WISENET

NÄTVERKSKAMERA

Bruksanvisning

PNM-9000VD
SLA-5M3700D/SLA-5M4600D/SLA-5M7000D

CE

Nätverkskamera
Bruksanvisning

Upphovsrätt

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Varumärke

Alla varumärken häri har registrerats. Namnet på den här produkten och övriga varumärken som omnämns i den här manualen är ett registrerat varumärke som tillhör respektive företag.

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- **Utseendet och specifikationerna kan ändras utan föregående meddelande.**
- **Initialt administratörs-ID är "admin" och lösenordet ska ställas in vid första inloggningen.**
  Ändra lösenordet var tredje månad för att säkert skydda den personliga informationen och för att förhindra skada från informationsstölden.
  Observera att det är ananvändarens ansvar att bibehålla säkerheten och andra problem som orsakas av fel hantering av lösenordet.

VIKTIGA SÄKERHETSANVISNINGAR

1. Läs de här instruktionerna.
2. Behåll de här instruktionerna.
3. Dölj alla varningar.
4. Följ alla instruktioner.
5. Använd inte apparaten nära vatten.
6. Rengör den nedsmutsade ytan på produkten med en torr eller fuktig, mjuk trasa.
   (Använd inte rengöringsmedel eller kosmetiska produkter som innehåller alkohol, lösningsmedel, ytaktiva ämnen eller oljebeståndsdelar eftersom dessa kan orsaka skador på produkten.)
7. Blockera inga ventilationsöppningar, installera i enlighet med tillverkarens anvisningar.
8. Installera inte nära några värmekällor, såsom element, värmeaggregat, spisar eller motsvarande apparater (inklusive förstärkare) som producerar värme.
9. Bryt inte mot säkerhetsreglerna för den polariserade eller jordade kontakten.
   En polariserad kontakt har två blad som är bredare än de andra. En jordad kontakt har två blad och ett tredje jordningsstift. Det breda bladet eller det tredje stiftet finns för din säkerhet. Om den medföljande kontakten inte passar i uttaget ska du kontakta en elektriker för att byta det gamla uttaget.
10. Skydda strömsladden från att utsättas för tryck på grund av att du går på den, eller att den kläms, samt skydda bekväma recepterorer och den punkt där de går ut ur apparaten.
11. Använd bara tillbehör/accessoarer som specificeras av tillverkaren.
12. Använd bara med kundvagn, stativ, konsol eller bord som specificeras av tillverkaren eller säljs med apparaten. När en kundvagn används ska du vara försiktig när du flyttar kundvagnen/apparaten för att undvika att skada den till följd av att den välter.



13. Koppla från den här apparaten under åskväder eller när den inte används under längre perioder.
14. Överlåt all service åt behörig personal Service krävs när apparaten har skadats på något sätt, exempelvis då en elsladd eller kontakt har skadats, vätska har spillts ut eller föremål har ramlat ned på apparaten, om apparaten har utsatts för regn eller fukt, inte fungerar normalt eller har fallit.
15. Den här produkten är avsedd att levereras av en listad strömtillförselenhet med märkningen “Klass 2” eller “LPS” och med effekt från PoE(48V) , 0.27A. (PNM-9000VD)
16. Den här produkten är avsedd att levereras av en listad strömtillförselenhet med märkningen “Klass 2” eller “LPS” och med effekt från 5 Vdc, min.0.25 A. (SLA-5M3700D/5M4600D/5M7000D)
17. Produkten är avsedd att strömförsörjas av isoleringskraft.
18. Om du använder för mycket kraft vid installation av produkten kan kameran skadas och sluta fungera som den ska. Om du installerar produkten med tvång, med verktyg som inte är godkända, kan produkten skadas.
19. Installera inte produkten på en plats där kemiska ämnen eller oljeångor förekommer eller kan alstras. Eftersom ätbara oljor, såsom sojabönsolja, kan skada eller förvrida produkten, får du inte installera produkten i köket eller nära köksbordet.
    Det kan orsaka skada på produkten.
20. Vid installation av produkten ska du vara försiktig så du inte låter produktens yta fläckas ned av kemiska medel. Vissa kemiska lösningsmedel, såsom rengöringsmedel eller vidhäftningsmedel, kan orsaka allvarlig skada på produktens yta.
21. Om du installerar/demonterar produkten på ett annat sätt än det som rekommenderas kan produktionsfunktionerna/prestandan inte garanteras.
    Installera produkten genom att hänvisa till “Installation & anslutning” i bruksanvisningen.
22. Installation eller användning av produkten i vatten kan orsaka allvarlig skada.

VARNING

FÖR ATT MINSKA RISKEN FÖR BRAND OCH ELEKTRISK KORTSLUTNING SKA DU INTE UTSÄTTA PRODUKTEN FÖR REGN ELLER FUKT. FÖR INTE IN NÅGRA METALLFÖREMÅL I VENTILATIONSGALLREN ELLER I ANDRA ÖPPNINGAR PÅ ENHETEN.

Apparaten får inte utsättas för droppar eller fukt och därför skall inte föremål som innehåller vatten, exempelvis vaser, placeras på apparaten.

Produkten måste fästas på ett säkert sätt i väggen/taket och enligt installationsinstruktionerna, för att förhindra skador.

OBSERVERA



FÖRKLARING AV GRAFISKA SYMBOLER



Blixtsymbolen med pilsymbol, inom en likformig triangel, är avsedd att varna användaren för att det finns ”farlig spänning” inom produktens infattning, som är tillräckligt stark för att utföra en risk för att personer ska utsättas för kortslutning.



Utropstecknet inom en likformad triangel är avsett att informera användaren om att det finns viktiga drifts- och underhållsanvisningar (service) i litteraturen som medföljer produkten.

Klass I konstruktion

En apparat med KLASS I konstruktion ska anslutas till ett jordat EL-uttag.

Batteri

Batterier (löstagbart batteri eller installerat) får inte utsättas för extrem hetta, t.ex. direkt solljus eller eld.

Frånkopplingsenhet

Koppla från kontakten från apparaten om den är trasig. Kontakta en reparatör som finns i närheten.

Om du befinner dig utanför USA kan det användas en HAR-kod från en godkänd myndighet som är engagerad i tillbehörsmontering.

OBSERVERA

Explosionsrisk om batteriet ersätts med ej korrekt sort.
Kassera använda batterier enligt instruktionerna.

De här serviceanvisningarna ska bara användas av kvalificerad servicepersonal.
För att minska risken för elektrisk kortslutning ska du inte utföra någon annan service än den som finns i användaranvisningarna om du inte är behörig för det.

Produktens CVBS-utterminal medföljer för att förenkla installationen och rekommenderas inte för övervakningsändamål.

Använd ingångsströmmen med bara en kamera och koppla bort alla andra enheter.

ITE ska endast anslutas till PoE-nätverk utan dirigering till den yttre anläggningen.

Läs följande rekommenderade säkerhetsföreskrifter noggrant.

- Placera inte den här apparaten på en ojämn yta.
- Installera inte på en yta där den utsätts för direkt solljus, nära värmeaggregat eller på en mycket kall plats.
- Placera inte den här apparaten i närheten av ledande material.
- Försök inte utföra service på apparaten själv.
- Ställ inte ett glas vatten på produkten.
- Installera inte produkten nära några magnetiska källor.
- Blockera inte ventilationsöppningarna.
- Placera inte tunga föremål på strömsladden.
- Använd skyddshandskar när du monterar/nedmonterar kameran.
  Den höga temperaturen på kamerans yta kan orsaka brännskador.

Bruksanvisningen är en vägledningsbok för hur du använder produkterna.

Användarsymbolerna i boken har följande betydelser.

- Referens : När det gäller att erbjuda information för att fungera som en hjälp för produktanvändning
- Obs : Om det finns någon risk för skador på produkter eller den mänskliga hälsan om anvisningarna inte följs

※ Läs den här manualen av säkerhetsskäl innan du använder produkterna och förvara den på en säker plats.

I vissa installationsmiljöer kan det förekomma störningar i radiokommunikationen.
När störningar av elektromagnetiska vågor uppstår mellan produkten och radiokommunikationsenheten rekommenderar vi att hålla dessa två på visst avstånd eller att rikta mottagarantennen åt ett annat håll.

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PRODUKTEGENSKAPER

- **Linsalternativ enligt brännvidd**
  Du kan välja linsen du vill använda och installera den i kameran
- **Damm-/vattenresistent (IP66)**
  Den damm- och vattenresistenta designen gör att du med enkelt kan installera produkten utomhus eller exponera den för regn.
- **Multi-Streaming**
  Den här nätverkskameran kan visa videos i olika upplösningar och kvaliteter samtidigt genom att använda olika CODECs.
- **Webbläsarbaserad övervakning**
  Använda Internet-webbläsaren för att visa bilden i en lokal nätverksmiljö.
- **Alarm**
  När en händelse uppstår skickas tillhörande videoklipp till användaren som registrerat e-post och FTP-server eller lagrat på Micro SD-minneskortet
- **Manipuleringslarm**
  Upptäcker manipuleringsförsök på videoövervakning.
- **Funktion för detektering av defokusering**
  Detekterar defokusering i kamerans objektiv.
- **Rörelsedetektering**
  Upptäcker rörelser från kamerans videoingång.
- **Dimdetektering**
  Detekterar dimma som är tyngre än detekteringsnivån.
- **Ansiktsdetektering**
  Detekterar ansikten i det specificerade området från kamerans videoingång.
- **IVA-funktion (Intelligent Video Analytics)**
  Detekterar en rörelse eller situation som uppfyller reglerna för den konfigurerade händelsen.
- **Automatisk detektering av frånkopplade nätverk**
  Detekterar nätverksfrånkopplingar innan den utlöser en händelse.
- **ONVIF-efterlevnad**
  Den här produkten stöder ONVIF Profil S.
  För mer information, se www.onvif.org.

ONVIF
Driving network video through global standardization

REKOMENDERADE DATORSPECIFIKATIONER

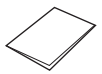
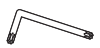
- Processor : Intel(R) Core(TM) i7 3.4 GHz och senare
- Operativsystem som stöds : Windows 7, 8.1, 10, Mac OS X 10.12, 10.13, 10.14
- Rekommenderad webbläsare : Google Chrome
- Webbläsare som stöds : MS Explore11, MS Edge, Mozilla Firefox(endast Windows 64 bitar), Apple Safari(endast Mac OS X)

SPECIFIKATIONER FÖR REKOMMENDERADE MICRO SD/SDHC/SDXC MINNESKORT

- Rekommenderad kapacitet : 16GB till 256GB (MLC-typ)
- Följande typer av minneskort från följande tillverkare rekommenderas för den här kameran.
  - Tillverkare : SanDisk, Transcend
  - Produktfamilj : Hög tålighet
- Vi rekommenderar att du använder ett minneskort på 16GB eller mer som uppfyller kraven för UHS-3 klass (MLC typ).

VAD INGAR (PNM-9000VD)

Kontrollera om kameran och tillbehören är inkluderade i produktförpackningen.
(Tillbehören kan variera med land.)

Utseende	Artikelnamn	Kvantitet	Beskrivning
	Kamera	1	
	Snabbguide (tillval)	1	
	Garantikort (tillval)	1	
	Kabel för skärmtestning	1	Används för att testa kameraanslutningen för en bärbar skärm
	Mall	1	Produktinstallationsguide
	Stjärnmejsel	1	Ta bort/fixera skyddslocket
	Sjalvgangande skruv	4	Används för installation på väggen eller i taket
	Plastförankring	4	För åtdragning av en skruv som sitter iskruvad i ett hål (förstärkt åtdragningsmoment)
	Maskinskruvar	4	Används för montering av skyddskåpan vid installation av produkten på rör, väggmontering etc. eller vid blockering av hål.
	Kabelnav	2	Används för att ansluta LAN-kabeln med en diameter på Ø7~8,5.

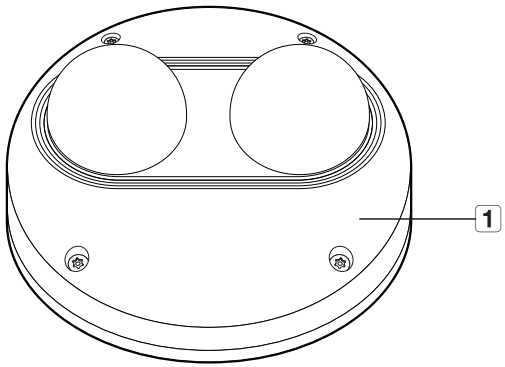
Utseende	Artikelnamn	Kvantitet	Beskrivning
	Cap Installer	1	Används för att ansluta RJ45-kabeln.
	Korttyp med fuktabsorbering	1	Inkopplad när installerad.

VAD INGAR (LINSMODUL -TILLVAL)

Utseende	Artikelnamn	Kvantitet	Beskrivning	Modellnamn
	Linsmodul	1	Monterad i PNM-9000VD	SLA-5M3700D
		1		SLA-5M4600D
		1		SLA-5M7000D

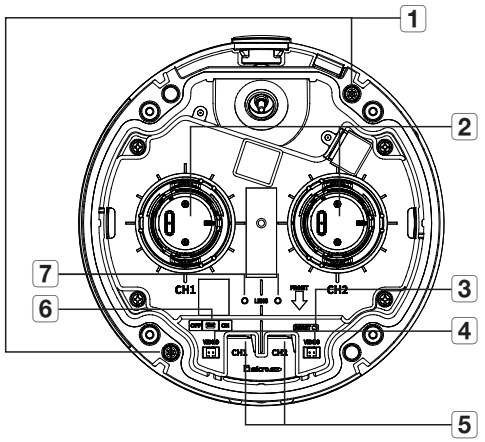
ÖVERGRIPANDE ÖVERSIKT (PNM-9000VD)

Utseende



Post	Beskrivning
1 Skyddslock	Höljeskydd som används för att skydda objektivet och huvudenheten.

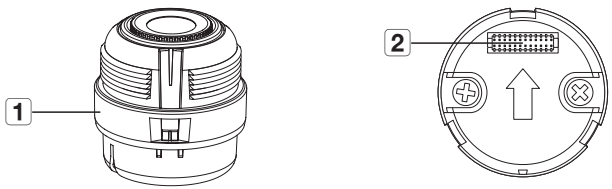
Inuti



Post	Beskrivning
1 Kamerans stativgänga	Skruvar som fäster kamerahuset på monteringsplattan.
2 Monteringsdel för linsmodul	Det här är terminalen för montering av linsmodulen.
3 Återställningsknapp	Knappen återställer alla kamerainställningar till fabriksstandardinställningar. Håll nedtryckt i 5 sekunder för att starta om systemet. ! Om du återställer kameran justeras nätverksinställningarna så att DHCP kan aktiveras. Om det inte finns någon DHCP-server i nätverket, måste du köra programmet Device Manager för att ändra de grundläggande nätverksinställningarna som IP-adress, Subnätsmask, Gateway, osv. innan du kan ansluta till nätverket.
4 Utgående skärmtest	Utgående port för testövervakning av videoutgång. Använd testmonitorkabeln för att ansluta till en mobil display och kontrollera testvideon.
5 Micro SD-minneskortsplats	Fack för Micro SD-minneskort.
6 Ström på/av-knapp	Knapp som används för att slå på och stänga av produkten. ! Använd den endast för att byta ut din linsmodul.
7 Linsmodulindikering (normal, grön, onormal, röd)	Om linsmodulen är korrekt monterad kommer den gröna LED-lampan att lysa och sedan släckas efter omkring 40 sekunder. (för att förhindra oönskade reflektioner)

ÖVERGRIPANDE ÖVERSIKT (LINSMODUL)

Utseende



Post	Beskrivning
1 **Linsmodul**	Det här är en linsmodul som spelar in video.
2 **Kamerakontakt**	Det här är en terminsl för anslutning till kameran.

INSTALLATION

- Den här kameran är vattentät och uppfyller IP66-specifikationerna, men uttaget anslutet till den externa kabeln gör det inte. Vi rekommenderar att du installerar den här produkten under kanten på takskägget för att förhindra att kabeln utsätts för väder och vind.

Föreskrifter före installation

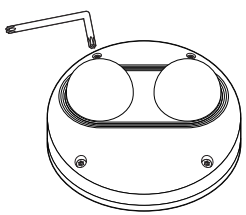
Se till att läsa följande anvisningar innan du installerar kameran:

- Välj en plats som klarar minst fem gånger kamerans vikt.
- Instuckna eller avskalade kablar kan orsaka skada på produkten eller brandrisk.
- Av säkerhetsskäl ska du hålla alla borta från installationsplatsen.
  Plocka även för säkerhets skull bort personliga tillhörigheter från platsen.
- Om produkten installeras med överdriven kraft kan det orsaka skada på kameran på grund av felfunktion.
  Tvångsmontering med icke kompatibla verktyg kan skada produkten.
- Ta inte bort linsmodulen när strömmen är på.

Demontera

Ta bort övre luckan genom att skruva ur de fyra skruvarna i moturs riktning med den medföljande stjärnmejseln.

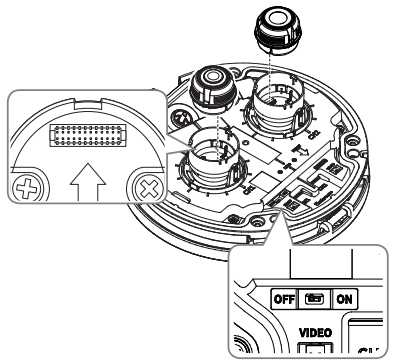
- Notera att man inte måste skruva ur skruvarna helt.



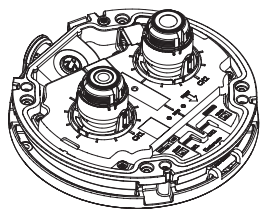
Montera linsmodulen

1. Rikta in och fäst kontakten på linsmodulen i kontakten på kamerahuset.

- Vi rekommenderar att du undviker att röra vid linsen separat, eftersom den levereras från fabriken med fokus inställt under tillverkningsinspektionen.

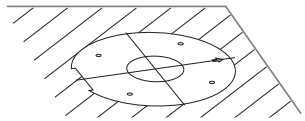


2. Slutför linsmonteringsprocessen.

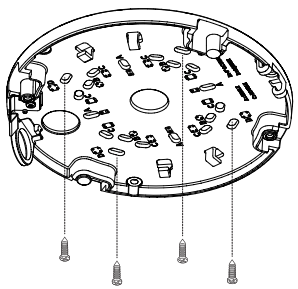


Installation i taket eller på väggen

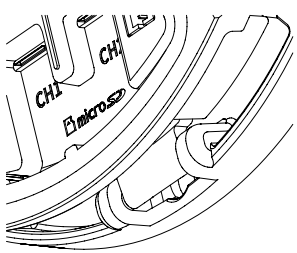
1. Använd den medföljande mallen för att borra hål för installation (diameter 6 mm och minsta djup på 45 mm) och för in de medföljande plastförankringarna i änden.



2. Rikta in monteringshålet på kameran mot hålet där plastförankningen är införd och dra sedan åt skruven.

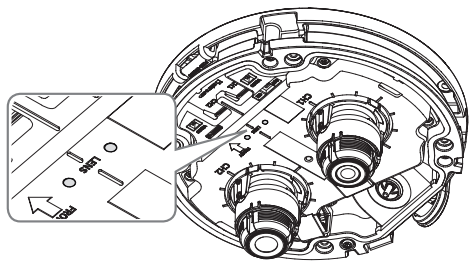


3. Montera kameran på monteringsplattan.
- Montera den så att den passar gångjärnen som bilden visar.

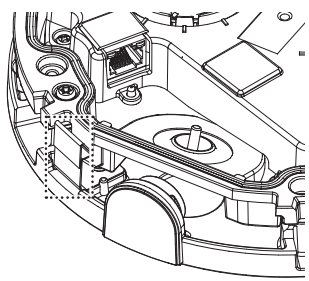


4. Anslut en kabel till kameran. Var försiktig så du inte skadar kabeln. En ska trimmas upp.

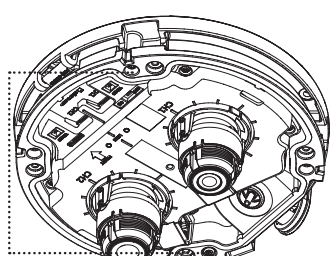
5. Om linsmodulen inte är korrekt installerad tänds linsmodulens statuslampa med rött sken, så som visas på bilden. Om detta händer stänger du avs trömbrytaren och remonterar linsmodulen.
Om den monteras normalt tänds den med grönt sken och släcks efter omkring 40 sekunder.



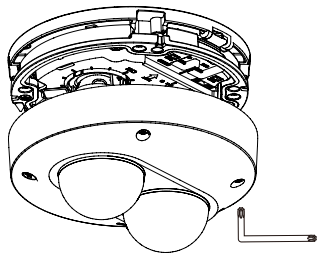
6. Tryck på den tills den snäpper in i fästkonsolen enligt bilden.



7. Använd kamerafästskruvarna för att fästa kamerahuset på monteringsplattan.



8. Täck över luckan överst och skruva medurs med en stjärnmejsel för att säkra luckan.

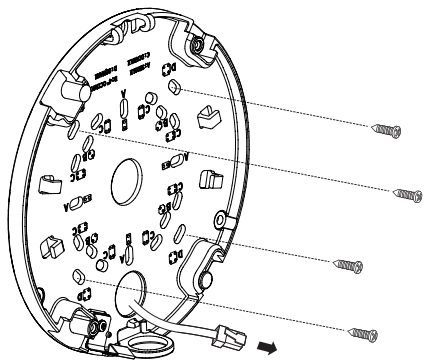


- Om du inte drar åt skruvarna helt när du fäster luckan kan det orsaka problem med vattenläckage. (IP66)

SÅ HÄR INSTALLERAR DU LAN-KABELN FÖR OLIKA INSTALLATIONSPLATSER

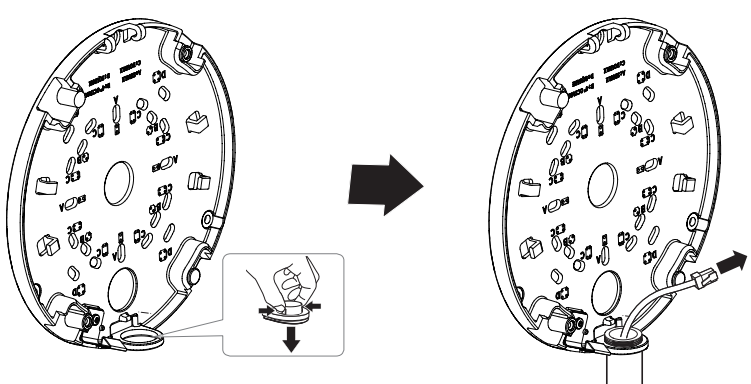
Installera direkt på vägg/tak

1. Dra ut LAN-kabeln genom hålet på monteringsplattan.



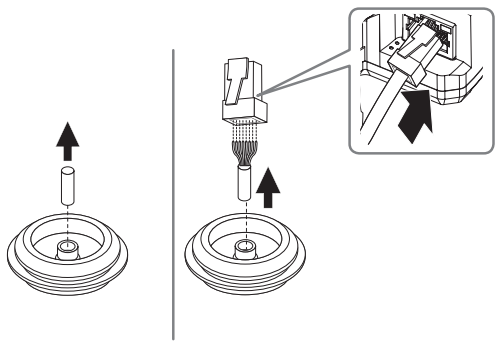
Installera med röret

1. Separera rörplåten på monteringsplattan genom att trycka på sidorna.
2. Placera röret på monteringsplattan.
3. Dra ut LAN-kabeln genom hålet på monteringsplattan.



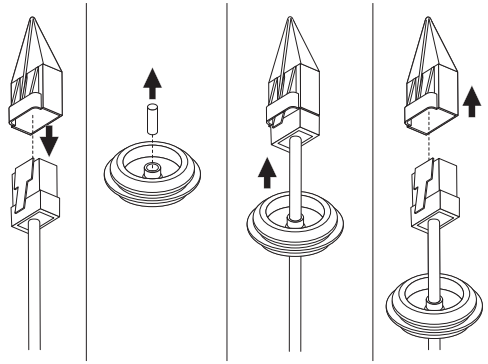
Metod 1. Anslut LAN-kabeln

1. Dra av de extruderande delarna från bussningen som ska användas.
2. Dra LAN-kabeln genom det stora hålet på bussningen och anslut till LAN-kontakten.



Metod 2. Anslut LAN-kabeln

1. Dra av den extruderande delen från bussningen med 1 hål som medföljer.
   Använd spetshuvudet för att föra genom RJ45-kabeln.

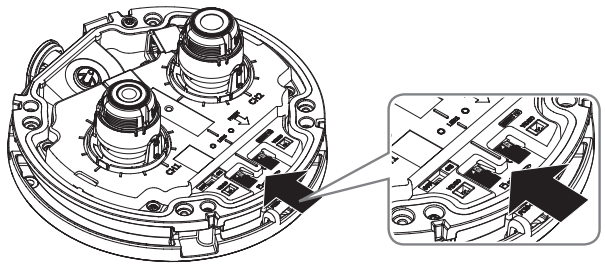


MATA IN/MATA UT MICRO SD-MINNESKORT

- Koppla från strömkabeln från kameran innan du matar in Micro SD-minneskortet.
- För inte in Micro SD-minneskortet upp och ned med tvång.
  Annars kan du skada SD-minneskortet.
- När det regnar eller om luftfuktigheten är hög rekommenderar vi inte att du matar in eller ut Micro SD-kortet.
- Demontering av produktkåpan ska slutföras inom 5 minuter, annars finns det risk för invändig kondens.

Mata in ett Micro SD-minneskort

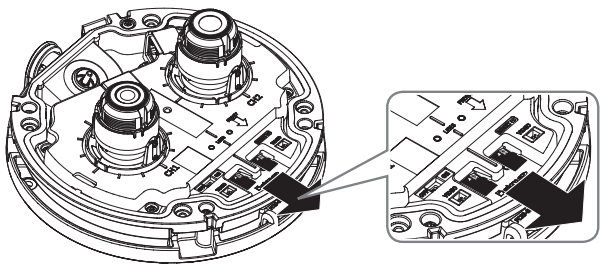
1. Plocka bort kamerans skyddslock.
2. Mata in ett Micro SD-kort i pilens riktning så som visas på bilden.



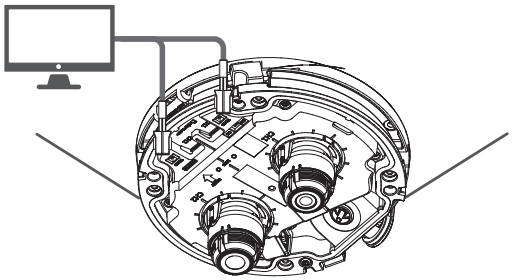
Mata ut ett Micro SD-minneskort

Tryck försiktigt nedåt på minneskortet så som visas i diagrammet för att mata ut det ur kortplatsen.

- Observera atat om du trycker på Micro SD-minneskortet när det matas ut kan det poppa ut.
- Innan du tar ut Micro SD-minneskortet i <**Lagring**>, konfigurerar du enheten till <**Av**> och trycker på knappen [**Tillämpa**] och stänger av kameran.
- Om du stänger av kameran eller tar ut Micro SD-minneskortet som innehåller data från produkten kan datan gå förlorad eller skadas.



ANSLUTNING TILL EN ANNAN ENHET



- Produktens CVBS-utterminal medföljer för att förenkla installationen och rekommenderas inte för övervakningsändamål.

Påslagning och nätverk

Anslut PoE-terminalen på kameran till PoE-enheten.

- Anslut till en PoE-aktiverad router (Power over Ethernet) till PoE-anslutningen.
- Använd PoE (Power over Ethernet) som överensstämmer med protokollet IEEE802.3af.

Specifikation för nätverkskabel

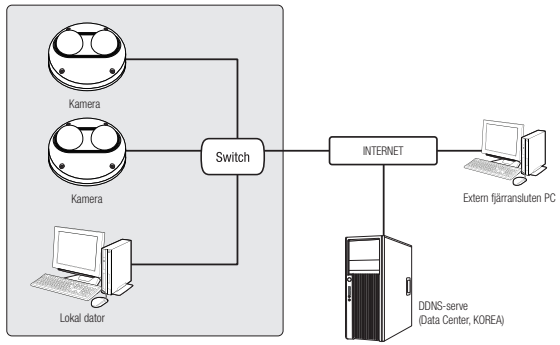
Artikel	Innehåll	Anmärkning
Anslutningsanordning	RJ45 (10/100BASE-T)	
Ethernet	10/100BASE-T	
Kabel	UTP Kategori 5e	
Max avstånd	100M	DC-resistens ≤ 0,0938 Ω/m
Stöd för PoE	IEEE 802.3af	

Du kan göra nätverksinställningar enligt dina nätverkskonfigurationer.

ANSLUTA KAMERAN DIREKT TILL LOKALT NÄTVERK

Ansluta till kameran från en lokal dator i nätverket

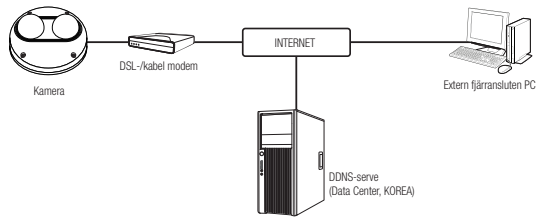
1. Starta Internet-klienten på den lokala datorn.
2. Ange IP-adressen för kameran i adressfältet för webbläsaren.



<Lokalt Nätverk>

- En fjärrdator på externt Internet utanför LAN-nätverket kan inte ansluta till kameran som är installerad i Intranätet om portvidarebefordran inte har ställts in eller om en brandvägg är inställd.
  I så fall ska du kontakta nätverksadministratören för att lösa problemet.
- Enligt fabriksstandard tilldelas IP-adressen från DHCP-servern automatiskt.
  Om det inte finns någon DHCP-server tillgänglig är IP-adressen ställd till 192.168.1.100.
  Använd Device Manager för att ändra IP-adress.
  För mer information om hur man använder Device Manager, se "**Använda Device Manager**". (sidan 16)

ANSLUTA KAMERAN DIREKT TILL ETT DHCP-BASERAT DSL/ KABELMODEM



1. Anslut användar-PC:n direkt till nätverkskameran.
2. Kör Device Manager för att ändra kamerans IP-adress så att du kan använda webbläsaren i din dator för att ansluta till internet.
3. Använd Internet-klienten för att ansluta till Webbvisning.
4. Gå till sidan [**Inställningar**].
5. Gå till [**Nätverk**] – [**DDNS**] och konfigurera DDNS-inställningarna.
6. Gå till [**Basic**] – [**IP & Port**] och ställ in IP-typ på [**DHCP**].
7. Anslut kameran, som togs bort från datorn, direkt till modemet.
8. Starta om kameran.

- För information om hur du konfigurerar DDNS, se onlinehjälpen för webbvisaren.
- För information om hur du konfigurerar IP format, se onlinehjälpen för webbvisaren.

ANVÄNDA DEVICE MANAGER

- Programmet Device Manager kan laddas ned från menyn <**Technical Guides**> – <**Online Tool**> på Hanwha Techwins webbplats (http://www.hanwha-security.com).
- Du kan hitta fler instruktioner för Device Manager i menyn <**Hjälp**> på huvudsidan.

AUTOMATISK KAMERASÖKNING

Om en kamera är ansluten till samma nätverk som datorn där Device Manager är installerat, kan du hitta nätverkskameran med hjälp av sökfunktionen.

1. Klicka på <**Search (Sök)**> på Device Managers huvudsida.
2. Markera kameran i listan.
   - Kontrollera MAC-adressen på etiketten som är fäst på kameran.

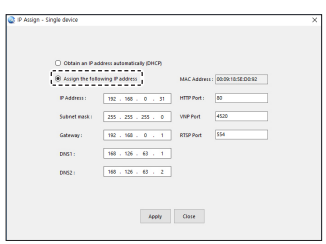
KONFIGURERA IP-ADRESS

Om du vill ändra nätverksinställningarna för kameran måste <**Status**> visa <**Login OK (Inloggning OK)**>. Klicka på <**Authentication (Autentisering)**> på huvudsidan för att logga in.

Konfigurera statisk IP

Infoga och konfigurera IP-adress och portinformation manuellt.

1. I listan klickar du på kameran som du vill ändra IP-inställningen för.
2. Klicka på <**IP Assign (Tilldela IP)**> på Device Managers huvudsida.
3. Välj <**Assign the following IP address (Tilldela följande IP-adress)**>.
   - Kamerans aktuella IP-information kommer att visas.
4. Fyll i IP- och portrelaterade kategorier.



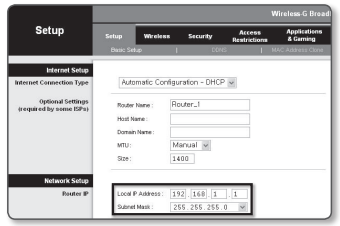
Utan användning av en Bredbandsrouter

Fråga den nätverksansvarige om inställt värde för <**IP-adress**>, <**Subnätsmask**>, <**Gateway**>.

- HTTP Port : Används för att komma åt kameran med Internetklienten, med standard på 80.
- RTSP Port : En port som kontrollerar streaming i realtid. Det ursprungliga värdet är 554.

Vid användning av en Bredbandsrouter

- IP-adress : Ange en adress som ligger inom IP-intervallet som erbjuds av Bredbandsrouter.
  ex) 192.168.1.2~254, 192.168.0.2~254,
  192.168.XXX.2~254
- Subnet Mask : <**Subnet Mask**> för Bredbandsrouter blir kamerans <**Subnet Mask**>.
- Gateway : <**Local IP Address**> för Bredbandsrouter blir <**Gateway**> för kameran.



- Inställningarna kan variera beroende på ansluten Bredbandsrouter modell.
  För vidare information, se användarhandboken för tillämplig router.
- Mer information om portvidarebefordring av bredbandsrouter finns i avsnittet "**Portintervallsinställning Framåt (portmappning)**". (sidan 18)

Om Bredbandsrouter har mer än en kamera ansluten

Konfigurera IP-relaterade inställningar och portrelaterade inställningar separerat från varandra.

ex)

Kategori		Kamera #1	Kamera #2
IP-relaterade inställningar	IP Address Subnet Mask Gateway	192.168.1.100 255.255.255.0 192.168.1.1	192.168.1.101 255.255.255.0 192.168.1.1
Portrelaterade inställningar	HTTP Port RTSP Port	8080 554	8081 555

- Om <**HTTP Port**> är inställd på något annat än 80, måste du ange <**Port**>-numret i adressfältet på Internet-klienten innan du kan komma åt kameran.
  ex) http://IP-adress: HTTP-port
  http://192.168.1.100:8080

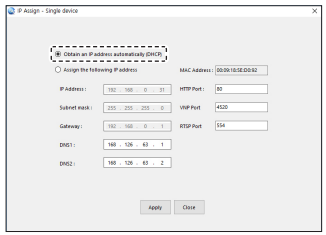
5. Klicka på knappen [**Tillämpa**].
6. Om meddelandet om genomförd åtgärd visas, klicka på [**OK**].

Konfigurera dynamisk IP

Erhålla IP-adress från DHCP

- Exempel på dynamisk IP-miljö
  - Om en Bredbandsrouter, med anslutna kameror, tilldelas en IP-adress av DHCP-servern
  - Om kameran ansluts direkt till modemet med DHCP-protokoll
  - Om IP-adresser tilldelas av den interna DHCP-servern via LAN

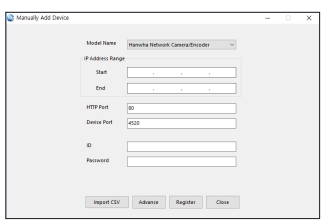
1. I listan klickar du på kameran som du vill ändra IP-inställningen för.
2. Klicka på<**IP Assign (Tilldela IP)**> på Device Managers huvudsida.
3. Välj <**Obtain an IP address automatically (DHCP) (Erhålla en IP-adress automatiskt (DHCP))**>.
4. Klicka på knappen [**Apply (Tillämpa)**].
5. Om meddelandet om genomförd åtgärd visas, klicka på [**OK**].



REGISTRERA KAMERAN MANUELLT

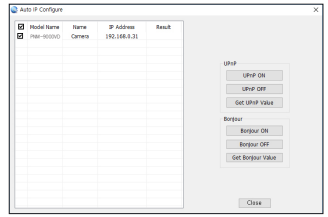
Om kameran inte kan hittas med hjälp av sökfunktionen, kan kameran registreras fjärrstyrt genom att manuellt infoga IP-information, om kameran är ansluten till ett externt nätverk.

1. Klicka på <**Add Devices (Lägg till enheter)**> – <**Manually Add Device (Lägg till enhet manuellt)**> på Device Managers huvudsida.
2. Ange intervallet för den IP-adress du söker.
3. Välj <**Model Name (modellnamn)**> för kameran som du registrerar och ange HTTP-port, ID och lösenord.
4. Klicka på knappen [**Register (Registrera)**].
5. Kontrollera om kameran är registrerad.
   - Kontrollera MAC-adressen på etiketten som är fäst på kameran.



AUTOMATISK KONFIGURERING AV IP

1. I listan klickar du på kameran som du vill konfigurera IP-inställningen för automatiskt.
2. Klicka på < **+** > på Device Managers huvudsida.
   - Utrustningens inställningsmeny visas.
3. Klicka på <**Auto IP Configure (Auto-IP-konfigurera)**> i menyn.
4. Klicka på knappen [**Close (Stäng)**].

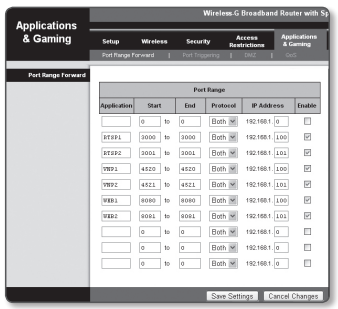


PORTINTERVALLSINSTÄLLNING FRAMÅT (PORTMAPPNING)

Om du har installerat en Bredbandsrouter med en kamera ansluten måste du ställa in portintervall för vidarebefordran av Bredbandsrouter så att en fjärrdator kan få åtkomst till kameran i den.

Manuell vidarebefordran för portintervall

1. I inställningsmenyn för Bredbandsrouter väljer du <**Applications & Gaming**> - <**Port Range Forward**>.
   För inställning av vidarebefordran för portintervall gällande en tredjeparts Bredbandsrouter, läs bruksanvisningen för Bredbandsrouter.
2. Välj <**TCP**> och <**UDP Port**> för varje ansluten kamera till Bredbandsrouter.
   Numret för varje port som ska konfigureras till IP-routern bör ställas in efter det portnummer som tilldelats i <**Inställningar**> - <**Basic**> - <**IP & Port**> på kamerans webbvisare.
3. När du är klar klickar du på [**Save Settings**].
   Inställningarna sparas.

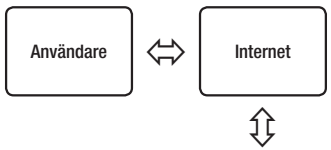


- Inställningen Portvidarebefordran är ett exempel på inställning för CISCO IP-router.
- Inställningarna kan variera beroende på ansluten Bredbandsrouter modell.
  För vidare information, se användarhandboken för tillämplig router.

Installera vidarebefordran av port för flera nätverkskameror

- Du kan ställa in en regel för portvidarebefordran på Bredbandsrouter enheten genom dess konfiguration för webbsidan.
- En användare kan ändra varje port med kamerainställningsskärmen.

När Kamera1 och Kamera2 är anslutna till en router:



Bredbandsrouter			
Start	Slut	Protokoll	IP-adress
3000	3000	TCP/UDP	192.168.1.100
3001	3001	TCP/UDP	192.168.1.101
8080	8080	TCP/UDP	192.168.1.100
8081	8081	TCP/UDP	192.168.1.101

Kamera1 (192.168.1.100)	
HTTP-port	8080
RTSP-port	3000

Kamera2 (192.168.1.101)	
HTTP-port	8081
RTSP-port	3001

- Portvidarebefordran kan göras utan ytterligare inställningar av router om routern stöder funktion för UPnP (Universal Plug and Play).
  Efter anslutning av nätverkskameran markerar du kryssrutan i menyn <**Snabbanslutning**> i <**Wisenet DDNS**> i "**Inställningar** -> **Nätverk** -> **DDNS**".

ANSLUTA TILL KAMERAN FRÅN EN DELAD, LOKAL DATOR

1. Kör Device Manager.
   Den söker efter anslutna kameror och visar en lista över dem.
2. Dubbelklicka på en kamera du vill komma åt.
   Internetklienten startar och ansluter till kameran.

▪ Du kan även komma åt kameran genom att skriva in IP-adressen för den uppsökta kameran i adressfältet för Internet-klienten.

ANSLUTA TILL KAMERAN FRÅN EN FJÄRRDATOR VIA INTERNET

På en fjärrdator som inte finns i bredbandsrouterns nätverk är inte kluster tillåtna. Användarna kan få tillgång till kameror inom bredbandsrouterns nätverk med hjälp av kamerans DDNS-adress.

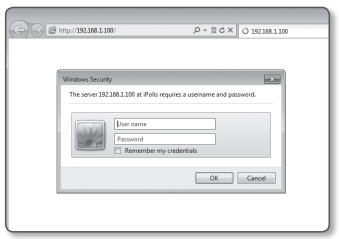
1. Innan du kan få åtkomst till en kamera i nätverket för Bredbandsrouter ska du ha ställt in portintervall för vidarebefordran för Bredbandsrouter.
2. Starta Internet-klienten från fjärrdarotn och skriv in DDNS URL-adressen för kameran, eller IP-adressen för Bredbandsrouter i adressfältet.
   ex) http://ddns.hanwha-security.com/ID

▪ För att använda Wisenet DDNS registrerar du dig på Wisenet DDNS hemsida (http://ddns.hanwha-security.com) och registrerar produkten på [**Mitt DDNS**]>[**Registrera produkt**].

ANSLUTA TILL KAMERAN

I normala ska du

1. Starta Internet-klienten.
2. Skriva in IP-adressen för kameran i adressfältet.
   ex) • IP-adress (IPv4): 192.168.1.100
   → http://192.168.1.100
   - inloggningsfönstret ska öppnas.
   • IP-adress (IPv6) : 2001:230:abcd: ffff:0000:0000:ffff:1111
   → http://[2001:230:abcd:ffff:0000:0000:ffff:1111]
   - inloggningsfönstret ska öppnas.



Om HTTP-porten är någon annan än 80

1. Starta Internet-klienten.
2. Skriva in IP-adressen och HTTP-portnumret för kameran i adressfältet.
   ex) IP-adress: 192.168.1.100:HTTP Port number(8080)
   → http://192.168.1.100:8080 - inloggningsfönstret ska öppnas.

Använda URL

1. Starta Internet-klienten.
2. Skriv in DDNS URL-adressen för kameran i adressfältet.
   ex) URL-adress: http://ddns.hanwha-security.com/ID
   - inloggningsfönstret ska öppnas.

▪ Nätverksanslutning är inaktiverad i miljöer med endast LAN.

Anslutning via UPnP

1. Ställ in klienten eller operativsystemet så att det stöder UpnP-protokollet.
2. Klicka på kameranamnet för att söka.
   Vid Windows operativsystem, klicka på kameranamnet som sökts från nätverksmenyn.
   - Inloggningsfönstret visas.

Anslutning via Bonjour

1. Ställ in klienten eller operativsystemet så att det stöder Bonjour-protokollet.
2. Klicka på kameranamnet för att söka.
   Vid Mac operativsystem, klicka på kameranamnet som sökts på Bonjourfliken i Safari.
   - Inloggningsfönstret visas.

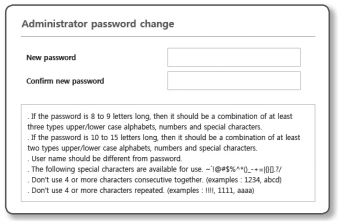
Kontrollera DDNS-adressen

Om kameran är ansluten direkt till en DHCP-baserad kabel via modem eller DSL-modem, ändras IP-adressen varje gång den försöker ansluta till ISP (företaget du prenumererar på).
Om detta är fallet informeras du inte om att IP-adressen har ändrats av DDNS.

Så fort du registrerar en dynamisk, IP-baserad enhet med DDNS-servern kan du enkelt kontrollera den ändrade IP-adressen när du försöker få tillgång till enheten.
För att registrera enheten till <**DDNS**>-servern, besök sidan http://ddns.hanwha-security.com och registrera enheten först och ställ sedan in webbvisningens <**Nätverk**> - <**DDNS**> till <**Wisenet DDNS**>, samt erbjuda <**Produkt-ID**> som har använts för DDNS-registringen.

LÖSENORDSINSTÄLLNING

När du öppnar produkten för första gången måste du registrera inloggningslösenordet.
När fönstret för "**Lösenordsändring**" visas anger du ett nytt lösenord.

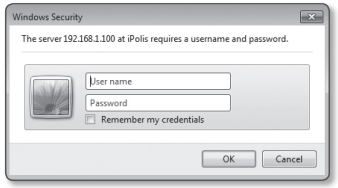


- För ett nytt lösenord med 8 till 9 tecken måste du använda minst 3 av följande alternativ: versaler/gemener, siffror och specialtecken. För ett lösenord med 10 till 15 siffror måste du använda minst 2 typer av ovan nämnda alternativ.
  - Specialtecken som tillåts. : ~`!@#$%^*()_-+={}[].?/
- För ökad säkerhet rekommenderar vi att du inte upprepa samma tecken eller tecken i följd på tangentbordet för dina lösenord.
- Om du tappar bort lösenordet kan du trycka på knappen [**RESET**] för att återställa produkten, så du inte förlorar lösenordet genom att använda en memo pad eller memorera det.

INLOGGNING

När du har tillgång till kameran visas inloggningsfönstret.
Ange användar-ID och lösenord för att öppna kameran.

1. Ange "**admin**" i inmatningsrutan <**User name**>.
   Administratörs-ID, "**admin**", är fast och kan inte ändras.
2. Ange lösenordet i inmatningsfältet <**Password**>.
3. Klicka på [**OK**].
   Om du har loggat in utan problem kommer du till skärmen Live Viewer.



- När du öppnar kamerans web viewer ska du vara noggrann med säkerheten och kontrollera om bilddata krypteras.

- Om du markerar alternativet "**Remember my credentials**" när inmatningen har gjorts loggas du automatiskt in utan att tillfrågas om att ange inloggningsinformationen från nästa gång.
- Du får bästa videokvaliteten om skärmstorleken är 100 %. Om du minskar förhållandet kan det kapa bilden i kanterna.

KAMERANS WEBBVISNINGSINSTÄLLNINGAR

1. Klicka på ikonen [**Konfiguration ( )**].
2. Inställningsfönstret visas.
3. Du kan konfigurera inställningarna för kamerans grundinformationsvideo, ljud, nätverk, händelse, analys och system över nätverket.
4. Klicka på <**Hjälp ( )**> för att visa detaljerade beskrivningar av varje funktion.

SPECIFIKATIONER (PNM-9000VD)

Artiklar		Beskrivning
Video	Video ut	CVBS : 1.0 Vp-p / 75Ω komposit, 720x480(N), 720x576(P), för installation
Användning	Kameratitel	Visas med 85 tecken : Varje kan. - B/B: Engelska/numeriska/specialtecken - Kina : Engelska/numeriska/Special/Kinesiska tecken - Vanligt: Flerradigt (Max 5), Färg (grå/grön/röd/blå/svart/vit), transparens, autoskala enligt upplösning
	Dag och natt	Auto (elektrisk)/färg/S/V/Schema
	Motljuskompensation	AV, BLC, HLC(Maskering/Gråmarkering), WDR
	Brett dynamiskt intervall	120dB
	Digital brusreducering	SSNRV (2D+3D brusfilter) (Av / På)
	Digital bildstabilisering	Av/på
	Dimborttagning	Auto / Manuell / Av
	Rörelsedetektering	Av/på (8ea, Polygona zoner med 8 punkter)
	Sekretessmask	Av / På (32ea, Polygona zoner) - Färg: grå, grön, röd, blå, svart, vit - Mosaik
	Gain-kontroll	Av / Låg / Medel / Hög
	Vitbalans	ATW / AWC / manuell / inomhus / utomhus (innehåller kvicksilver och natrium)
	LDC	Av/på (5 nivåer med min/max)
	Elektronisk slutarhastighet	Minimum / Maximum / Antiflimmer (2 ~ 1/12,000 sek)
	Videorotation	Rotation (På/Av) Spegelvänd (På/Av) Hallvy (0˚/90˚/270˚)

Artiklar		Beskrivning
Användning	Analys	Identifiering av flytt av fokusering, Riktningsdetektering, Dimdetektering, Ansiktsdetektering, Rörelsedetektering, Visa / Dölj, Ansiktsdetektering, Öppna/ Stäng, Vandring, Klåfingerskydd, Virtuell linje
	Alarmutlösare	Rörelsedetektering, Video analys, Nätverksfrånkoppling
	Alarmhändelser	• Filöverföring via FTP, e-post • Meddelande via e-post • Inspelning på lokal lagringsenhet (SD/SDHC/SDXC) i frånkopplat nätverk och vid händelse (alarmutlösare)
Nätverk	Ethernet	RJ-45 (10/100BASE-T)
	Videokomprimering	H.265/H.264 : Primär/Baslinje/Hög, MJPEG
	Upplösning	2560x1920, 2560x1440, 1920x1080, 1600x1200, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
	Max. ramhastighet	H.265/H.264: Max. 30fps/25fps (60Hz/50Hz) MJPEG : Max. 30fps/25fps (60Hz/50Hz)
	Smart Codec	Manuell (5ea-område), WiseStreamⅡ
	Videokvalitetsjustering	H.264/H.265 : Målbithastighetskontroll MJPEG : Målbithastighetskontroll
	Bithastighetskontroll	H.264/H.265 : CBR eller VBR MJPEG : VBR
	Strömning	Unicast (20 användare)/Multicast Multiströmning (upp till 10 profiler)
	Protokoll	IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP,RTSP, NTP, HTTP, HTTPS, SSL/ TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour, LLDP

Artiklar		Beskrivning
Nätverk	Säkerhet	HTTPS(SSL) inloggningsautentisering Digest inloggningsautentisering IP-adressfiltrering användaråtkomstlogg 802.1X autentiseringsmetod (EAP-TLS, EAP-LEAP)
	Edge-lagring	SD/SDHC/SDXC 2slot (Varje kan.) - Rörelsebilder inspelade på SD/SDHC/SDXC-minneskort kan hämtas. Lokal dator för direkt inspelning
	Programmeringsgränssnitt	ONVIF Profile S SUNAPI(HTTP API)
	Webbsidspråk	Engelska, Koreanska, Kinesiska, Franska, Italienska, Spanska, Tyska, Japanska, Ryska, Svenska, Portugisiska, Tjeckiska, Polska, Turkiska, Holländska, Ungerska, Grekiska
	Webbviewer	Operativsystem som stöds : Windows 7, 8.1, 10, Mac OS X 10.12, 10.13, 10.14 Rekommenderad webbläsare: Google Chrome Webbläsare som stöds : MS Explore11, MS Edge, Mozilla Firefox(endast Windows 64 bitar), Apple Safari(endast Mac OS X)
Omgivande miljö	Driftstemperatur/Luftfuktighet	-40°C ~ +55°C (-40°F ~ +131°F) / Mindre än 90 % RH
	Förvaringstemperatur/ Luftfuktighet	-50°C ~ +60°C (-58°F ~ +140°F) / Mindre än 90 % RH
	Certifiering	IP66, IK10
Elektricitet	Inspänning	PoE (IEEE802.3af, klass 3)
	Strömförbrukning	Max. 12,95W typisk 10,8W
Mekanik	Färg / Material	Vit/Aluminium
	RAL-kod	RAL9003
	Produktens mått/vikt	Ø197.6x84mm (7.78x3.31"), 1250g (2.76 lb)

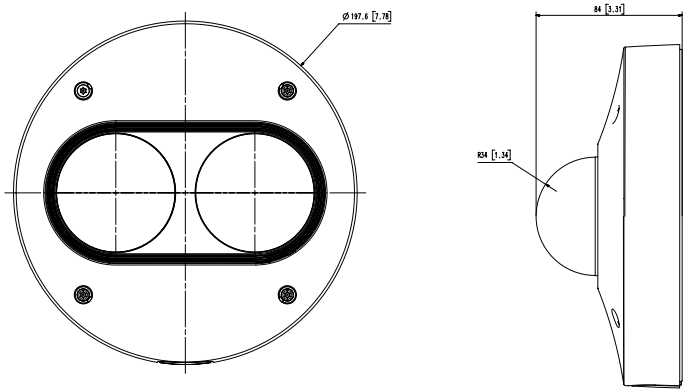
SPECIFIKATIONER (LINSMODUL)

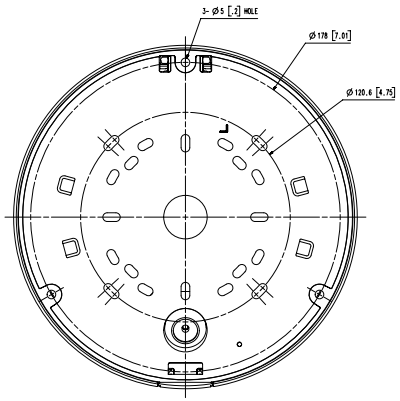
Artiklar		Beskrivning		
		SLA-5M3700D	SLA-5M4600D	SLA-5M7000D
Video	Bildenhet	1/1.8" 5M CMOS		
	Effektiva pixlar	2616(H) x 1976(V)		
	Min. upplysning	Färg : 0.16 lux(F1.6, 1/30sek, 30IRE) S/V : 0.16 lux(F1.6, 1/30sek, 30IRE)		
Objektiv	Fokallängd (zoomförhållande)	3,7 mm fast fokus	4,6 mm fast fokus	7,0 mm fast fokus
	Max. bländarförhållande	F1.6		
	Vinkel på visningsfält	H:95.8˚, V:70˚, D:123.6˚	H: 76.1˚, V: 56.8˚, D: 96.8˚	H: 49.5˚, V: 36.9˚, D: 62.2˚
	Objektivtyp	Fast brännpunkt		
	Monteringstyp	M12 Linsmodul med huvudenhet		
Panorering/ tiltning/rotation	Panorerings-/tiltnings-/ rotationsområde	-90˚ ~ +90˚ / +36˚ ~+73˚ / -180˚ ~ +180˚	-90˚~+90˚ / +21~+85˚ / -180˚~+180˚	-90˚~+90˚ / +12~+93˚ / -180˚~+180˚
Användning	Brett dynamiskt intervall	120dB		
	Dag och natt	Auto (elektrisk)		
Mekanik	Färg/Material	Svart/plast		
	Produktens mått/vikt	Ø35.5x35.9mm(1.40x1.41") / 35g(0.08 lb)		

PRODUKTÖVERSIKT

PNM-9000VD

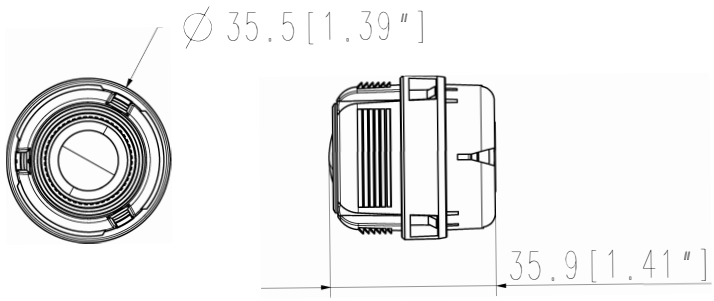
Enhet : mm [tum]





Linsmodul

Enhet : mm [tum]



FELSÖKNING

PROBLEM	LÖSNING
Ingen video visas i den kostnadsfria plugin-webbvisaren på Safari via HTTPS.	• Klicka på "Visa autentiseringscertifikat" i popup-autentiseringsfönstret som visas när du ansluter till HTTPS för första gången, och markera kryssrutan "Lita alltid på anslutningar till den tilldelade webbvisarens IP-adress". • Om webbvisaren inte visar video när du har klickat på "Nästa" i meddelandet nedan, trycker du på kommandotangenten + Q för att avsluta Safari. Anslut igen och genomför samma procedur som ovan.
Jag kan inte komma åt kameran från en webbläsare.	• Kontrollera för att säkerställa att kamerans nätverksinställningar är korrekta. • Kontrollera för att säkerställa att alla nätverkskablar har anslutits korrekt. • Om den är ansluten och du använder DHCP ska du kontrollera att kameran kan förvärva dynamiska IP-adresser utan problem. • Om kameran har anslutits till en Bredbandsrouter ska du se till att portvidarebefordran är korrekt konfigurerat.
Viewern har kopplats ur under övervakningen.	• Anslutna användare blir frånkopplade vid en ändring i kamera- eller nätverkskonfigurationen. • Kontrollera alla nätverksanslutningar.
Den nätverksanslutna kameran hittas inte i programmet Device Manager.	• Slå av inställningarna för brandväggen på datorn och sök kameran igen.
Bilderna överlappas.	• Kontrollera om två eller fler kameror är inställda på enkel multicast-adress istället för olika adresser. Om en enkel adress används för flera kameror kan bilderna överlappas.
Ingen bild visas.	• Om sändningsmetoden är inställd på multicast ska du kontrollera om det finns en router som stöder multicast i nätverket som kameran är ansluten till. • Kontrollera om linsmodulen arbetar normalt.

PROBLEM	LÖSNING
<MD / VA> för <Händelse> är inställd på <Aktivera>, men inga meddelanden via e-post når mig, även om en analyshändelse har uppstått.	• Verifiera inställningarna i följande sekvens: A. Kontrollera inställningarna för <Datum och tid>. B. <MD / VA> ska ställas in på <Aktivera>. C. Kontrollera om alternativet <e-post> för <Händelseinställningar> har markerats för användning.
Kan jag definiera händelseregler även när jag inte använder <MD / VA>?	• Ja, det kan den. Du kan ange regler för händelser, oavsett inställningar för intelligent videoanalys.
Kan inte lagra på Micro SD-minneskort.	• Kontrollera om det finns fel på minneskortet.
Micro SD-minneskortet är isatt men kameran fungerar inte som den ska.	• Kontrollera om minneskoret har satts i på rätt håll. Användning av minneskorts som har formaterats av andra enheter garanteras inte med den här kameran. • Formatera minneskortet igen i <Inställningar> → <Händelse> → <Lagring>.

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GPL SW

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

LGPL SW

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

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lighttpd is a secure, fast, compliant, and very flexible webserver that has been optimized for high-performance environments. It has a very low memory footprint compared to other webservers and takes care of cpuload. Its advanced feature-set (FastCGI, CGI, Auth, Output-Compression, URL-Rewriting and many more) make lighttpd the perfect webserver-software for every server that suffers load problems. Simple Network Management Protocol (SNMP) is an Internetstandard protocol for managing devices on IP networks. It is used mostly in network management systems to monitor the devices attached to the network for conditions that need administrative attention. Net-SNMP is a suite of applications used to implement SNMP v1, SNMP v2c and SNMP v3 using both IPv4 and IPv6. For more additional information, send email to help.cctv@hanwha.com.

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- Version 1.1

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It appears that the arithmetic coding option of the JPEG spec is covered by patents owned by IBM, AT&T, and Mitsubishi. Hence arithmetic coding cannot legally be used without obtaining one or more licenses. For this reason, support for arithmetic coding has been removed from the free JPEG software. (Since arithmetic coding provides only a marginal gain over the unpatented Huffman mode, it is unlikely that very many implementations will support it.) So far as we are aware, there are no patent restrictions on the remaining code.

The IJG distribution formerly included code to read and write GIF files. To avoid entanglement with the Unisys LZW patent, GIF reading support has been removed altogether, and the GIF writer has been simplified to produce "uncompressed GIFs". This technique does not use the LZW algorithm; the resulting GIF files are larger than usual, but are readable by all standard GIF decoders.

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

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

Article 1. Scope of License Agreement

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

Article 2. Definition

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

2. "Source Code" means a source program, including related comments and documentations, for the T-Kernel and the Ported Source Code defined in Article 2.8 which is registered with T-Engine Forum.

3. "Hardware-dependent Part" means the part of the Source Code which depends on hardware 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.

4. "Compiler-dependent Part" means the part of the Source Code which depends on compiler and needs to be changed when the Source Code is ported and operated on the target hardware, and is designated and separated as such part.

5. "Header File" means the part of the Source Code which contains definitions necessary to develop application programs.

6. "T-Engine Hardware" means the hardware which is manufactured in accordance with the T-Engine Hardware specifications or the µT-Engine Hardware specifications issued by T-Engine Forum, and registered with T-Engine Forum.

7. "Similar Hardware to T-Engine Hardware" means any hardware (including software which emulates hardware) other than that defined in Article 2.6 above, on which the T-Kernel can be operated.

8. "Ported Source Code" means a source program produced from the Source Code by modifying only its Hardwaredependent Part and/or Compiler-dependent Part to enable it to be operated on the T-Engine Hardware or the Similar Hardware to T-Engine Hardware. The Ported Source Code which is registered with T-Engine Forum shall be included in the Source Code.

9. "Modified Source Code" means a source program modified from the Source Code for the purpose of improving its performance, increasing or decreasing its function, and the like. The Ported Source Code shall not be included in the Modified Source Code.

10. "Binary Code" means an executable code form which is created by compiling programs, which include all or part of the Source Code or the Modified Source Code.

11. "Derivative Work" means the Modified Source Code or the Binary Code.

12. "Embedded Product" means any product which operates with executable code form of the Source Code, the Modified Source Code or the Binary Code loaded on its hardware.

13. "End User" means a consumer who uses the Embedded Product.

14. "System Developer" means any person who develops the Embedded Product by itself or has a third party develop the same, and provides, whether with or without payment, the End User with the Embedded Product.

15. "Distributor of Modification" means any person who produces the Modified Source Code and, whether with or without payment, distributes the same to any third party.

16. "Patch for Modification" means a difference, program, system, or the like in order to create the Modified Source Code from the Source Code or the Binary Code thereof.

17. "Vicarious Execution of Patch Processing" means vicarious execution service to create the Modified Source Code applying the Patch for Modification to the Source Code or the Binary Code thereof.

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2. to transmit a work to the general public through the Internet communication, broadcasting, and the like automatically in response to a request from the public; and

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

Article 3. Copyright

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

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1. As provided for in this Article, T-Engine Forum shall provide, and grant a license to use, the Source Code free of charge to any person who has taken the necessary procedure for registration as prescribed by T-Engine Forum and agreed to the T-License.

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2. to run the Source Code provided by T-Engine Forum hereunder for its own research, development and the like.

3. to run the Source Code modified in accordance with the provision of Article 4.3 (1) above for its own research, development and the like.

4. to distribute the Binary Code created from the Source Code provided by T-Engine Forum hereunder or from the Source Code modified in accordance with the provision of Article 4.3 (1) above.

4. In accordance with the license granted under Article 4.1 above, the System Developer may perform the following acts:

1. to perform any and all acts set forth in the Article 4.3 above.

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.

5. The Source Code User and the System Developer shall be obligated to give a notice that the Source Code is used, in such a way as separately specified by T-Engine Forum, when they use the Source Code or the Binary Code, or make the Binary Code available for the End User on the Embedded Product.

Article 5. Distribution of Modified Source Code

1. Any of A- members of T-Engine Forum may become the Distributor of Modification by obtaining the approval of T-Engine Forum through the registration procedure as prescribed by the Forum provided that only the department of the A- member which has taken the registration procedure may distribute the Modified Source Code in such a way as provided for in this Article as long as it holds the Amembership.

2. The Distributor of Modification may create the Modified Source Code based on the Source Code provided by T-Engine Forum and the Patch for Modification to be applied to create such Modified Source Code from the Source Code.

3. The Distributor of Modification shall, prior to the distribution, inform T-Engine Forum of and register a name and description of the Modified Source Code in such a way as specified by T-Engine Forum.

4. The Distributor of Modification shall determine the name of the Modified Source Code subject to the rules separately established by T-Engine Forum and publish an appropriate notice as required by the rules on the Patch for Modification and the Modified Source Code.

5. The Distributor of Modification may distribute the Modified Source Code to a third party, whether with or without payment, provided that the Distributor of Modification shall take the necessary measures to prohibit the third party from making the re-Distribution of the Modified Source Code.

6. Developer with the Patch for Modification. Provided, however, that the Distributor of Modification shall be obligated to confirm that the System Developer is the Source Code User duly licensed under Article 4.1.

7. The Distributor of Modification may perform the Vicarious Execution of Patch Processing for the System Developer.

8. The System Developer shall not distribute the Modified Source Code in further modified form to any third party as a stand-alone software product.

9. The System Developer may, under the same obligation as imposed in Article 4.5, make the Embedded Product available for the End User through use of the Patch for Modification distributed by the Distributor of Modification or the Derivative Works obtained through the Vicarious Execution of Patch Processing.

Article 6. Distribution and Registration of the Ported Source Code

1. The Source Code User and the System Developer may, whether with or without charge, distribute to any third party only the following parts of the Ported Source Code on the T-Engine Hardware or the Similar Hardware to T-Engine Hardware:

1. The Hardware-dependent Part and/or Compiler-dependent Part; provided that the Source Code User and the System Developer shall inform T-Engine Forum of, and T-Engine Forum may publish, a method for distributing said Part(s) to third parties.

2. The Header File; provided that the Header File shall be distributed together with the Binary Code of the Ported Source Code.

2. Any member of T-Engine Forum may request T-Engine Forum to register and distribute, as an original source code for T-Kernel, the Ported Source Code on the T-Engine Hardware or the Similar Hardware to T-Engine Hardware.

3. Any member of T-Engine Forum who requests the distribution mentioned in the preceding paragraph shall accede to the following conditions:

1. The member shall confirm that the object hardware is the T-Engine Hardware or the Similar Hardware to T-Engine Hardware.

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.

Article 8. Limited Warranty

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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.

Article 11. Governing Law and Language

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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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Iperf performance test

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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 (deflate format) and rfc1952.txt (gzip format).



Hanwha Techwin värnar om miljön i alla produkttillverkningssteg och vidtar ett antal åtgärder för att erbjuda kunderna miljövänligare produkter.
Eco-märkningen symboliserar Hanwha Techwin strävan att skapa miljövänligaprodukter och visar att produkten uppfyller EU RoHS Directive.



Korrekt avfallshantering av produkten (elektriska och elektroniska produkter)

Denna markering på produkten, tillbehören och i manualen anger att produkten och de elektroniska tillbehören (t.ex. laddare, headset, USB kabel) inte bör sorteras tillsammans med annat hushållsavfall när de kasseras. Till förebyggande av skada på miljö och hälsa bör dessa föremål hanteras separat för ändamålsenlig återvinning av beståndsdelarna.

Hushållsanvändare bör kontakta den återförsäljare som sålt produkten eller sin kommun för vidare information om var och hur produkten och tillbehören kan återvinnas på ett miljösäkert sätt.

Företagsanvändare bör kontakta leverantören samt verifi era angivna villkor i köpekontraktet. Produkten och de elektroniska tillbehören bör inte hanteras tillsammans med annat kommersiellt avfall.



Korrekt avfallshantering av den här produktens batterier

(Gäller i EU och andra europeiska länder med separata insamlingssystem för batterier.)

Märkningen på batteriet, manualen eller förpackningen visar att batterierna i den här produkten inte får slängas i hushållssoporna vid livsslut. Det kan finnas en märkning med de kemiska symbolerna Hg, Cd eller Pb vilket visar att batteriet innehåller kvicksilver, kadmium eller bly över referensnivåerna i EU-direktivet 2006/66. Om batterierna inte avfallshanteras korrekt kan dessa ämnen orsaka skador på människors hälsa eller på miljön.
För att skydda våra naturresurser och främja återvinning ska batterierna separeras från andra typer av avfall och återvinnas via det lokala återvinningssystemet.

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