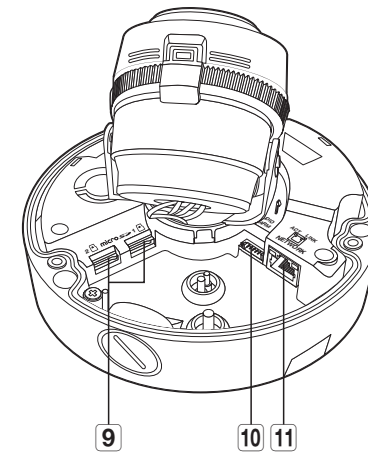
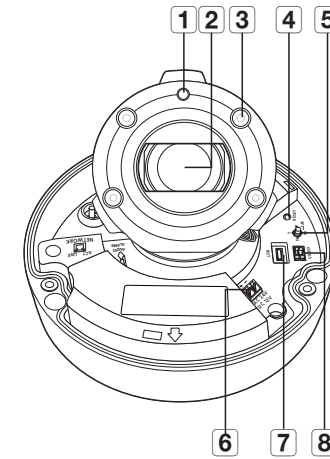
VISTA (XNV-6120RS)

Componentes

Aspecto



Elemento	Descripción
<b>1</b> Tapa curvada	Cubierta utilizada para proteger el objetivo y la unidad principal.
<b>2</b> Caja de la cámara	Parte del alojamiento que cubre la carcasa de la cámara.



Elemento	Descripción	
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<b>5</b> Botón de control de zoom/ enfoque	T	Acercar (Tele)
	W	Alejar (Wide)
	N	Enfoque de un objeto cercano (Near)
	F	Enfoque de un objeto lejano (Far)
	Control del enfoque	Pulse este botón para un control automático del enfoque.
<b>6</b> Puerto de Alimentación	Puerto para el bloque de terminales de alimentación.	
<b>7</b> Puerto USB MICRO	Puerto para conectar el dongle Wi-Fi. Puede comprobar el vídeo de instalación a través de las aplicaciones instaladas en el teléfono inteligente. Consulte " <b>Conectar al dongle WiFi</b> " en la página 16. <ul style="list-style-type: none"> <li>■ Wifi dongle y adaptador OTG se venden por separado.</li> </ul>	
<b>8</b> Prueba de salida de monitor	Puerto de salida para monitorizar la prueba de la salida de vídeo. Utilice el cable del monitor de prueba para conectarlo a una pantalla móvil y realizar la prueba de vídeo.	
<b>9</b> Compartimento de la tarjeta de memoria Micro SD	Compartimento de la tarjeta de memoria Micro SD.	

Elemento	Descripción	
<b>10</b> Puerto del cable de audio y alarma	Puerto para conectar cables de audio y alarma.	
	ARM-IN	Se utiliza para conectar el sensor de entrada de la alarma o el sensor externo de día/noche.
	ARM-OUT	Se utiliza para conectar la señal de salida de alarma.
	GND	Estos son los puertos comunes para conectar las señales de entrada/salida de la alarma.
	MIC	Se utiliza para conectar un micrófono.
	SPEAKER	Se utiliza para conectar altavoces.
<b>11</b> Puerto Red	Se utiliza para conectar el cable PoE o Ethernet para la conexión de red.	

## INSTALACIÓN

- !** La cámara es resistente al agua y cumple la norma IP66. No obstante, el conector hembra conectado al cable externo no lo es. Se recomienda instalar este producto por debajo del borde de los aleros para evitar que el cable quede en el exterior.

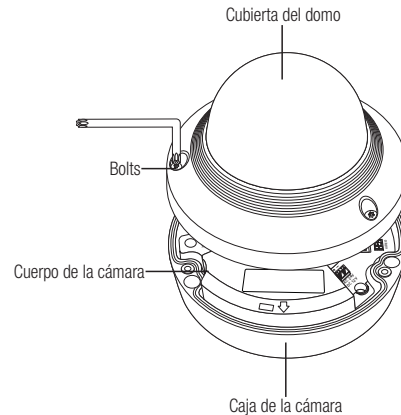
### Precauciones antes de la instalación

Asegúrese de leer las siguientes instrucciones antes de instalar la cámara:

- Debe estar instalada en una zona (techo o pared) que pueda soportar 5 veces el peso de la cámara, incluido el soporte de la instalación.
- Cables doblados o pelados pueden causar daños en el producto o producir un incendio.
- Por razones de seguridad, mantenga alejado a todo el mundo del lugar de la instalación. Y guarde aparte las pertenencias personales, como precaución.
- Si aplica una fuerza excesiva durante la instalación del producto, la cámara podría resultar dañada debido a una avería. Forzar el ensamblaje utilizando herramientas no compatibles podría dañar el producto.

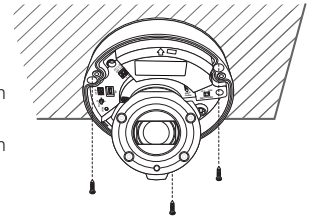
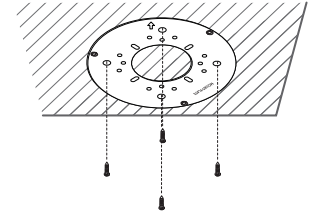
### Desmontaje

1. Utilice la llave en forma de estrella suministrada para aflojar el perno de sujeción de la cubierta del domo, girándolo hacia la izquierda. Retire la cubierta del domo.



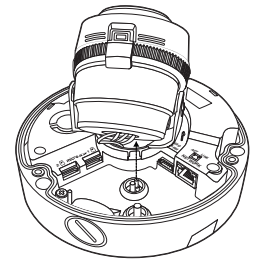
### Instalación

1. Taladre orificios para colocar los cuatro puntos D de la placa de montaje incluida como accesorio.
  - Oriente la marca [↑] hacia la dirección que desea supervisar.
2. Inserte completamente el anclaje de plástico.
3. Alinee el orificio de montaje de la cámara con el orificio donde se inserta el anclaje de plástico. A continuación, apriete el tornillo de rosca.
4. Ajuste la placa de montaje y la carcasa de la cámara como se muestra.
  - Oriente la marca [↑] hacia la dirección que desea supervisar.
5. Conecte y coloque los cables necesarios de forma que no puedan dañarse ni doblarse al instalar la cámara.
6. Ajuste el objetivo en la dirección que desee consultando la sección "Ajuste de la dirección de la cámara". (página 15)
7. Cierre la cubierta del domo.
  - Asegure firmemente el tornillo de fijación con una llave L para evitar que el agua se filtre.

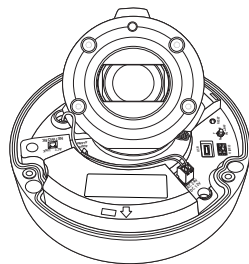


### Conexión del cable de alimentación y del cable LAN resistente al agua

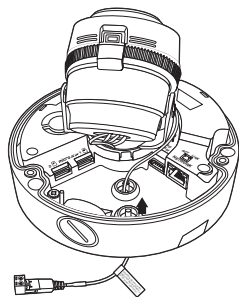
1. Retire la cubierta del domo de la carcasa.
2. Tire de la parte alargada del enchufe hacia la parte inferior y retírelo tal y como se indica en la figura.



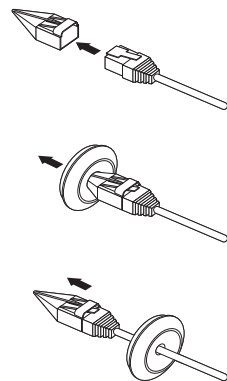
- Introduzca el cable de alimentación en el pequeño orificio realizado al retirar la parte del enchufe en el paso 2, y coloque el cable junto la ranura grande.
- Conecte el cable de alimentación al bloque de terminales de alimentación.



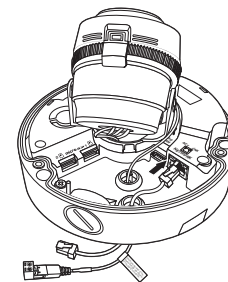
- Tire del tope de goma en el suelo como se muestra.



- Use el Instalador de tapa para permitir el paso del cable RJ45.

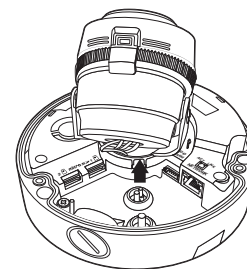


- Inserte el tope de goma nuevamente y conecte el cable LAN al terminal Ethernet.

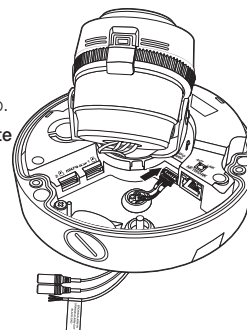


### Conexión del cable de alarma y audio

- Retire la cubierta del domo de la carcasa.
- Tire de la parte alargada del enchufe hacia la parte inferior y retírelo tal y como se indica en la figura.



- Inserte el cable de alarma/audio a través del orificio creado al retirar la tapa de goma en el N° 2, y conecte el cable al terminal de alarma.
- Alinee el cable para no dañarlo o atraparlo al instalar la cámara.
- Ponga la tapa de goma ubicada en el cable de alarma/audio en el orificio.
- Ajuste el objetivo en la dirección que desee consultando la sección "Ajuste de la dirección de la cámara". (página 15)
- Coloque la cubierta del domo.



## Colocación en el adaptador no suministrado

Elija y compre una de las opciones siguientes (no suministradas) apropiada para el lugar de instalación o que se adapte a sus preferencias.

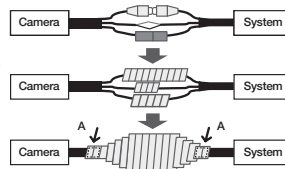
1. Retire la cubierta del domo de la carcasa según se indica en el apartado "**Desmontado**". (página 12)
2. Utilice el tornillo ensamblado para fijar la caja de la cámara al adaptador no suministrado.
3. Conecte y coloque los cables necesarios de forma que no puedan dañarse ni doblarse al instalar la cámara.
4. Instale la carcasa de la cámara en el orden inverso a las instrucciones de "**Desmontaje**".
5. Ajuste el objetivo en la dirección que desee consultando la sección "**Ajuste de la dirección de la cámara**". (página 15)
6. Cierre la cubierta del domo.
  - Apriete los pernos de sujeción con fuerza usando la llave en forma de estrella para evitar fugas de agua.

## Instalación en el exterior

Cuando instale la cámara en un lugar exterior, impermeabilícela con cinta de goma de butilo resistente al agua (disponible en tiendas), para que el agua no entre por el espacio del cable conectado al exterior.

1. Conecte los cables de alimentación, E/S, BNC y de la red LAN.

2. Envuelva el aislante negro del cable (Área A) y la parte de conexión del cable con cinta (de goma de butilo) impermeable, de modo que más de la mitad de esta cinta quede superpuesta.

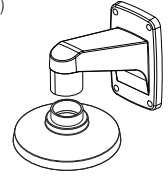


- ! Si el aislante del cable no se impermeabiliza correctamente, puede haber filtraciones. Asegúrese que el cable queda protegido con una densa capa de cinta.
- La cinta de butilo resistente al agua está fabricada con goma de butilo, que puede estirarse el doble de su longitud normal.

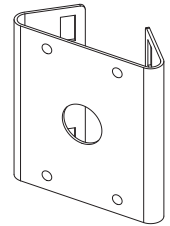
## Accesorios opcionales para la instalación

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

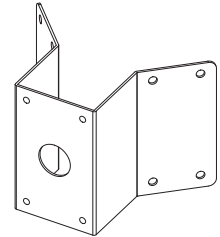
1. MONTAJE DE ESTRUCTURA (SBP-300WMS)/MONTAJE COLGANTE (SBP-HMS6)  
Este adaptador se utiliza para instalar la cámara domo en la pared.



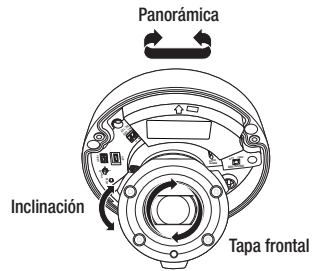
2. ADAPTADOR DE MONTAJE EN POSTE (SBP-300PMS)  
Se trata de un adaptador para la instalación del ADAPTADOR DE MONTAJE EN PARED (SBP-300WMS o SBP-300WMS1) en un poste cuyo diámetro sea mayor de 80 mm.



3. ADAPTADOR DE MONTAJE EN ESQUINA (SBP-300KMS)  
Se trata de un adaptador para la instalación del ADAPTADOR DE MONTAJE EN PARED (SBP-300WMS o SBP-300WMS1) en una esquina de la pared.



## Ajuste de la dirección de la cámara



### ▪ Ajuste de la dirección de vigilancia

Puede ajustar la dirección de la cámara sólo cuando la cámara esté fija al techo. Girar la unidad de la cámara a la izquierda o a la derecha se denomina Panorámica, ajustar la inclinación se denomina Inclinación y girar el objetivo sobre su eje se denomina Rotación.

- El rango efectivo de la panorámica es de 354 grados.
- El rango efectivo de giro es de 355 grados.
- El ángulo de rotación de inclinación es de 67° para XNV-6080RS/8080RS y de 75° para XNV-6120RS.

- ! La imagen puede quedar cubierta por la carcasa de la cámara según el ángulo.
- No gire la lente de enfoque/zoom con fuerza una vez que la carcasa del domo esté desinstalada. De lo contrario, puede realizar un enfoque incorrecto debido a un fallo del motor.

### ▪ Métodos de ajuste

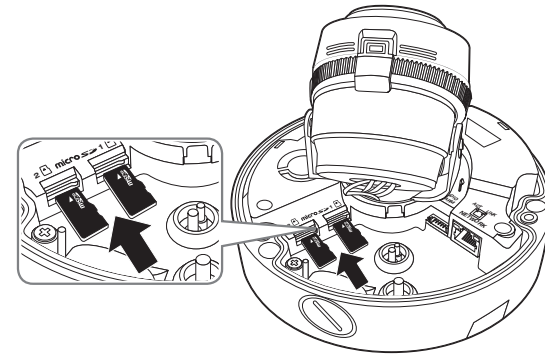
1. Ajuste el ángulo de giro después de instalar la cámara teniendo en cuenta la dirección que se va a supervisar.
2. Ajuste el ángulo horizontal, de modo que la imagen no quede invertida.
3. Ajuste el ángulo de inclinación de forma que la cámara apunte hacia el objeto vigilado.

## INSERCIÓN/EXTRACCIÓN DE UNA TARJETA DE MEMORIA MICRO SD

- ! Desconecte el cable de alimentación de la cámara antes de insertar la tarjeta de memoria Micro SD.
- No inserte al revés la tarjeta de memoria Micro SD forzándola. Si lo hace, podría dañar la tarjeta de memoria Micro SD.
- Cuando llueve o la humedad es alta, no se recomienda que inserte o expulse una tarjeta Micro SD.
- El desmontaje de la cubierta del producto se debe efectuar en un plazo de 5 minutos, o se podría producir condensación interna.

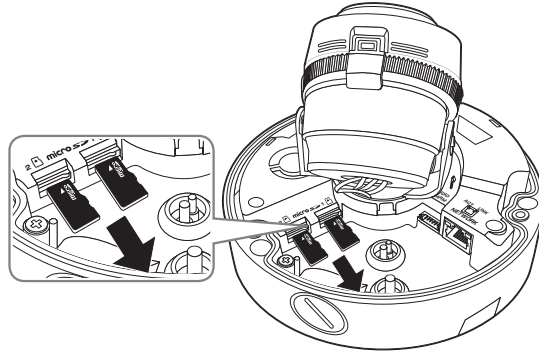
### Inserción de una tarjeta de memoria Micro SD

1. Separe la cubierta del domo de la cámara.
2. Inserte una tarjeta micro SD en la dirección de la flecha que aparece en la figura.



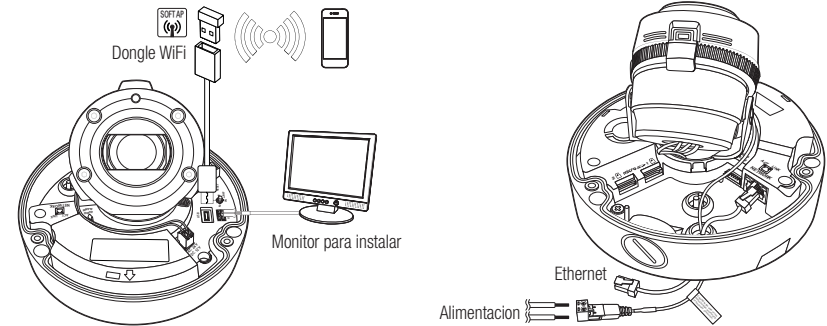
## Extracción de una tarjeta de memoria Micro SD

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 se presiona demasiado fuerte la tarjeta de memoria Micro SD, al liberarla es posible que salga despedida sin control de la ranura.
- Antes de retirar la tarjeta de memoria Micro SD, en **<Almacenamiento>**, ajuste el dispositivo en **<Des>** y pulse 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.

## CONEXIÓN CON OTROS DISPOSITIVOS



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

### Conexión Ethernet

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

### Conexión de Wi-Fi

#### Configuración de la cámara

1. Conecte el adaptador OTG (5 pines) y el dongle WiFi al terminal micro USB.

#### Configuración del smartphone

1. Instale la aplicación de instalación de Wisenet.
2. Seleccione el SSID de la cámara después de encender el WiFi.
3. Ejecute la aplicación de instalación de Wisenet.
4. Cuando inicie sesión en la cámara, el vídeo se conectará (contraseña inicial: 4321)
  - El vídeo se reproducirá sin estar conectado durante la conexión inicial.
5. Puede ajustar el ángulo de visión mientras ve el vídeo a través del smartphone.



### Fabricante de dongle recomendado

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

### Alimentación eléctrica

Utilice el destornillador para conectar cada línea (+, -) del cable de alimentación al puerto de alimentación correspondiente de la cámara.

- ! ■ Cuando se suministre PoE y 12V CC o PoE y 24V CA al mismo tiempo, el equipo se alimentará mediante la fuente externa (24V CA, 12V CC).
  - También puede utilizar un enrutador que incorpore PoE para suministrar energía a la cámara.
  - Utilice PoE que sea compatible con los protocolos IEEE 802.3af.
  - Se recomienda el uso de una única fuente para alimentar el aparato, PoE, 12 V CC o 24 V CA.
- Tenga cuidado de no invertir la polaridad al conectar el cable de alimentación.
- 24 V CA se pueden conectar en una unión no polar.
- Si desea conectar un dispositivo externo, debe apagar el dispositivo externo antes de continuar.
- Conecte primero el conjunto y la línea de alimentación del adaptador y, a continuación, conecte el cable de alimentación a la toma de la pared.

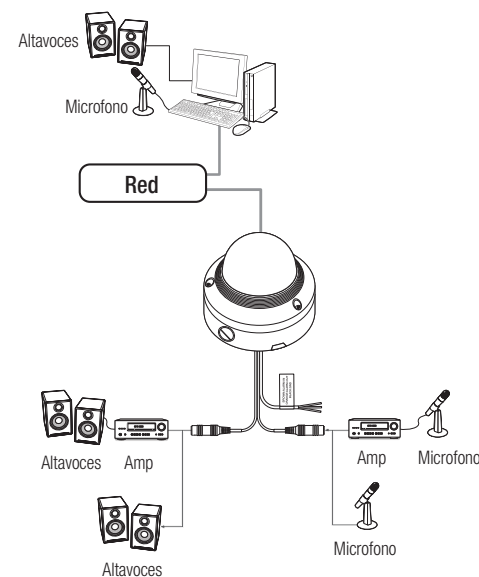
### Características del cable de alimentación para cada modelo

Modelo	Potencia de entrada	Tipo de cable (AWG)	Longitud del cable (Max.)
XNV-6080RS/8080RS/6120RS	DC 12V	#18	19m
		#16	30m
	AC 24V	#20	26m
		#18	40m

### Características del cable de red

Elemento	Contenido	Observaciones
Conector	RJ45	
Ethernet	10/100BASE-T	
Cable	UTP de categoría 5e	
Distancia máx.	100M	Resistencia de CC ≤ 0,188 Ω / m
Soporte PoE	IEEE 802.3af	

### Conectar la Entrada/Salida de Audio



1. Conecte el puerto AUDIO IN de la cámara con el micrófono o al puerto LINE OUT del amplificador al que está conectado el micrófono.
2. Conecte el puerto AUDIO OUT de la cámara con el micrófono o al puerto LINE IN del amplificador al que está conectado el altavoz.
3. Compruebe las especificaciones de entrada de audio.

#### • Códec de Audio

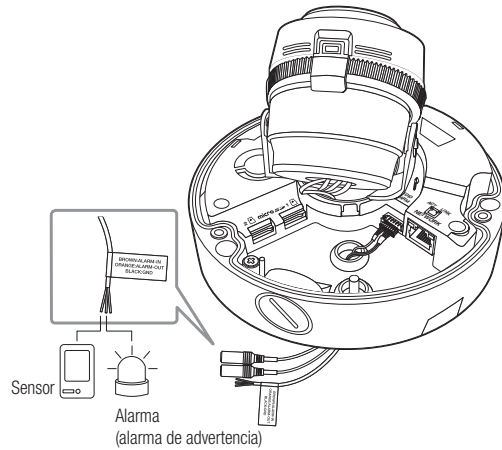
- Entrada de audio : G.711 PCM (Velocidad en bits: 64 kbps / Frecuencia de muestreo: 8 kHz), G.726 ADPCM (Velocidad en bits: 16 Kbps, 24 Kbps, 32 Kbps, 40 Kbps / Frecuencia de muestreo: 8 kHz), AAC (Bit Rate: 48Kbps / Frecuencia de muestreo: 16kHz)
- Salida de audio : G.711 PCM (Velocidad en bits: 64 kbps / Frecuencia de muestreo: 8 kHz)

#### • Audio Full dúplex

- **Entrada de Audio** : Seleccionable (micrófono/entrada de línea), tensión admitida: 2.5 V CC (4 mA), impedancia de entrada: 2K Ohm
- **Salida de audio** : Salida de línea (conector mono de 3,5 mm), salida máxima: 1 V<sub>rms</sub>
- **Impedancia de salida de línea** : 600Ω

## Conexión al cuadro del puerto de E/S

Conecte el cable de E/S de la alarma al puerto correspondiente en la caja de puertos.



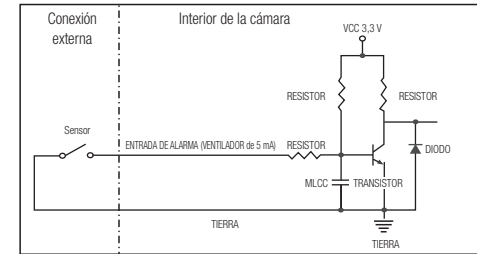
- ALARM-IN : Se utiliza para conectar el sensor de entrada de la alarma o el sensor externo de día/noche.
- ALARM-OUT : Se utiliza para conectar la señal de salida de alarma.
- GND : Puerto común para la señal de entrada/salida de alarma.

! Si los dispositivos (por ejemplo, luz parpadeante, alarma) que superan los límites de voltaje y potencia se conectan con el método de colector abierto, puede producirse un error de funcionamiento. Consulte el "Diagrama de cableado de salida de alarma" para conectar dispositivos que superen las cifras de voltaje y corriente. (página 18)

### Para conectar el sensor externo

Conecte un filamento de cada línea de señal (2 filamentos) de los sensores al puerto [ALARM IN], y conecte el otro filamento en el puerto [GND].

## Diagrama de cableado de entrada de alarma

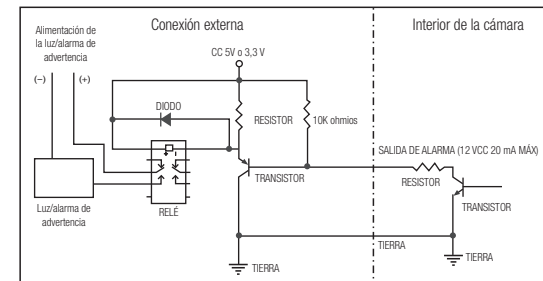


### Para conectar la salida de alarma

Si los dispositivos (por ejemplo, luz parpadeante, alarma) que superan los límites de voltaje y potencia se conectan con el método de colector abierto, puede producirse un error de funcionamiento.

Consulte el diagrama de conexión de salida de alarma inferior cuando conecte dispositivos que superen las condiciones de tensión y corriente.

## Diagrama de cableado de salida de alarma

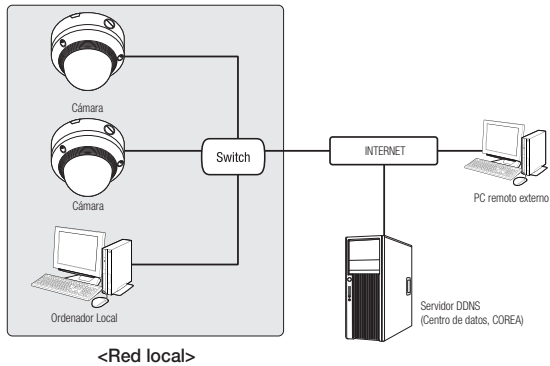


Puede fijar la configuración de red de acuerdo con sus configuraciones de red.

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

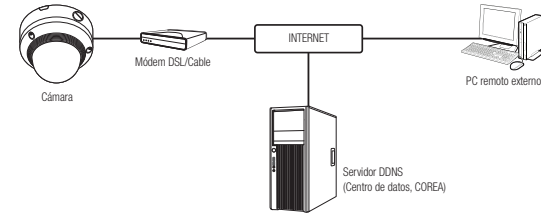
### Conectar con la cámara desde un ordenador local en la LAN

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 21)

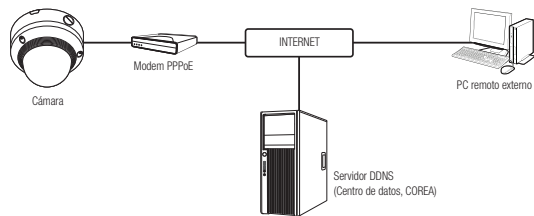
## CONEXIÓN DIRECTA DE LA CÁMARA A UN MÓDEM DSL/CABLE BASADO EN DHCP



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

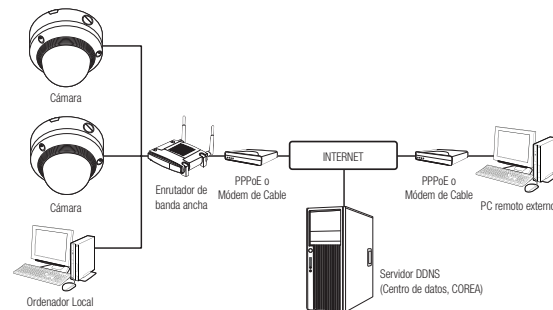


1. Conectar el PC del usuario directamente a la cámara de red.
2. Ejecute el Device Manager y cambie la dirección IP de la cámara de tal manera que pueda usar el navegador web en su ordenador de sobremesa para conectarse a Internet.
3. Utilice el navegador de Internet para conectar a Web Viewer.
4. Vaya 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.

- Seleccione : <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 reenvío de puertos del enrutador de banda ancha, consulte "Configuración de Reenvío del Rango de Puertos (Asignación de Puertos)". (Página 23)

## 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.

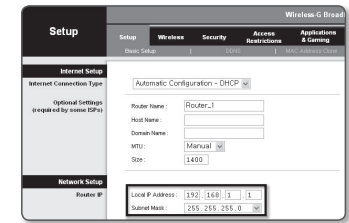
### Si no se utiliza un Enrutador de banda ancha

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 23)

### 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].

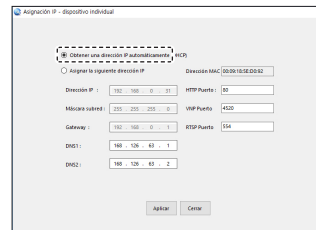
6. Si aparece el mensaje de que la acción se ha realizado correctamente, haga clic en [Aceptar].

## Configuración de la IP dinámica

Reciba la dirección IP desde DHCP

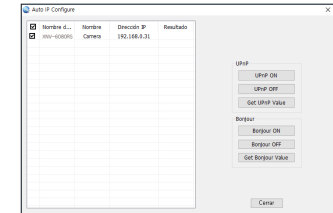
- Ejemplo de entorno de IP dinámica
  - Si a un enrutador de banda ancha, con cámaras conectadas, se le asigna una dirección IP mediante el servidor DHCP
  - Si se conecta la cámara directamente al módem utilizando los protocolos DHCP
  - Si las IP se asignan mediante el servidor DHCP interno a través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

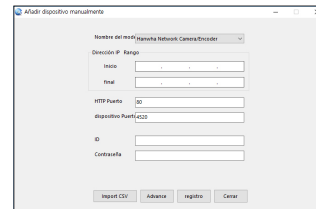
1. Haga clic en la cámara de la lista para la que quiera configurar automáticamente la IP.
2. En la página principal del Device Manager, haga clic en **< + >**.
  - Aparecerá el menú de configuración del equipo.
3. En el menú, haga clic en **<Auto IP Configure (Configuración IP automática)>**.
4. Haga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

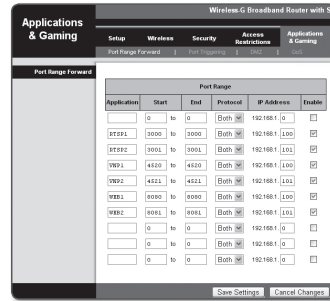
1. En el menú de configuración del enrutador de banda ancha, seleccione **<Applications & Gaming>** - **<Port Range Forward>**.

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.

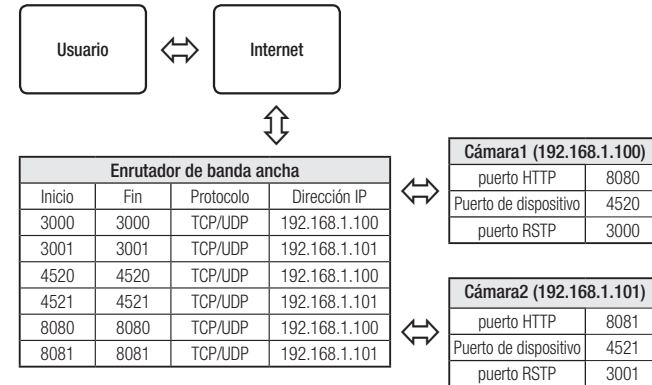


- El ajuste del reenvío del puerto es un ejemplo de configuración del router de la IP de CISCO.
- Es posible que los ajustes difieran dependiendo del modelo de enrutador de banda ancha conectado. Para obtener información adicional, consulte el manual de usuario del enrutador aplicable.

### 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>



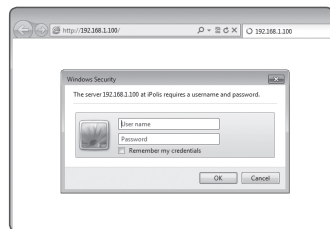
- Para utilizar el DDNS de Wisenet, regístrese en la página de inicio del DDNS de Wisenet (<http://ddns.hanwha-security.com>) y registre el producto en **[Mi DDNS]>[Registrar producto]**.



## 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 <Wisenet DDNS>, 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 de plug-in existente y un nuevo visor web sin plug-in están integrados de forma conjunta.

Esto le permite usar el visor web en los entornos de navegador más recientes que no admiten plug-ins, como Chrome, EDGE y Firefox (solo Windows 64 bits). Para los navegadores que permiten la instalación de complementos, como IE y Safari, se recomienda instalar el plug-in.

Según el entorno del navegador, pueden observarse las siguientes diferencias.

- **Navegadores Chrome, Firefox (solo Windows 64 bits), EDGE y Safari** : El entorno del navegador no permite el uso de complementos, pero puede usar el visor web si instala el visor web sin complementos.
  - Los visores web sin complementos pueden tener un rendimiento menor que los visores web basados en complementos, en función del códec y la resolución del vídeo.
    - Cuando hay un retraso en el vídeo en vivo, se crea automáticamente un perfil sin complementos (HD (1280x720) y 20 FPS de H.264).
    - Puede haber retrasos en la reproducción en función del códec y la resolución.
  - La función de complemento ha sido optimizada para el navegador Chrome.
- **Navegador IE, Safari** : Incluso si no instala el complemento del visor web con complemento existente, puede usar el visor web con funcionalidad limitada.
  - Para supervisar/reproducir vídeos guardados sin problemas, es necesario instalar un plug-in.

## INSTALACIÓN DEL PLUGIN WebViewer

Si intenta acceder al visor web sin complementos desde IE y solicita una vista en vivo con un códec que no sea el códec que se está reproduciendo actualmente, o si intenta usar la función de reproducción de vídeo grabado, aparecerá un mensaje de instalación.

En este momento, se debe instalar el complemento del visor web para usar las funciones normalmente.

1. Cuando se accede por primera vez a la página de monitorización, se muestra la página de instalación. Haga clic en **[Download plugin]** 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 en **[Run]** en la ventana de mensaje.
3. Haga clic en **[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 en **[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.

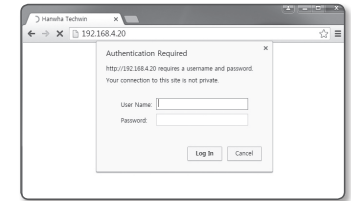


- En el explorador de Internet, si necesita pasar a la pantalla de instalación después de instalar el plugin de visor web, compruebe si `webviewer_activexplugin_lib.control` en el menú "Herramientas → Gestión de función adicional" está "Activado". Si no, y si hay un problema que persiste, a continuación,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

## USO DEL VISOR WEB SIN PLUG-IN

Aunque no es posible instalar plug-ins por separado, si accede a la cámara desde los navegadores Google Chrome, Mozilla Firefox o MS Edge, puede ver y controlar el vídeo de la cámara sin instalar complementos.

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.



### Para configurar 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.

**ESPECIFICACIONES**

Opciones	Descripción				
	XNV-6080RS	XNV-8080RS	XNV-6120RS		
Video	Dispositivo de imágenes	1/2.8" 2M CMOS	1/1.8" 6M CMOS	1/2.8" 2M CMOS	
	Píxeles totales	1945(H) x 1109(V) 2.16M	3096(H) x 2094(V)	1945(H) x 1109(V) 2.16M	
	Píxeles efectivos	1945(H) x 1097(V) 2.13M	2616(H) x 1976(V)	1945(H) x 1097(V) 2.13M	
	Sistema de barrido	Escaneo progresivo			
	Iluminación mín.	Color : 0,015 Lux(F1.4, 1/30 seg), ByN : 0 Lux (IR LED encendido)	Color : 0,07 Lux (F1.3, 1/30 seg), ByN : 0 Lux (IR LED encendido)	Color : 0,03 Lux (F1.6, 1/30 seg), ByN : 0 Lux (IR LED encendido)	
	Índice S/N	50dB			
	Salida de vídeo	CVBS : 1,0 Vp-p / 75Ω compuesto, 720x480(N), 720x576(P) Para instalación USB : Micro USB tipo B, 1280x720 para instalación			
Objetivo	Longitud focal (índice de zoom)	2,8~12mm(4.3x) Varifocal motorizado	3,9~9,4mm(2.4x) Varifocal motorizado	5,2~62,4 mm (Óptico 12X)	
	Coefficiente de apertura máx.	1.4(gran angular) ~ 3.6(Tele)	F1.3	1.6(gran angular) ~ 3.0(Tele)	
	Campo de visión angular	H : 119.5°, V: 62.8°, D : 142.1° H : 27.9°, V: 15.7°, D: 32.0°	H : 92.1°, V : 67.2°, D : 119.9° H : 38.7°, V : 29.0°, D : 48.6°	H : 54.58°(gran angular) ~ 5.30°(Tele) / V : 32.19(gran angular) ~ 3.00°(Tele) / D : 61.40°(gran angular) ~ 6.06°(Tele)	
	Distancia mín. del objeto	0.5m (1,64 pies)		2.1m (6,89 pies)	
	Control de enfoque	Enfoque sencillo (Motorizado V/F) / Manual - Control remoto a través de la red (Manual, Enfoque simple)		Auto/Manual/AF de disparo	
	Tipo de objetivo	DC Auto Iris, P-iris		DC Auto Iris	
	Tipo montaje	Tipo en placa			
	Panorámica / Inclinación / Giro	Rango de giro/inclinación/rotación	0° ~ 354° / 0° ~ 67° / 0° ~ 355°		0° ~ 354° / 0° ~ 75° / 0° ~ 355°

Opciones	Descripción			
	XNV-6080RS	XNV-8080RS	XNV-6120RS	
Funcionamiento	Longitud visualizable	50 m (164,04 pies)		70 m (229,66 pies)
	Título de cámara	No / Sí (Se muestran 85 caracteres) - W/W : Inglés/Numérico/Caracteres especiales - Común: Multilínea (Máx 5), color (gris / verde / rojo / azul / negro / blanco), transparencia, escala automática por resolución		
	Día y noche	Auto (ICR) / Color / B/N / Externo / Programación		
	Compensación de luz de fondo	No / BLC / HLC (enmascaramiento/atenuación) / WDR		
	Rango dinámico amplio	150dB	120dB	150dB
	Mejora de contraste	SSDR (No / Sí)		
	Reducción de ruido digital	SSNR5 (Filtro de ruido 2D+3D) (No / Sí)		
	Estabilizador digital de imágenes	No / Sí		No / Sí (sensor giroscópico incorporado)
	Desempeñado	Auto/Manual/No		
	Detección de movimiento	No / Sí (zonas poligonales 8ea, 8 puntos), transferencia		
	Máscara de privacidad	No / Sí (zonas poligonales 32ea) - Color: gris, verde, rojo, azul, negro, blanco - Mosaico		
	Control de ganancia	No / Bajo / Mediana / Alto	No / Bajo / Mediana / Alto / Manual	No / Bajo / Mediana / Alto
	Balance de blanco	ATW / AWC / Manual / Interior / Exterior (Mercurio y sodio incluidos)		
Contraste	Ajuste de nivel			
LDC	Sí / No (5 niveles con mín./máx.)			
Velocidad de obturador electrónico	Mínima / Máxima / Anti parpadeo (2 ~ 1/12,000 seg)			
PTZ Digitale	24X, PTZ Digitale(Predeterminado, Grupo)		24X	
Ajuste predeterminado	-		300ea	

Opciones		Descripción		
		XNV-6080RS	XNV-8080RS	XNV-6120RS
Funcionamiento	Volteo / Espejo	Volteo: Encendido/apagado Espejo: Encendido/apagado Pasillo: 90° /270°		
	Análisis de vídeo y audio	Detección de manipulación, detección de merodeo, detección direccional, detección de desenfoque, detección de neblina, línea virtual, entrada/salida, aparición/ desaparición, detección de audio, Detección de cara, detección de movimiento, seguimiento automático digital, clasificación de sonido		
	E/S alarma	Entrada 1ea / Salida 1ea		
	Se activa la alarma	Entrada de alarma, detección de movimiento, análisis de vídeo y audio, desconexión de red		
	Evento de alarma	<ul style="list-style-type: none"> <li>Subida de archivo a través de FTP, E-Mail</li> <li>Notificación a través de e-mail</li> <li>Almacenamiento local (SD / SDHC / SDXC) o NAS grabación en red desconectada y eventos (activación de alarmas)</li> <li>Salida externa</li> <li>Preajuste DPTZ</li> </ul>		
	Contador de píxeles	Soporte		
	Ethernet	RJ-45 (10/100BASE-T)		
Red	Formato de compresión de vídeo	H.265 / H.264 (MPEG-4 Parte 10 / AVC): Principal/Línea base/Alto Motion JPEG		
	Resolución	XNV-6080RS/XNV-6120RS : 1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240 XNV-8080RS : 2560x1920, 2560x1440, 1920x1080, 1600x1200, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240		
	Velo. máx. de fotogramas	H.265/H.264 : Máx 60fps en todas las resoluciones Motion JPEG : Máx 30fps	H.265/H.264 : Máx. 30fps en todas las resoluciones Motion JPEG : Máx. 30fps	H.265/H.264 : Máx 60fps en todas las resoluciones Motion JPEG : Máx 30fps
	Códec inteligente	Modo manual (basado en zona : 5ea)		

Opciones		Descripción		
		XNV-6080RS	XNV-8080RS	XNV-6120RS
Red	WiseStream II	Soporte		
	Ajuste de calidad de vídeo	H.264/H.265 : Control de nivel de vel. de bits de destino MJPEG : Control de nivel de vel. de bits de destino		
	Método de control de vel. de bits	H.264/H.265 : CBR o VBR Motion JPEG : VBR		
	Capacidad de flujo de datos	Flujo de datos múltiple (hasta 10 perfiles)		
	Entrada de audio	Seleccionable (entrada de micrófono/entrada de línea) Tensión de alimentación: 2.5 VCC (4 mA), Impedancia de entrada: aprox. 2K ohmios		
	Salida de audio	Salida de línea, salida máxima: 1 Vrms		
	Formato de compresión de audio	G.711 µ-law / G.726 Seleccionable G.726 (ADPCM) 8KHz, G.711 8KHz G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps AAC-LC : 48kbps a 8/16/32/48KHz		
	Comunicación de audio	Bidireccional		
	IP	IPv4, IPv6		
	Protocolo	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		
	Seguridad	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)		
	Método de flujo de datos	Unicast / Multicast		
	Acceso máx. de usuarios	20 usuarios en modo Unicast		

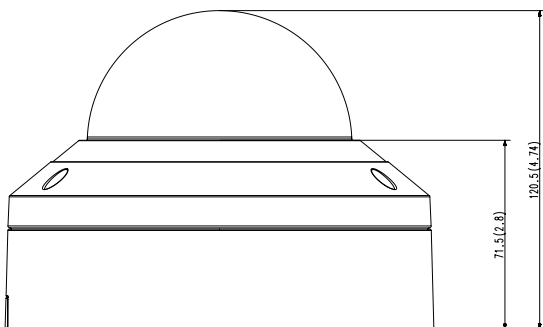
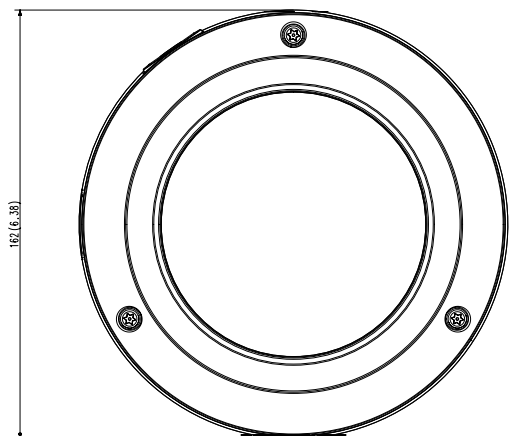
Opciones	Descripción			
	XNV-6080RS	XNV-8080RS	XNV-6120RS	
Red	Almacenamiento Edge	SD/SDHC/SDXC de 2 ranuras (hasta 512 GB) - Grabación continua (1ª ranura a 2ª ranura) - Las imágenes de movimiento grabadas en la tarjeta de memoria SD/SDHC/SDXC se pueden descargar. NAS (almacenamiento conectado en red) PC local para la grabación instantánea		
	Interfaz de programación de aplicaciones	ONVIF Profile S/G SUNAPI(HTTP API) Plataforma abierta		
	Idioma de página web	Inglés, Coreano, Francés, Alemán, Español, Italiano, Chino, Ruso, Japonés, Sueco, Portugués, Checo, Polaco, Turco, Holandés, Húngaro, Griego		
	Visor Web	SO admitido : Windows 7 / 8.1 / 10, MAC OS X 10.10, 10.11, 10.12 <b>Visor web sin plug-in</b> Navegadores web compatibles: Google Chrome, MS Edge, Mozilla Firefox (sólo compatible con Window 64bit) , Apple Safari 10 (sólo compatible con Mac OS X) <b>Visor web de plug-in</b> Navegadores web compatibles: MS Explore 11, Apple Safari (sólo compatible con Mac OS X)		
	Software de gestión central	SmartViewer, SSM		
Ambiental	Temperatura / Humedad de funcionamiento	-40°C ~ +55°C (-40°F ~ +131°F) / Menos del 90% RH	-40°C ~ +55°C (-40°F ~ +131°F) / Menos del 90% RH *El arranque debe realizarse a una temperatura superior a -35°C (-31°F)	
	Temperatura / Humedad deprzechowywania	-50°C ~ +60°C (-58°F ~ +140°F) / Menos del 90% RH		
	Protección de ingreso	IP66, NEMA 4X		
	Antivandálico	IK10+(50J)		

Opciones	Descripción			
	XNV-6080RS	XNV-8080RS	XNV-6120RS	
Eléctrico	Tensión/corriente de entrada	24VAC ± 10%, 12VDC ± 10%, PoE (IEEE802.3af)		
	Consumo de energía	Máx. 11,5W (12VDC), Máx. 12,95W (PoE), Máx. 14W (24VAC)		
Mecánico	Color / Material	Plata / SUS316L		
	Dimensiones (Ø x An)	Ø 162 X An120.5mm (Ø6.38" x 4.74")		Ø 162 X An134.5mm (Ø6.38" x 5.3")
	Peso	2.8kg		2.7kg

## VISTA DEL PRODUCTO

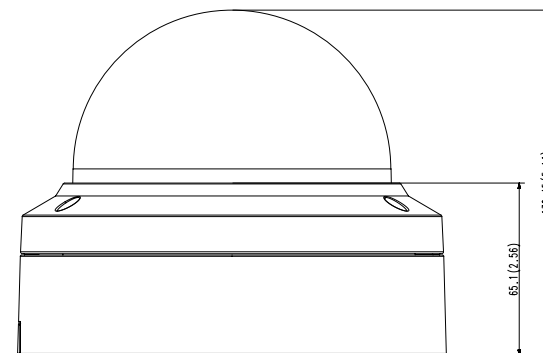
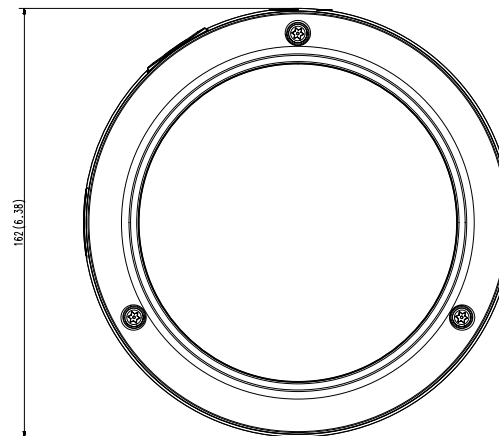
XNV-6080RS/XNV-8080RS

Unidad : mm (pulg.)



XNV-6120RS

Unidad : mm (pulg.)



## SOLUCIÓN DE PROBLEMAS

PROBLEMA	SOLUCIÓN
Cuando un usuario de Windows 10 accede al visor web a través de Chrome o Firefox, el volumen de sonido del micrófono cambia periódicamente.	<ul style="list-style-type: none"> <li>Esto es lo que sucede cuando el controlador del micrófono se ha configurado en el controlador Realtek. Instale el dispositivo de audio de alta definición (controlador predeterminado de Windows) o el controlador de terceros como el controlador de micrófono.</li> </ul>
No se visualiza ningún vídeo 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 vídeo 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 voz no se graba aunque se configuren los ajustes de entrada de audio.	<ul style="list-style-type: none"> <li>Seleccione la casilla &lt;Entrada de audio&gt; en &lt;Basic&gt; - &lt;Perfil de vídeo&gt;.</li> </ul>
<Detección de movimiento> de <Analítica> está ajustado en <Activar>, pero no me llega una notificación por correo electrónico, ni siquiera cuando se ha producido un evento de análisis.	<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 Micro SD.	<ul style="list-style-type: none"> <li>Compruebe si la tarjeta de memoria está defectuosa.</li> </ul>
La tarjeta de memoria Micro 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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## GPL SW

Component Name	License	URL
Base Kernel	GPL 2.0	
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	

## LGPL SW

Component Name	License	URL
glibc	LGPL 2.0	
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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established by T-Engine Forum  
on January 23, 2004  
revised on June 17, 2004  
revised on December 21, 2006  
revised on March 24, 2009

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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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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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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.

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#### **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.

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.
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.

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iperf performance test

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