

WISENET

KAMERA SIECIOWA

Instrukcja obsługi

XNP-6550RH



Kamera Sieciowa

Instrukcja obsługi

Prawa autorskie

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Znaki towarowe

Wszystkie znaki handlowe wymienione w niniejszym dokumencie są zastrzeżone. Nazwa niniejszego produktu i inne znaki handlowe wymienione w niniejszym podręczniku są zastrzeżonymi znakami handlowymi odpowiednich właścicieli.

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- ❖ Konstrukcja i dane techniczne urządzenia mogą ulec zmianie bez powiadomienia.
- ❖ Początkowym ID administratora jest "admin" a hasło powinno zostać ustawione podczas pierwszego logowania.
Dla zabezpieczenia informacji i zapobieżenia szkodom, hasło należy zmieniać co trzy miesiące.
Proszę pamiętać, że odpowiedzialność za bezpieczeństwo i wszelkie szkody wynikające z braku dbałości o hasło.

WAŻNE ZALECENIA DOTYCZĄCE BEZPIECZEŃSTWA

- Należy przeczytać poniższe zalecenia.
- Należy zachować je do wglądu.
- Należy przeczytać wszystkie ostrzeżenia.
- Należy przestrzegać wszystkich zaleceń.
- Nie używać urządzenia w pobliżu wody.
- Zabrudzoną powierzchnię produktu wyczyść miękką, suchą szmatką lub wilgotną szmatką. (Nie używaj żadnych detergentów ani produktów kosmetycznych zawierających alkohol, rozpuszczalniki, surfaktanty lub substancje oleiste, ponieważ mogą one spowodować odkształcenie lub uszkodzenie produktu).
- Nie blokować żadnych otworów wentylacyjnych. Montować zgodnie z instrukcją producenta.
- Nie montować w pobliżu źródeł ciepła takich jak grzejniki, kratki nagrzewnic lub innych urządzeń (w tym wzmacniaczy) emitujących ciepło.
- Nie lekceważyć zabezpieczenia wynikającego ze stosowania wtyczek spolaryzowanych lub z uziemieniem. Wtyczka spolaryzowana ma dwa bolce, z których jeden jest szerszy od drugiego. Wtyczka z uziemieniem ma trzy bolce, z czego jeden jest uziemiający. Szerszy lub odpowiednio trzeci bolec stosuje się w celu zapewnienia bezpieczeństwa. Jeśli dostarczona wtyczka nie pasuje do gniazda, skontaktuj się z elektrykiem w celu wymiany przestarzałego gniazda.
- Przewód zasilający przy wtyczkach, oprawach oraz w miejscach, gdzie wystają one z urządzenia należy zabezpieczyć przed możliwością nadeptnięcia lub przyciśnięcia.
- Używać wyłącznie elementów dodatkowych/akcesoriów zalecanych przez producenta.
- Kamery należy używać tylko z wózkiem, podstawą, statywem, uchwytem lub stołem zalecanym przez producenta lub sprzedawanym z kamerą. W przypadku użycia wózka podczas przemieszczania zestawu wózek-urządzenie należy zachować ostrożność, aby uniknąć obrażeń spowodowanych jego wywróceniem.
- W czasie burzy z wyładowaniami atmosferycznymi lub w przypadku nieużywania urządzenia przez dłuższy czas należy odłączyć urządzenie od zasilania.
- Wszelkie naprawy należy zlecać wykwalifikowanemu personelowi serwisu. Naprawy są konieczne gdy urządzenie zostało uszkodzone w jakikolwiek sposób, np. gdy uszkodzony jest przewód zasilający lub wtyczka, do środka urządzenia przedostał się płyn lub ciała obce, urządzenie miało kontakt z deszczem lub wilgocią, nie funkcjonuje normalnie lub spadło.
- Ten produkt przeznaczony jest do zasilania z listwowego zasilacza oznaczonego symbolami „Klasa 2” lub „LPS” o mocy od 24 Vac (50/60 Hz) min. 4,9 A lub PoE, 1,15 A.
- Użycie zbyt dużej siły podczas instalacji produktu może doprowadzić do uszkodzenia i nieprawidłowego działania kamery. Instalacja produktu przy użyciu siły i nieodpowiednich narzędzi może doprowadzić do jego uszkodzenia.
- Produktu nie należy instalować w miejscu, w którym mogą występować lub powstawać substancje chemiczne lub mgły olejowe. Oleje jadalne, takie jak olej sojowy, mogą uszkodzić lub odkształcić produkt, w związku z czym nie należy instalować go w kuchni lub w pobliżu blatu kuchennego. W przeciwnym razie produkt może ulec uszkodzeniu.
- Podczas instalacji produktu należy uważać, aby jego powierzchnia nie została zabrudzona substancjami chemicznymi. Niektóre substancje chemiczne zawierające rozpuszczalniki lub kleje mogą powodować poważne uszkodzenie powierzchni produktu.
- W przypadku instalacji lub demontażu produktu w sposób inny niż zalecany nie można zagwarantować prawidłowego działania funkcji i wydajności produktu. Zainstaluj produkt, zapoznając się z rozdziałem „Instalacja i podłączanie” w podręczniku użytkownika.
- Instalacja lub eksploatacja produktu w wodzie może doprowadzić do jego poważnego uszkodzenia.
- Jeśli produkt działa normalnie, stopień presetowej precyzji wynosi 0,2°. W przypadku rebootowania w związku z przestojem, aktualizacją oprogramowania układowego itp., tolerancja może wymagać korekty po sprawdzeniu wszelkich zmian w ustawieniach presetowych.



OSTRZEŻENIE

ABY ZMNIJEJSZYĆ RYZYKO POŻARU LUB PORAŻENIA PRADEM ELEKTRYCZNYM, NIE NALEŻY WYSTAWIAĆ URZĄDZENIA NA DZIAŁANIE WODY ANI WILGOCI. DO NOT INSERT ANY METALLIC OBJECT THROUGH THE VENTILATION GRILLS OR OTHER OPENINGS ON THE EQUIPMENT.

Nie należy narażać urządzenia na kapanie lub rozlewanie płynów. Na urządzeniu nie należy stawiać przedmiotów wypełnionych cieczą np. wazonów.

Aby zapobiec obrażeniom, urządzenie należy dobrze przymocować do ściany/sufitu, zgodnie z instrukcjami montażu.

Silnik panoramowania/wychylania/zoomowania oraz pierścień ślizgowy są objęte jednoročzną gwarancją przy ciągłej pracy.

UWAGA

	UWAGA NIEBEZPIECZEŃSTWO PORAŻENIA PRADEM. NIE OTWIERAĆ	
UWAGA : ABY ZMNIJEJSZYĆ RYZYKO PORAŻENIA PRADEM NIE USUWAĆ OBUDOWY (ANI CZĘŚCI TYLNEJ). NIE MA CZĘŚCI PRZEZNACZONYCH DO NAPRAWY PRZEZ UŻYTKOWNIKA. NALEŻY SKONTAKTOWAĆ SIĘ Z WYKWALIFIKOWANYM PERSONELEM SERWISU.		

WYJAŚNIENIE SYMBOLI GRAFICZNYCH



Równoboczny trójkąt ostrzegawczy ze znakiem błyskawicy zakończony strzałką przestrzega przed „niebezpiecznym napięciem” wewnątrz urządzenia, które może mieć wystarczająco wysokie natężenie, aby stanowić zagrożenie porażenia prądem elektrycznym.



Trójkąt równoboczny z wykrzyknikiem to symbol wskazujący, że dokumentacja dołączona do urządzenia zawiera ważne instrukcje dotyczące obsługi i konserwacji (serwisowania).

Klasa I konstrukcji

Urządzenie z konstrukcją KLASA I należy podłączać do gniazda SIECI ELEKTRYCZNEJ za pomocą zabezpieczonych przewodów uziemiających.

Akumulator

Akumulatorów (znajdującego się w urządzeniu zestawu akumulatorów lub akumulatora) nie należy wystawiać na działanie zbyt wysokiej temperatury, np. promieni słonecznych, ognia itp.

Nie można wymienić baterii.

Odlączenie urządzenia

Jeśli urządzenie jest uszkodzone, odłącz je z sieci zasilającej. Wezwij także lokalnego technika serwisowego.

Jeśli urządzenie jest używane poza granicami Stanów Zjednoczonych, może być stosowane ze wtyczkami z kodami atestów odpowiednich urzędów.

UWAGA

Poniższe instrukcje serwisowania są przeznaczone wyłącznie na użytek wykwalifikowanych pracowników serwisu.

Ze względu na zagrożenie porażeniem prądem elektrycznym osoby nieposiadające odpowiednich kwalifikacji nie powinny wykonywać czynności serwisowych innych niż opisane w poniższej instrukcji.

Terminal CVBS służy łatwiejszej instalacji oraz nie jest zalecany dla celów monitoringu.

Należy doprowadzać zasilanie wejściowe tylko do jednej kamery i nie należy do niego podłączać innych urządzeń.

ITE należy podłączać tylko do sieci PoE bez trasowania do zewnętrznego zakładu.

Należy uważnie przeczytać poniższe zasady bezpieczeństwa.

- Nie należy umieszczać tego urządzenia na nierównej powierzchni.
- Urządzenia nie należy instalować na powierzchni wystawionej bezpośrednio na działanie promieni słonecznych, w pobliżu grzejników lub w miejscach o bardzo niskiej temperaturze.
- Nie umieszczać urządzenia w pobliżu materiałów przewodzących.
- Nie należy samodzielnie podejmować prób naprawy urządzenia.
- Na urządzeniu nie należy stawiać pojemników z wodą.
- Produktu nie należy instalować w pobliżu urządzeń emitujących pola magnetyczne.
- Nie zasłaniać otworów wentylacyjnych.
- Na urządzeniu nie należy kłaść ciężkich przedmiotów.
- Podczas instalacji i demontażu kamery należy używać rękawic ochronnych. Wysoka temperatura powierzchni produktu może spowodować poparzenia ciała.

Instrukcja obsługi zawiera wytyczne dotyczące użytkowania produktu.

W niniejszej instrukcji obsługi informacje są oznaczone jako.

- Informacje dodatkowe : wytyczne dotyczące użytkowania produktu
 - Uwaga : informacje o występowaniu ryzyka uszkodzenia produktu lub obrażenia użytkownika w wyniku nieprzestrzegania instrukcji
- ※ W celu zapewnienia bezpieczeństwa przed rozpoczęciem korzystania z urządzenia należy zapoznać się z poniższą instrukcją obsługi i przechowywać ją w bezpiecznym miejscu.

W niektórych środowiskach montażowych mogą wystąpić zakłócenia w komunikacji radiowej. W przypadku wystąpienia zakłóceń fal elektromagnetycznych między produktem a urządzeniem komunikacji radiowej zaleca się zachowanie pewnej odległości między nimi lub zmianę kierunku anteny odbiorczej.

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ZALECANE SPECYFIKACJE KOMPUTERA PC

- Procesor: Intel(R) Core(TM) i7 3.4 GHz lub wyższy
- Pamięć RAM: 8 GB lub więcej
- Obsługiwany system operacyjny: MS Windows, Mac OS X
- Zalecana przeglądarka: Google Chrome
Obsługiwane przeglądarki: MS Explorer, MS Edge, Mozilla Firefox (tylko 64-bitowa wersja systemu Windows), Apple Safari (tylko system Mac OS X)

※ Szczegółowe informacje dotyczące zweryfikowanej wersji systemu operacyjnego i przeglądarki można znaleźć w załączniku.

SPECYFIKACJA ZALECANYCH KART PAMIĘCI MICRO SD/SDHC/SDXC

- Zalecana pojemność: Zalecana pojemność: od 16 do 256 GB (typ MLC)
- W przypadku tej kamery zalecane są następujące typy kart pamięci następujących producentów.
 - Producent: SanDisk, Transcend
 - Rodzina produktów: karty o dużej odporności

SPECYFIKACJA ZALECANA PRZEZ NAS

- Zalecana pojemność: Zalecane jest 200GB lub więcej.
- Dostęp jednoczesny: Jednostka NAS może przyjąć do szesnastu dostępów do kamery.
- Dla tej kamery zalecane jest wykorzystanie NAS z następującą specyfikacją fabryczną.










Zalecane produkty	Dostępne rozmiary
Urządzenia sieciowe Netgear NAS	Dostęp jednoczesny dla maksimum 16 kamer.
Synology NAS	Dostęp jednoczesny dla maksimum 16 kamer.





- W przypadku wykorzystania urządzeń sieciowych Netgear NAS nie należy przypisywać pojemności do wykorzystania.
- Wykorzystanie urządzeń NAS dla celów innych niż zapis video może spowodować zmniejszenie dostępnej liczby kamer.

CO ZNAJDUJE SIĘ W OPAKOWANIU

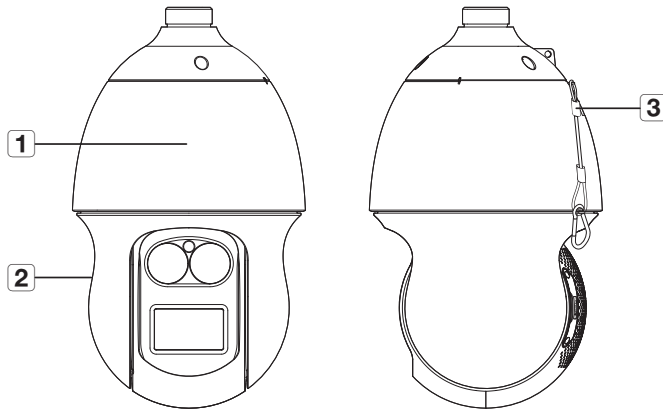
Należy sprawdzić, czy w opakowaniu znajduje się kamera oraz wszystkie akcesoria.
(Akcesoria nie są identyczne i zależą od kraju sprzedaży)

Wygląd	Nazwa elementu	Liczba	Opis
	Obudowa Główna	1	
	Skrócona instrukcja obsługi (Opcjonalny)	1	
	Karta gwarancyjna (Opcjonalny)	1	
	Konwerter sieciowy HPoE	1	Służy do podłączania zasilania i sieci
	Przewód monitora sprawdzającego	1	Służy do sprawdzania kamery poprzez podłączenie do przenośnego wyświetlacza
	Kabel zasilający	1	Służy do podłączania konwertera HPoE
	Kabel Audio/RS-485	1	Użyty do połączenia audio oraz RS-485
	Śruba sześciokątna	3	Służy do mocowania podstawy instalacyjnej do kamery.
	Klucz imbusowy	1	Służy do przyzepiania podstawy instalacyjnej po przymocowaniu jej do kamery.

Wygląd	Nazwa elementu	Liczba	Opis
	Podstawa instalacyjna	1	Wspornik do montażu produktu
	Akcesoria wodoszczelne	1	Zalóż i stosuj w przypadku dużej wilgotności.

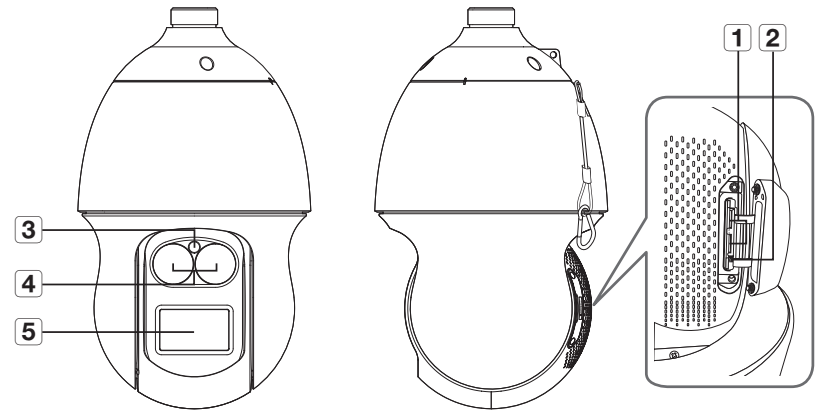
SPOJRZENIE NA KAMERĘ

Wygląd



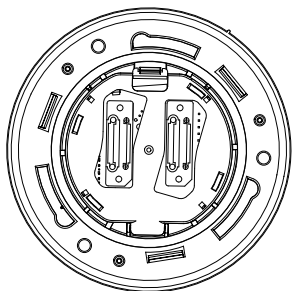
Element	Opis
1 Urządzenie Główne	Chroni mechanizm wewnętrzny PTZ przed bezpośrednim nasłonecznieniem, deszczem lub czynnikami zewnętrznymi.
2 Pokrywa	Pokrywa ochronna na obiektyw.
3 Kabel zabezpieczający	Kabel chroni przed upadkiem produktu podczas jego montażu.

Wewnątrz

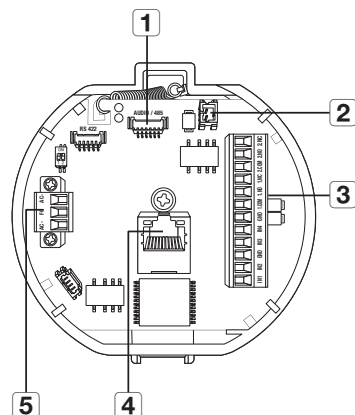


Element	Opis
1 Gniazdo karty pamięci Micro SD	Gniazdo na kartę pamięci Micro SD. ☑️ Pozycję wciśnięcia karty pamięci Micro SD można znaleźć <Wkładanie i Wymywanie Karty Pamięci Micro SD>. (strona 10)
2 Przycisk Reset	Ten przycisk przywraca wszystkie ustawienia kamery do wartości domyślnych. Naciśnij i przytrzymaj przez około 5 sekund, aby uruchomić system ponownie. ❗ W przypadku zresetowania kamery ustawienia sieciowe zostaną dostosowane tak, aby możliwe było włączenie protokołu DHCP. Jeśli w sieci nie ma serwera DHCP, należy uruchomić program Device Manager, aby zmienić podstawowe ustawienia sieciowe, takie jak adres IP, maska podsieci, brama itp., zanim będzie można połączyć się z siecią.
3 Czujnik oświetlenia	Wykrywa natężenie światła i steruje diodą podczerwieni.
4 Dioda podczerwieni	Diody podczerwieni są sterowane za pomocą czujnika oświetlenia.
5 Obiektyw	Obiektyw kamery.

Widok podstawy instalacyjnej
od spodu



Widok podstawy instalacyjnej
wewnątrz



Element	Opis
1 Złącze Audio/RS-485	Ten terminal służy do połączenia kabli audio i RS-485.
2 Gniazdo wyjścia wideo	Gniazdo wyjścia analogowego sygnału wideo. (do instalacji)
3 Gniazdo wej./wyj. alarmu	Używany do podłączania kabla wejścia/wyjścia alarmu.
4 Połączenia sieciowe	Gniazdo dla połączenia z siecią za pomocą kabla ethernetowego.
5 Gniazdo zasilania	Używane do podłączania źródła zasilania.

MONTAŻ

- ! Kamera jest wodoszczelna i spełnia wymogi IP66, z wyłączeniem przyłącza zewnętrznego kabla. Zaleca się montaż tego urządzenia pod okapem dachu, tak aby uchronić kabel przed działaniem warunków zewnętrznych.

Środki ostrożności przed montażem

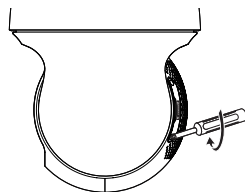
Przed przystąpieniem do montażu kamery należy przeczytać poniższe instrukcje:

- Wybierz miejsce instalacji, które może utrzymać pięciokrotną masę kamery.
- Zmiażdżone lub "gole" przewody mogą być przyczyną uszkodzenia urządzenia lub pożaru.
- Ze względów bezpieczeństwa nie należy dopuszczać innych osób w pobliżu miejsca montażu. Na wszelki wypadek należy również odsunąć rzeczy osobiste personelu.
- Użycie zbyt dużej siły w celu montażu może doprowadzić do uszkodzenia kamery z powodu jej nieprawidłowego działania. Montaż przy użyciu siły i nieodpowiednich narzędzi może doprowadzić do uszkodzenia produktu.

Wkładanie karty pamięci Micro SD

1. Odkręć dwie śruby na wsporniku uchwytu SD, obracając je w kierunku przeciwnym do ruchu wskazówek zegara za pomocą śrubokręta.

- ! Przed włożeniem karty pamięci Micro SD odłącz kabel zasilania od kamery.
- W przypadku deszczu lub wysokiej wilgotności wkładanie i wyjmowanie karty Micro SD nie jest zalecane.
- Podczas instalacji/wyjmowania karty pamięci Micro SD należy pamiętać o ustawieniu korpusu produktu na płaskim gruncie przed rozpoczęciem użytkowania, aby zapobiec upadnięciu i uszkodzeniu jakichkolwiek części.
- Nie odkręcaj całkowicie śrubek.

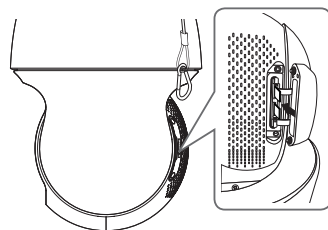


2. Wyciągnij wspornik uchwytu SD i przesunij kartę pamięci Micro SD w kierunku strzałki, jak pokazano na rysunku.

- ! Nie wolno na siłę wkładać karty pamięci Micro SD w odwrotnym kierunku. Może się uszkodzić lub spowodować uszkodzenie produktu.

3. Złóż kamerę w odwrotnej kolejności demontażu po włożeniu karty pamięci Micro SD.

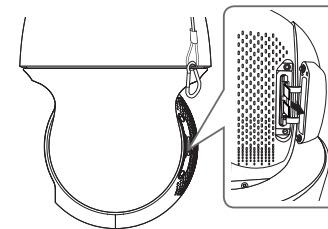
- ! Dokręć śruby podczas montażu kamery, aby zapobiec przenikaniu wilgoci.



Wymywanie karty pamięci Micro SD

Aby wysunąć kartę pamięci z gniazda, delikatnie naciśnij wystającą jej część tak, jak to jest widoczne na schemacie.

- ! Pamiętaj, że silne wciśnięcie i zwolnienie wysuniętej karty Micro SD może spowodować jej wypadnięcie.
- Przed wyjęciem karty pamięci Micro SD w obszarze <Pamięć> dla urządzenia wybierz ustawienie <Wyt.>, naciśnij przycisk [Zastosuj] i wyłącz kamerę.
- W przypadku wyłączenia kamery lub wyjęcia karty pamięci Micro SD, która zawiera dane z produktu, dane te mogą ulec utracie lub zniszczeniu.



Przygotowanie i instalacja uchwytu kamery

Instrukcje dotyczące montażu uchwytów i obudów dostępne są w instrukcji instalacji dołączonej do uchwytu lub obudowy.

■ Dostępne modele uchwytów

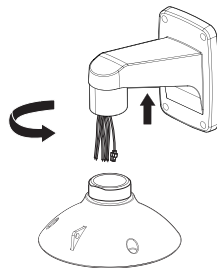
Model	Opcja
SBP-300WM1	Montaż ścienny
SBP-300WM	
SBP-300CM	Uchwyt sufitowy
SBP-300LM	Montaż na gzymsie
SBP-300KM	Montaż narożnikowy
SBP-300PM	Montaż na słupie

- ☒ Aby sprawdzić wygląd każdego uchwytu (nie dołączonego do zestawu), patrz „Opcjonalne akcesoria instalacyjne” (strona 13)

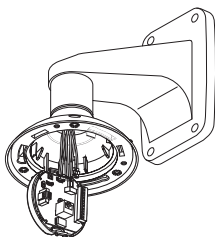
Instalacja w uchwycie ściennym

- Zamocuj podstawę instalacyjną za pomocą uchwytu.

1. Zamocuj podstawę obracając uchwyt w prawo.



2. Zgodnie z poniższym rysunkiem delikatnie naciśnij i podnieś uchwyt drzwiczek na zawiasach u dołu podstawy instalacyjnej. Aby podłączyć przewody, zapoznaj się z częścią „Płytkę połączeń elektrycznych kamery” na stronie 14.

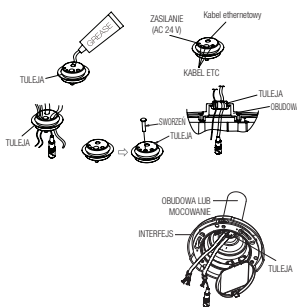


- ! ▪ Kamery nie należy podłączać do gniazda zasilania przed zakończeniem montażu. Podłączenie kamery do zasilania w trakcie montażu może spowodować pożar lub uszkodzenie produktu.

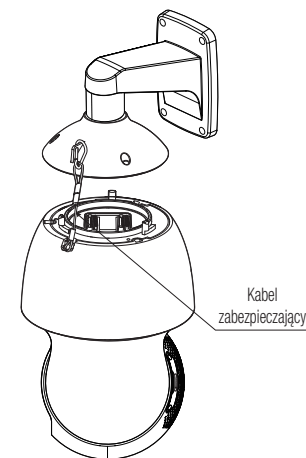
☑ Sprawdź sposób połączenia kablowego.

- Uwaga do montażu zewnętrznego, gdzie instalacja jest narażona na wilgoć, dostarczane są **TULEJE** na **RURĘ** lub **UCHWYT**, **OBUDOWĘ** należy montować za pomocą **TULEI**, aby zapobiec przedostawaniu się wilgoci.

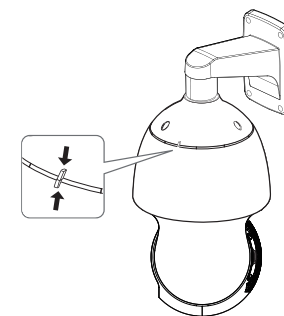
- Przed montażem na **TULEJE** należy nałożyć porcję smaru, i przeciągnąć kable przez każdy z otworów tulej. Do zamykania pustych otworów, przez które nie przechodzą kable, należy użyć **ZATYCZEK**.
- Przymocuj **TULEJE** na górnej wewnętrznej stronie **OBUDOWY**, jak pokazano na poniższym rysunku. Następnie, naciskając równomiernie **TULEJĘ** przymocuj ją solidnie **OBUDOWY**, jak pokazano na rysunku.



3. Podłącz drut zabezpieczający kamery do podstawy instalacyjnej.

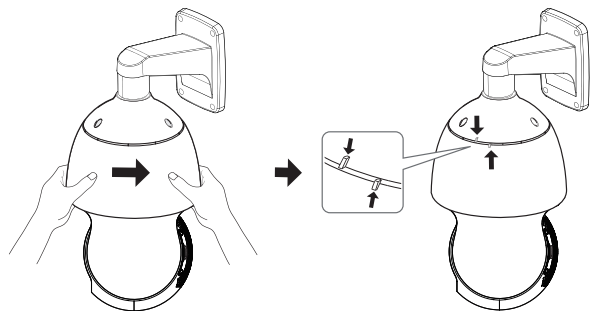


4. Montaż kamery i podstawy instalacyjnej
Zmontuj podstawę instalacyjną i kamerę dopasowując do siebie oznaczenia kierunku.



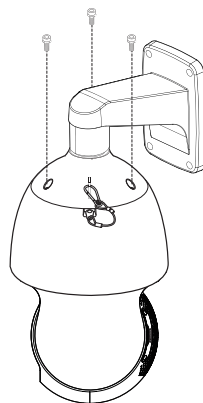
5. Zamocuj kamerę

Obróć korpus aparatu zgodnie z ruchem wskazówek zegara, aby umieścić znacznik w części górnej i dolnej, jak pokazano na rysunku.



6. Mocowanie kamery i podstawy instalacyjnej

Przymocuj podstawę instalacyjną i kamerę za pomocą 3 śrub sześciokątnych, jak przedstawia to poniższy rysunek.



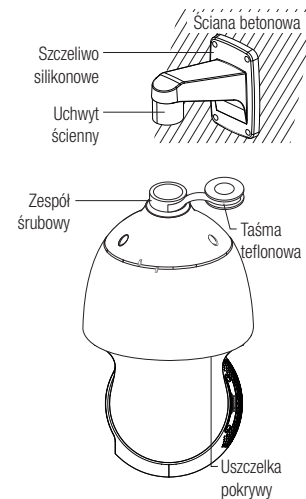
Uwagi dotyczące wodoszczelności

Model jest zintegrowanym produktem w obudowie do instalacji pod gołym niebem.

■ Gdy obudowa główna jest połączona z umocowaniem ściennym do montowana na ścianie

1. Do pionowej ściany zainstalować uchwyt ścienny. Przy instalacji na nachylonej ścianie, wilgoć może przeniknąć do środka obudowy głównej przez kabel zewnętrzny.
2. Część śrubową obudowy ochronnej owinać dostateczną ilością taśmy teflonowej celem zamocowania.
3. Proszę upewnić się, że uszczelka nie została zdjęta z pokrywy po jej zdjęciu ponownym założeniu.
4. Zainstalować ścienny pośredni łącznik mocujący celem zapewnienia wodoszczelności, a pomiędzy i wokół ściany uchwytu ściennego zastosować szczelino silikonowe.

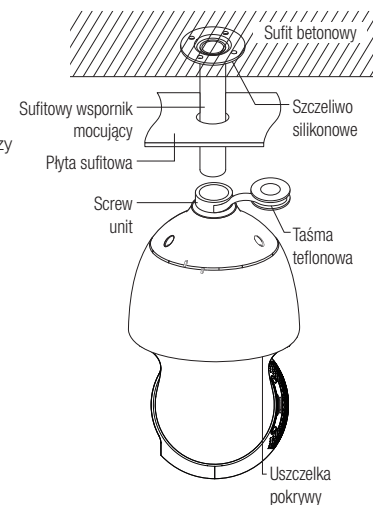
! ■ Zwrócić szczególną uwagę na to, aby zapewnić właściwą szczelność w przypadku, jeśli ściana do której urządzenie jest mocowane, nie jest płaska.



■ Gdy obudowa główna jest połączona z umocowaniem stropowym do montowana na ścianie

1. Część śrubową obudowy owinać dostateczną ilością tamy teflonowej celem przeprowadzenia montażu.
2. Proszę upewnić się, że uszczelka nie została zdjęta z pokrywy po jej zdjęciu ponownym założeniu.
3. Zamocować sufitowy łącznik mocujący zapewniający wodoszczelność i nałożyć szczelino silikonowe pomiędzy ścianą a uchwytem sufitowym celem uszczelnienia.

! ■ Zwrócić szczególną uwagę na to, aby zapewnić właściwą szczelność przy nierównych płaszczyznach montażowych.

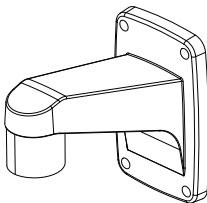


Opcjonalne akcesoria instalacyjne

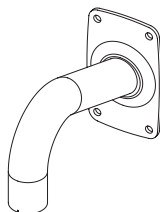
W celu ułatwienia instalacji można zakupić odpowiednie opcjonalne akcesoria.

1. Do instalacji kamery na ścianie

- Montaż ścienny (SBP-300WM1)

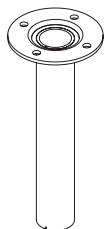


- Montaż ścienny (SBP-300WM)



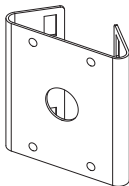
2. Do instalacji kamery na suficie

- Uchwyt sufitowy (SBP-300CM)



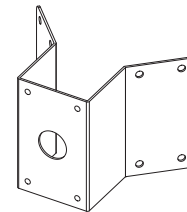
3. Do instalacji uchwyty ściennego (SBP-300WM/SBP-300WM1) na kołku o długości przynajmniej 80mm

- Montaż na słupie (SBP-300PM)



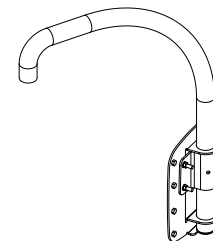
4. Do instalacji uchwyty ściennego (SBP-300WM/SBP-300WM1) na rogu ściany

- Montaż narożnikowy (SBP-300KM)

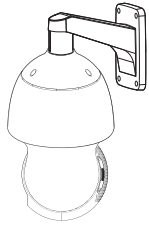


5. Do instalacji na dachu budynku

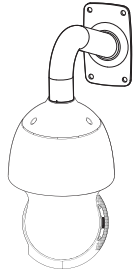
- Montaż na gzymsie (SBP-300LM)



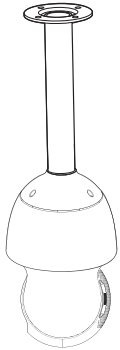
▪ Połączenie montażowe



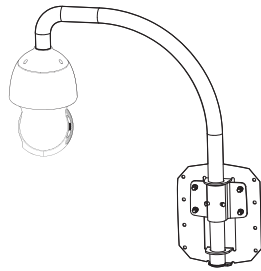
Montaż ścienny (SBP-300WM1)



Montaż ścienny (SBP-300WM)



Uchwyt sufitowy (SBP-300CM)

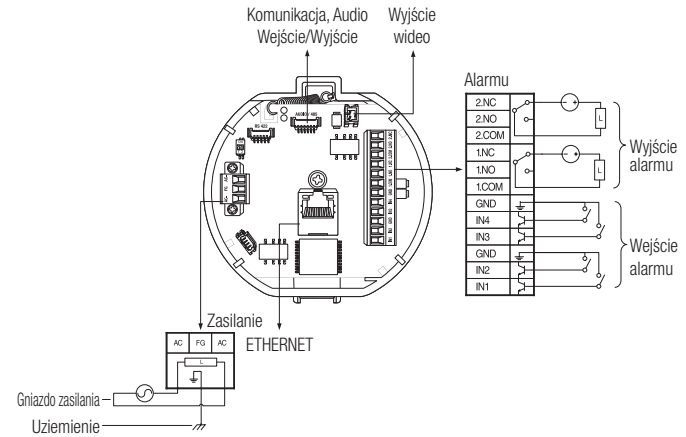


Montaż na gzymsie (SBP-300LM)

PODŁĄCZANIE INNEGO URZĄDZENIA

Płytki połączeń elektrycznych kamery

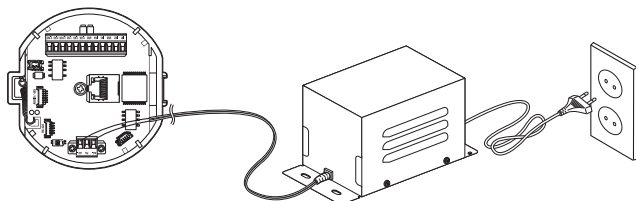
Aby poprowadzić przewody kamery, patrz poniższy rysunek.



- W menu ustawień wybrać Normal. otwarte.
 - Uaktywnia się wejście czujnika przy zwarciu styku zwiernego lub w przypadku „Niskiego” poziomu w przypadku typu czynnego.
- Z menu ustawień wybrać Normal. zamkn.
 - Wejście czujnika uaktywnia się przy otwarciu styku rozwiernego lub w przypadku stanu wysokiej impedancji (przy otwartym kolektorze) dla typu aktywnego.
- Maksymalna moc gniazda wyjścia alarmu to 30 V DC/2 A, 125 V AC/0,5 A i 250 V AC/0,25 A.
- Podłączając przewody wejścia i wyjścia alarmu należy podłączyć odpowiednio po jednym przewodem do poszczególnych zacisków.
- Aby podłączyć produkty o zasilaniu wyższym niż zasilanie kamery, należy użyć dodatkowego urządzenia przekaźnikowego.
- Nieprawidłowe podłączenie kabli zasilania i masy do wyjścia NC/NO lub gniazda COM niesie ze sobą ryzyko pożaru i uszkodzenia sprzętu.

Przygotowanie zasilacza i kabla

- Podłącz kamerę do zasilacza. Następnie podłącz przewód zasilający zasilacza do gniazda sieciowego.



Przed podłączeniem sprawdź napięcie znamionowe i prąd.

Moc znamionowa	Dopuszczalne napięcie zasilania	Pobór prądu
24 V prądu zmiennego	22 V–26 V prądu zmiennego	6 A

- Nie można korzystać z produktu w temperaturze urządzenia bądź otoczenia poniżej -50°C .
- Zależnie od otoczenia, Produkt może nie odmrozić się w temperaturze poniżej -50°C .
- Po odłączeniu produktu w niskich temperaturach otoczenia, czas potrzebny na przywrócenie normalnego działania może sięgać 2 godzin.
- Prędkość zoomowania przyciemniacza IR może się zmniejszyć w temperaturze otoczenia poniżej -40°C .
- Jeżeli produkt został włączony po wystawieniu na jakiś czas na temperaturę poniżej -20°C , należy zresetować czas.
- Aby podłączyć urządzenie zewnętrzne, należy wcześniej wyłączyć urządzenie zewnętrzne.

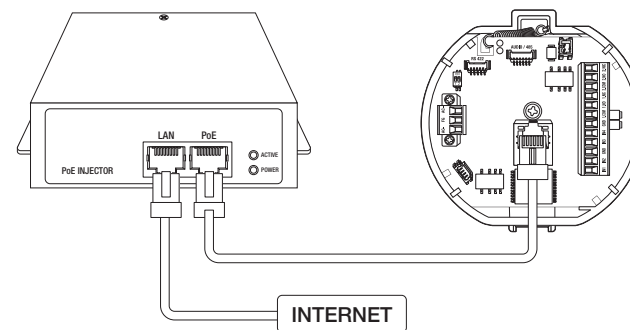
Specyfikacja kabla zasilania

W przypadku wejścia AC 24 V:

Typ drutu (AWG)	#16	#14
Długość kabla (maks.)	14m	23m

Połączenie typu Ethernet

Podłącz kabel Ethernet do sieci lokalnej lub do Internetu.



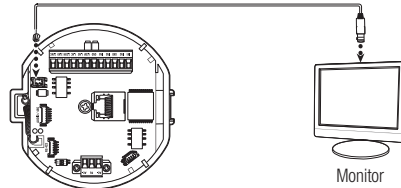
- Należy używać zgodnego adaptera stosownie do zasilania urządzenia.

Specyfikacja kabla sieciowego

Przedmiot	Zawartość	Uwagi
Łącze	RJ45 (10/100BASE-T)	
Ethernet	10/100BASE-T	
Kabel	UTP Kategoria 5e	
Odległość maks.	100M	Oporność pr. stałego $\leq 0,125 \Omega/\text{m}$
Obsługa HPoE	HPoE	

Podłączenie monitora instalacyjnego

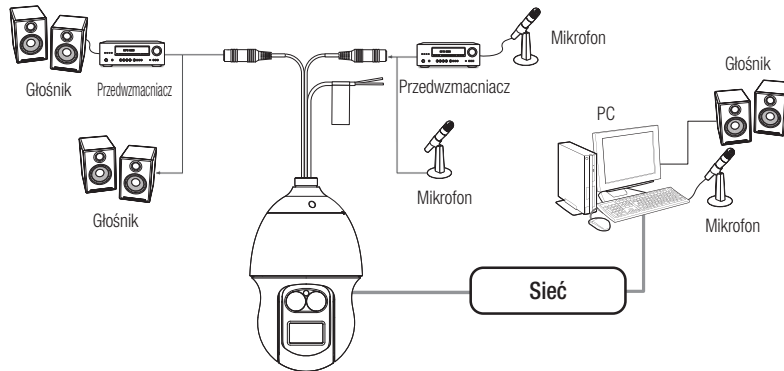
Podłącz kabel do tylnego złącza wyjścia wideo kamery i złącza wejścia wideo monitora instalacyjnego.



- Połączenie różni się w zależności od rodzaju monitora i urządzeń peryferyjnych, należy zapoznać się z instrukcją obsługi poszczególnych urządzeń.
- Przed podłączeniem urządzeń upewnij się, że monitor i kamera są wyłączone.

- ! Ten produkt to kamera sieciowa, która przekazuje obraz w sieci, złącze wyjścia wideo kamery służy do ustawiania zakresu kamery podczas instalacji.
- Zastosowania wyjścia do celów monitoringu może powodować problemy, np. pogorszenie jakości obrazu.
- Nie nadaje się do 24 godzinnego monitoringu z wykorzystaniem profesjonalnych monitorów CRT bądź przenośnych monitorów TFT/LCD.
- Do 24 godzinnego monitoringu i zapisu skorzystaj z ekranu transferu sieciowego.

Schemat blokowy wejść i wyjść audio



1. Połącz port AUDIO IN kamery z mikrofonem lub port LINE OUT wzmacniacza, do którego podłączony jest mikrofon, z bezpośrednim złączem mikrofonu.
2. Połącz port AUDIO OUT kamery z głośnikiem lub portem LINE IN wzmacniacza, do którego podłączony jest głośnik.
3. Sprawdź informacje o wyjściu audio w danych technicznych.

• Kodek Audio

- Wejście audio : G.711 PCM (Szybkość transmisji: 64kbps / Częstotliwość próbkowania : 8kHz), G.726 ADPCM (Szybkość transmisji: 16Kbps, 24Kbps, 32Kbps, 40Kbps / Częstotliwość próbkowania: 8kHz), AAC (Bit Rate: 48Kbps / Sampling Frequency: 16kHz)
- Wyjście audio : G.711 PCM (Szybkość transmisji: 64kbps / Częstotliwość próbkowania: 8kHz)

• Dźwięk w trybie pełnego duplexu

- **Wejście audio** : z możliwością wyboru (mikrofon/liniowe), Obsługiwane napięcie: 2,5 VDC (4 mA), Impedancja wejściowa: 2 kΩ
- **Wyjście audio** : Liniowe (typu Jack 3,5 mm, mono), Maksymalna moc wyjściowa: 1 Vms
- **Impedancja wyjścia liniowego** : 600omów

Obwody kamery

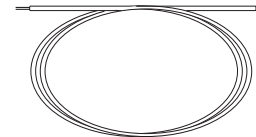
Przewód sygnału sterowania

- Komunikacja RS-485



Przewód komunikacji

Aby umożliwić komunikację pomiędzy kamerą a konsolą sterującą, potrzebny jest przewód komunikacji RS-485.



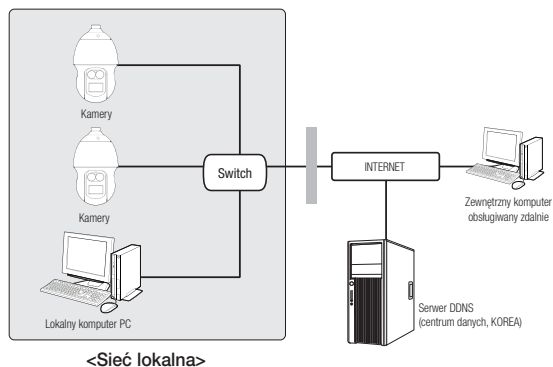
- ! Do podłączenia zaleca się przewód o długości 30 m lub krótszy.
- Przewód komunikacji nie jest dołączony do kamery.

Można skonfigurować ustawienia sieciowe zgodnie z charakterystyką sieci użytkownika.

PODŁĄCZANIE KAMERY BEZPOŚREDNIO DO SIECI LOKALNEJ

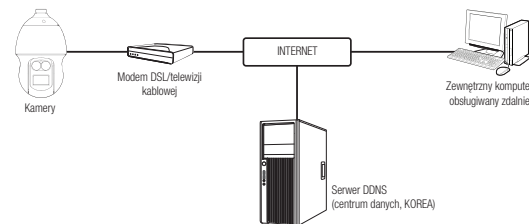
Podłączanie do kamery lokalnego komputera PC przyłączonego do sieci lokalnej

1. Uruchom na lokalnym komputerze PC przeglądarkę internetową.
2. Na pasku adresu przeglądarki wpisz adres IP kamery.



- Zdalny komputer PC podłączony do zewnętrznej sieci Internet poza siecią lokalną może nie połączyć się z kamerą podłączoną do intranetu, jeśli przekazywanie portów nie zostanie prawidłowo ustawione lub gdy działa zaporą. W takim wypadku, aby rozwiązać problem, należy skontaktować się z administratorem sieci.
- W programie Device Manager możesz użyć początkowego hasła, „4321” aby ustawić adres IP, maskę podsieci, bramę, port HTTP, port VNP, typ IP. Po zmianie interfejsu sieciowego, należy wejść na podgląd WEB i zmienić hasło.
- Domyślnym ustawieniem fabrycznym jest automatyczne przydzielanie adresu IP przez serwer DHCP. Jeśli serwer DHCP nie jest dostępny, adres IP zostanie ustawiony na 192.168.1.100. Aby zmienić adres IP, użyj programu Device Manager. Aby uzyskać więcej informacji nt. korzystania z programu Device Manager, patrz „Korzystanie z programu Device Manager”. (Strona 18)

PODŁĄCZANIE KAMERY BEZPOŚREDNIO DO MODEMU DSL/TELEWIZJI KABLOWEJ OPARTEGO NA PROTOKOLE DHCP



1. Połączenie użytkownika PC bezpośrednio z kamera sieciową.
2. Uruchom program Device Manager i zmierz adres IP kamery, aby móc korzystać z przeglądarki internetowej na pulpicie, aby połączyć się z internetem.
3. Uzyskaj połączenie z przeglądarką Web Viewer za pomocą przeglądarki internetowej.
4. Przejdź do strony **[Ustawienia]**.
5. Przejdź do opcji **[Sieć] – [DDNS]** i skonfiguruj ustawienia DDNS.
6. Przejdź do **[Basic] – [IP & Port]** i ustaw typ IP do **[DHCP]**.
7. Podłącz odłączoną od komputera kamerę, bezpośrednio do modemu.
8. Uruchom kamerę ponownie.

- Informacje na temat sposobu konfiguracji DDNS można znaleźć w systemie pomocy online przeglądarki Web Viewer.
- Informacje na temat sposobu ustawiania formatu IP można znaleźć w systemie pomocy online przeglądarki Web Viewer.

KORZYSTANIE Z PROGRAMU DEVICE MANAGER

- Program Device Manager można pobrać z menu <Technical Guides> – <Online Tool> w witrynie Hanwha Techwin (<http://www.hanwha-security.com>).
- Więcej instrukcji programu Device Manager można znaleźć w menu <Pomoc> na stronie głównej.

AUTOMATYCZNE WYSZUKIWANIE KAMERY

Jeśli kamera jest podłączona do tej samej sieci komputera PC, na którym jest zainstalowany Device Manager, możesz znaleźć kamerę sieciową za pomocą funkcji wyszukiwania.

- Kliknij <Wyszukaj> na stronie głównej programu Device Manager.
- Sprawdź kamerę z listy.
 - Sprawdź adres MAC na naklejce dołączonej do kamery.

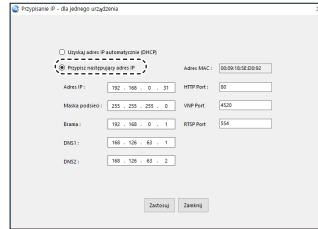
KONFIGUROWANIE ADRESU IP

Jeśli chcesz zmienić ustawienia sieci kamery, znak <Logowanie OK> musi być widoczny w <Status>. Kliknij <Uwierzytelnianie> na stronie głównej, aby się zalogować.

Konfigurowanie statycznego IP

Ręcznie wstaw i skonfiguruj adres IP i informacje o porcie.

- Kliknij kamerę z listy dla której chcesz zmienić ustawienia IP.
- Kliknij <IP Assign (Przypisz IP)> na stronie głównej programu Device Manager.
- Wybierz <Przypisz następujący adres IP>.
 - Informacje IP kamery zostaną wyświetlone zgodnie z poprzednim ustawieniem.
- Wypełnij kategorie związane z IP & Port.



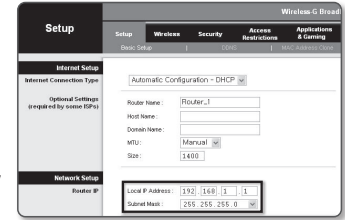
Jeżeli nie jest używany Ruter szerokopasmowy

Zapytaj o ustawioną wartość menedżera sieci <Adres IP>, <Maska podsieci>, <Brama>.

- HTTP Port : Umożliwia dostęp do kamery za pomocą przeglądarki internetowej; domyślna wartość to 80.
- VNP Port : Służy do sterowania transmisją sygnału wideo; wartość domyślna to 4520.
- RTSP Port : Port sterujący strumieniowaniem w czasie rzeczywistym. Początkowa wartość to 554.

Jeżeli używany jest Ruter szerokopasmowy

- IP Address : Wpisz adres mieszczący się w zakresie IP podanym przez Ruter szerokopasmowy.
Np. 192.168.1.2~254, 192.168.0.2~254, 192.168.XXX.2~254
- Subnet Mask : Opcja <Subnet Mask> Ruter szerokopasmowy będzie także stanowić <Subnet Mask> kamery.
- Gateway : Opcja <Local IP Address> Ruter szerokopasmowy będzie także stanowić <Gateway> kamery.



- Ustawienia mogą być różne, w zależności od Ruter szerokopasmowy. Aby uzyskać więcej informacji, patrz instrukcja obsługi odpowiedniego rutera.
- Aby uzyskać więcej informacji na temat przekierowywania portu rutera szerokopasmowego, patrz część "Konfigurowanie Przekazywania Zakresu Portów (Mapowania Portów)", (Strona 20)

Jeżeli do Ruter szerokopasmowy jest podłączonych więcej niż jedna kamera

Skonfiguruj ustawienia powiązane z adresem IP oraz portem osobno.

Np.

Kategoria	Kamera 1	Kamera 2	
Ustawienia związane z IP	IP Address	192.168.1.100	192.168.1.101
	Subnet Mask	255.255.255.0	255.255.255.0
	Gateway	192.168.1.1	192.168.1.1
Ustawienia związane z portem	HTTP Port	8080	8081
	VNP Port	4520	4521
	RTSP Port	554	555

- Jeżeli opcja <HTTP Port> ma inną wartość niż 80, należy podać numer <Port> w pasku adresu przeglądarki internetowej, aby móc uzyskać dostęp do kamery.
Np. [http://192.168.1.100:8080](http://Adres IP: port HTTP)

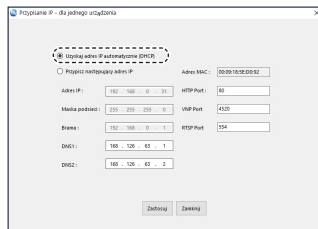
- Kliknij przycisk [Zastosuj].
- Jeśli wyświetlona zostanie wiadomość o powodzeniu, kliknij [OK].

Konfigurowanie dynamicznego IP

Odbierz adres IP z DHCP.

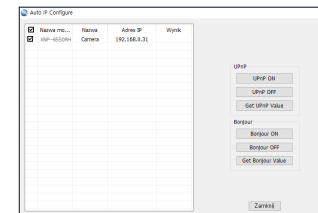
- Przykład środowiska dynamicznego IP
 - Jeżeli do Ruter szerokopasmowy IP z podłączonymi kamerami zostanie przypisany adres IP przez serwer DHCP
 - Jeżeli kamera zostanie podłączona bezpośrednio do xDSL lub modemu kablowego za pomocą protokołów DHCP
 - Jeżeli adresy IP są przypisywane przez wewnętrzny serwer DHCP przez sieć LAN

1. Kliknij kamerę z listy dla której chcesz zmienić ustawienia IP.
2. Kliknij **<IP Assign (Przypisz IP)>** na stronie głównej programu Device Manager.
3. Wybierz **<Uzyskaj adres IP automatycznie (DHCP)>**.
4. Kliknij przycisk **[Zastosuj]**.
5. Jeśli wyświetlona zostanie wiadomość o powodzeniu, kliknij **[OK]**.



AUTOMATYCZNA KONFIGURACJA IP

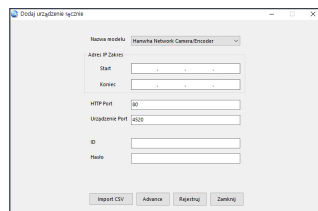
1. Kliknij kamerę z listy dla której chcesz automatycznie skonfigurować IP.
2. Kliknij **< + >** na głównej stronie programu Device Manager.
 - Pojawi się menu ustawień sprzętu.
3. W menu kliknij **<Auto IP Configure (Auto konfiguracja IP)>**.
4. Kliknij przycisk **[Zamknij]**.



RĘCZNA REJESTRACJA KAMERY

Jeśli nie można znaleźć kamery za pomocą funkcji wyszukiwania, kamerę można zarejestrować zdalnie, ręcznie wprowadzając informacje o IP, jeśli kamera jest podłączona do sieci zewnętrznej.

1. Kliknij **<Dodaj urządzenia>** – **<Dodaj urządzenie ręcznie>** na stronie głównej programu Device Manager.
2. Wstaw zakres szukanego adresu IP.
3. Wybierz **<Nazwa modelu>** zarejestrowanej kamery i wstaw port HTTP, port VNP, ID oraz hasło.
4. Kliknij przycisk **[Rejestruj]**.
5. Sprawdź, czy kamera jest zarejestrowana.
 - Sprawdź adres MAC na naklejce dołączonej do kamery.

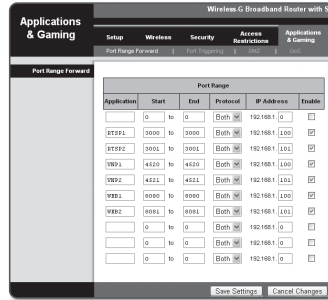


KONFIGUROWANIE PRZEKAZYWANIA ZAKRESU PORTÓW (MAPOWANIA PORTÓW)

Jeżeli zainstalowany jest Ruter szerokopasmowy z podłączoną kamerą, należy ustawić przekazywanie zakresu portów na Ruter szerokopasmowy, aby zdalny komputer mógł uzyskać dostęp do kamery za jego pośrednictwem.

Ręczne przekazywanie zakresu portów

1. Z menu Konfiguracja Ruter szerokopasmowy, wybierz opcję <Applications & Gaming> - <Port Range Forward>. W celu ustawienia przekazywania zakresu portów dla rutera innego producenta należy zapoznać się z instrukcją obsługi tego Ruter szerokopasmowy.
2. Wybierz opcję <TCP> oraz <UDP Port> dla każdej kamery podłączonej do Ruter szerokopasmowy. Numer każdego portu, który ma zostać skonfigurowany do routera IP, należy ustawić zgodnie z numerem portu określonym w menu <Ustawienia> - <Basic> - <IP & Port> w przeglądarce Web Viewer kamery.
3. Po zakończeniu kliknij opcję [Save Settings]. Ustawienia zostaną zapisane.

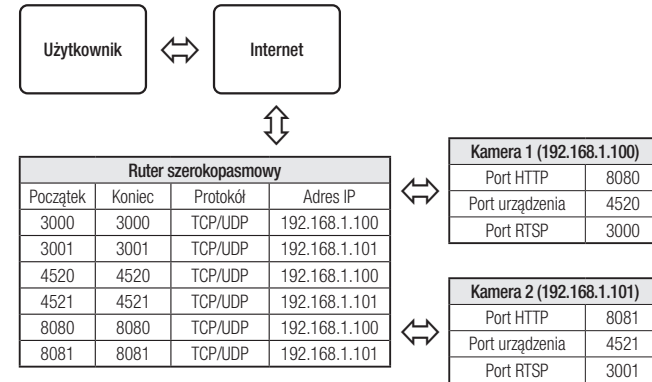


- Ustawienie przekierowania portu jest przykładem ustawienia routera IP CISCO.
- Ustawienia mogą być różne, w zależności od Ruter szerokopasmowy. Aby uzyskać więcej informacji, patrz instrukcja obsługi odpowiedniego routera.

Konfigurowanie opcji Przekazywanie zakresu portów dla kilku kamer sieciowych

- Użytkownik może ustawić przekierowanie portu na Ruter szerokopasmowy na stronie internetowej konfiguracji.
- Użytkownik może zmienić każdy port za pomocą ekranu ustawień kamery.

W przypadku podłączenia Kamery 1 i Kamery 2 do routera :



- Przekierowanie portów może zostać ustawione bez dodatkowych ustawień routera, jeżeli router obsługuje funkcję UPnP (Universal Plug and Play). Po podłączeniu kamery sieciowej zaznacz pole wyboru w menu <Szybkie podłączenie> w oknie <Wissenet DDNS> w "Ustawieniach" -> Sieć -> DDNS".

PODŁĄCZANIE DO KAMERY ZA POMOCĄ UDOSTĘPNIONEGO LOKALNEGO KOMPUTERA

1. Uruchom program Device Manager.
Aplikacja wyszuka podłączone kamery i wyświetli je w postaci listy.
2. Kliknij dwukrotnie kamerę, aby uzyskać do niej dostęp.
Zostanie uruchomiona przeglądarka internetowa i nastąpi połączenie z kamerą.



- Do kamery można przejść także wpisując adres IP znalezionej kamery w pasku adresu przeglądarki internetowej.

PODŁĄCZANIE DO KAMERY ZE ZDALNEGO KOMPUTERA PRZEZ INTERNET

Na komputerze zdalnym, który nie znajduje się w klastrze sieciowym routera szerokopasmowego, użytkownicy mogą uzyskać dostęp do kamer w sieci routera szerokopasmowego, używając DDNS URL kamery.

1. Aby możliwe było uzyskanie dostępu do kamery w sieci Ruter szerokopasmowy, należy ustawić przekazywanie zakresu portów Ruter szerokopasmowy.
2. Na zdalnym komputerze uruchom przeglądarkę internetową i wpisz adres URL DDNS kamery lub adres Ruter szerokopasmowy szerokopasmowy w pasku adresu.
Np. <http://ddns.hanwha-security.com/ID>

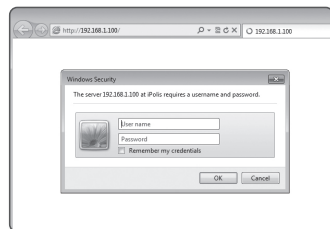


- Aby korzystać z Wisenet DDNS, zarejestruj się na stronie głównej Wisenet DDNS (<http://ddns.hanwha-security.com>) i zarejestruj produkt w [\[Moje DDNS\]](#)> [\[Zarejestruj Produkt\]](#).

PODŁĄCZANIE DO KAMERY

Zazwyczaj należy postępować w następujący sposób

1. Uruchom przeglądarkę internetową.
2. Wpisz adres IP kamery w pasku adresu.
np. • Adres IP (IPv4) : 192.168.1.100 → http://192.168.1.100
- powinno zostać wyświetlone okno dialogowe.
• Adres IP (IPv6) : 2001:230:abcd:ffff:0000:0000:ffff:1111
→ http://[2001:230:abcd:ffff:0000:0000:ffff:1111] - powinno zostać wyświetlone okno dialogowe.



Jeśli port http jest inny niż 80

1. Uruchom przeglądarkę internetową.
2. Wpisz adres IP i numer portu HTTP kamery w pasku adresu.
np. Adres IP : 192.168.1.100:numer portu HTTP (8080)
→ http://192.168.1.100:8080 - powinno zostać wyświetlone okno dialogowe logowania.

Za pomocą URL

1. Uruchom przeglądarkę internetową.
2. Wpisz adres URL DDNS kamery w pasku adresu.
np. Adres URL : http://ddns.hanwha-security.com/ID
- powinno zostać wyświetlone okno dialogowe logowania.

 Połączenie sieciowe jest wyłączone w środowisku ograniczonym do LAN.

Połączenie przez UPnP

1. Uruchomić klienta lub system operacyjny obsługujący protokół UPnP.
2. Aby wyszukać, kliknąć w nazwę kamery.
W systemie Windows, kliknąć w nazwę kamery wyszukaną w menu sieciowym.
- Okno logowania jest otwarte.

Połączenie przez Bonjour

1. Uruchomić klienta lub system operacyjny obsługujący protokół Bonjour.
2. Aby wyszukać, kliknąć w nazwę kamery.
W Mac SO kliknąć w nazwę kamery wyszukaną w zakładce Bonjour na Safari.
- Okno logowania jest otwarte.

Sprawdzanie adresu DDNS

Jeśli kamera została podłączona bezpośrednio do przewodowego modemu DHCP lub DSL, adres IP będzie zmieniał się przy każdej próbie połączenia się z infrastrukturą dostawcy internetowego (firmy, z którą została podpisana umowa o świadczenie usług komunikacyjnych).

W takim przypadku użytkownik nie będzie informowany o zmianie adresu IP przez DDNS.

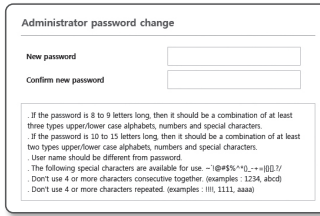
Po zarejestrowaniu urządzenia z dynamicznym adresem IP w serwerze DDNS można bezpiecznie sprawdzić zmieniony adres IP podczas uzyskiwania dostępu do urządzenia. Aby zarejestrować urządzenie na serwerze <DDNS>, najpierw wejdź na stronę <http://ddns.hanwha-security.com> i zarejestruj urządzenie, a następnie dla opcji <Sieć> - <DDNS> przeglądarki Web Viewer wybierz ustawienie <Wisenet DDNS> oraz podaj <ID produktu> używane do rejestracji DDNS.

USTAWIENIA HASŁA

Pierwsze użycie produktu wiąże się z koniecznością rejestracji loginu i hasła.

Po pojawieniu się okna "zmiana hasła" wprowadzić nowe hasło.

- ! Nowe hasło powinno mieć 8 do 9 znaków długości, w tym 3 znaki wielkie/male, cyfry i znaki specjalne. Dla hasła 10 do 15 znaków wystarczą 2 znaki wskazane wyżej.
 - Dozwolone znaki specjalne: ~!@#\$\$%^&*_+=""{}|.?/
- Dla poprawy bezpieczeństwa nie zaleca się powtarzania tych samych znaków po kolei ani używania kolejnych znaków klawiatury.
- Jeżeli hasło zostało utracone, nacisnąć przycisk [RESET] i inicjować produkt. Zatem hasło należy zapamiętać, lub zapisać.

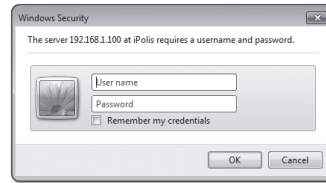


LOGOWANIE

Przy każdej próbie uzyskania dostępu do kamery zostanie wyświetlone okno logowania. Wprowadź ID użytkownika i hasło, aby uzyskać dostęp do kamery.

1. Wpisz słowo "admin" w polu <User Name>. ID administratora "admin" jest stałe i nie można go zmienić.
2. Wprowadź hasło w polu <Password>.
3. Kliknij przycisk [OK].
Jeżeli logowanie się powiodło, zostanie wyświetlony ekran aplikacji Live Viewer.

- ! Podczas korzystania z podglądu internetowego należy zwrócić uwagę na bezpieczeństwo i sprawdzić, czy obraz jest szyfrowany.
- ✍ Jeżeli zostanie zaznaczona opcja "Remember my credentials" po wprowadzeniu danych, przy kolejnym uruchomieniu nastąpi automatyczne logowanie bez potrzeby podawania danych logowania.
- Najlepszą jakość wideo można uzyskać przy ekranie o rozmiarze 100%. Zmniejszenie współczynnika może spowodować obcięcie krawędzi obrazu.



USTAWIANIE PRZEGLĄDARKI INTERNETOWEJ KAMERY

1. Kliknij ikonę [Ustawienia (⚙)].
2. Wyświetlone zostanie okno Ustawienia.
3. Ustawienia dotyczące podstawowych informacji o kamerze, wideo, dźwięku, sieci, zdarzeń, analizy i systemu można skonfigurować za pośrednictwem sieci.
4. Kliknij opcję <Pomoc (🔗)>, aby wyświetlić szczegółowy opis każdej funkcji.

DANE TECHNICZNE

Elementy	Opis		
Wideo	Urządzenie obrazujące	1/2.8" 2.16M CMOS	
	Całkowita liczba pikseli	1945(pionowo) X 1109(poziomo), 2,16 mln pikseli	
	Efektywna liczba pikseli	1945(pionowo) X 1097(poziomo), 2,13 mln pikseli	
	System skanowania	Skan progresywny	
	Min. oświetlenie	Kolor : 0,02 luksów (1/30s, F1,6) Czarno-biały : 0,002 luksów (1/30s, F1,6) 0 luksów (lampa LED IR włączona)	
	Współczynnik sygnał/szum	50dB	
	Wyjście wideo	CVBS : 1,0 Vp-p / 75Ω Zespólny sygnał, 720x480(N), 720x576(P) do instalacji	
Obiektyw	Odległość ogniskowa (współczynnik zoomu)	4.75mm ~ 261.4mm (55x)	
	Maks. otwór przesłony	F1,6 (Panoramyczny) ~ F6,5 (Tele)	
	Kąt pola widzenia	H : 58,6°(Panoramyczny) ~ 1,23°(Tele) / V : 34,8°(Panoramyczny) ~ 0,71°(Tele)	
	Min. odległość obiektu	5 m	
	Regulacja ostrości	AF/One-Shot AF/Ręczny	
	Rodzaj obiektywu	Autom. przysł. DC	
	Typ mocowania	Płyta wbudowana	
	Prędkość przesuwania zoomu	Ok. 5 sek. (szeroki do tele)	
	Panoram./odchyl./obr.	Zakres pan.	360° nieograniczony
		Prędkość pan.	Preset: 400°/s, Ręczny: 0,024°/s – 250°/s
Zakres odchylenia		95°(-5° ~ 90°)	
Prędkość odchylenia		Preset: 250°/s, Ręczny: 0,024°/s – 250°/s	
Sekwencja		Programowanie (300ea), Ruch wahadłowy, Grupa (6ea), Śledzenie, Obchód, Automatyczne wykonywanie, Harmonogram	
Dokładność ustawienia wstępnego		±0.2°	
Azymut		Tak (E/W/S/N/NE/NW/SE/SW OSD)	
Śledzenie auto		Wyt. / Wł.	

Elementy	Opis	
Informacje dotyczące obsługi	Zasięg widoczności	500 m
	Tytuł kamery	Wyt. / Wł. (wyświetlane do 85 znaków) - Cały świat: Angielski/cyfry/znaki specjalne - Wspólny: Kilka wierszy (maks. 5), kolor (szary/zielony/czerwony/niebieski/czarny/biały), przezroczystość, skala automatyczna według rozdzielczości
	Dzień i noc	Autom. (ICR) / kolorowy/ czarno-biały
	Kompensacja podświetlenia	Wyt. / BLC / HLC / WDR
	Funkcja szerokiego zakresu dynamiki	120dB
	Poprawa kontrastu	SSDR (Wyt. / Wł.)
	Redukcja szumów cyfrowych	SSNR5 (Filtr szumów 2D+3D) (Wyt. / Wł.)
	Cyfrowa stabilizacja obrazu	Wyt./Wł. (wbudowane w Gyro)
	Usuwanie mgły (Optical)	Automatyczny / Ręczny / Wyt.
	Wykrywanie ruchu	Tak (8 wielokąt stref)
	Maska prywatności	Wyt./Wł. (24 strefy prostokątnej strefy) - Kolor: szary/zielony/czerwony/niebieski/czarny/biały - Opcja współczynnika zoomu dla trybu maskowania - Opcja mozaiki
	Regulacja wzmocnienia	Wyt. / Niskie / Średnie / wysokie
	Balans bieli	ATW / AWC / Ręczny / Wewnętrzny / Na zewnątrz / Ręczny / Światło sodowe
	Prędkość elektronicznej migawki	Minimum / Maksimum / Anty-migotanie (2 ~ 1/12000s)
	Cyfrowy zoom	32x, funkcję zoomu obszaru obsługuje zoom cyfrowy 2x
Obróć obraz	Odwróć / Odbicie: Wł./Wyt.	
Inteligentna analiza wideo	Sabotaż, podejrzane zachowanie, wykrywanie kierunkowe, wirtualna linia, wchodź/wych., pojawienie się/zniknięcie, wykr. dźwięku, wykryw. twarzy, wykrywanie ruchu, wykrywanie mgły, klasyfikacja dźwięku	
Wej./wyj. alarmu	Wejście 4 / Wyjście 2 (Typ przekaźnika)	
Interfejs pilota	RS-485	
Protokół RS-485	Samsung-T, Pelco-D/P, Panasonic, Honeywell, AD, Vicon, GE, BOSCH	
Funkcje aktywujące alarm	Wprowadzanie alarmu, wykrywanie ruchu, inteligentna analiza wideo, odłączenie od sieci	

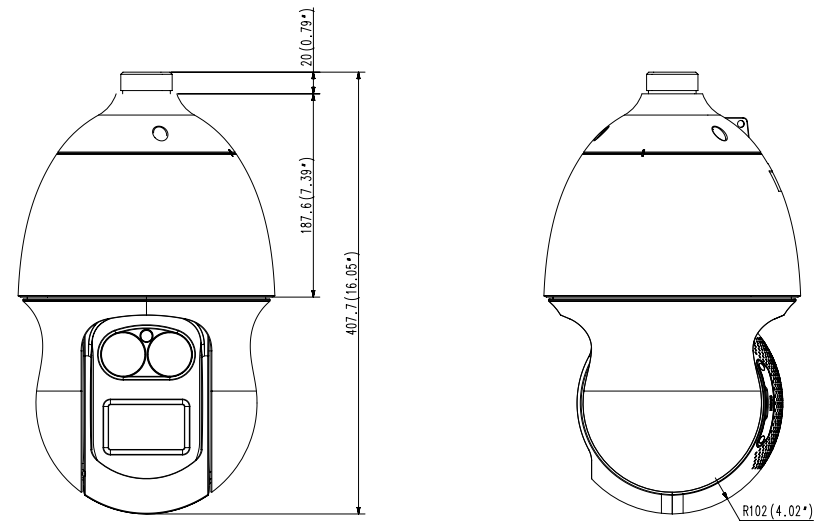
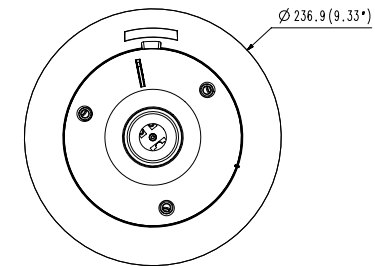
Elementy	Opis	
Informacje dotyczące obsługi	Zdarzenia alarmu	<ul style="list-style-type: none"> Przesyłanie plików za pośrednictwem FTP, poczty elektronicznej Powiadomienia za pośrednictwem poczty elektronicznej Zapis do lokalnego archiwum (SD/SDHC/SDXC) lub nagrywanie NAS w przypadku Zdarzenia. (Włączniki alarmu) Wyjście zewnętrzne Ustawienia wstępne PTZ
	Dźwięk Wejście	Ustawianie (Mic in / Line in), Napięcie zasilania : 2,5VDC DC (4mA), Impedancja wejścia: approx. 2K Ohm
	Dźwięk Wyjście	Wyjście liniowe (3,5 mm stereo mini jack), maks. poziom mocy wyjściowej: 1 Vrms
	Liczba pikseli	Obsługa
Sieć	Ethernet	RJ-45 (10/100BASE-T) SFP (* tylko przy użyciu SBP-303HF)
	Format kompresji wideo	H.265/H.264 (MPEG-4 Part 10/AVC) : Mani/Baseline/High , Motion JPEG
	Rozdzielczość	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
	Maks. prędkość odświeżania	H.265/H.264 : Maks. 60 kl./s przy wszystkich rozdzielczościach Format Motion JPEG: Maks. 30 kl./s przy wszystkich rozdzielczościach
	WiseStream II	Obsługa
	Smart Codec	Tryb ręczny (w oparciu o obszar: 5EA)
	Regulacja jakości wideo	H.264/H.265/MJPEG : Kontrola poziomu przepływności
	Metoda sterowania szybkością transmisji	H.264/H.265 : CBR lub VBR MJPEG : VBR
	Możliwości transmisji strumieniowej	Wiele kodeków (do 10 profili)
	Format kompresji audio	G.711 u-law (u-prawo) /G.726 Selectable (Wybieralny) G.726 (ADPCM) 8KHz, G.711 8KHz G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps AAC-LC : 48 Kbps na 16 KHz
	Komunikacja dźwiękowa	Dwu-kierunkowa

Elementy	Opis
IP	IPv4, IPv6
Protokół	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
Zabezpieczenia	HTTPS(SSL) Autoryzacja logowania Uwierzytelnienie logowania Digest Filtrowanie adresu IP Dziennik dostępu użytkownika metoda uwierzytelniania 802.1x (EAP-TLS, EAP-LEAP)
Metoda transmisji strumieniowej	Unicast/Multicast
Maks. dostęp użytkowników	20 użytkowników w trybie Unicast
Pamięć Edge	Micro SD/SDHC/SDXC 2slot (do 512 GB) - ciągłe nagrywanie (1szy slot do 2go slotu) - ruchome obrazy zapisane na karcie pamięci Micro SD/SDHC/SDXC można pobrać
	Pamięć masowa NAS (ang. Network Attached Storage) Lokalny komputer PC do natychmiastowego nagrywania
Application Programming Interface	ONVIF Profile S/G SUNAPI 2.0(HTTP API) Platforma WiseNet Open Platform
Język strony internetowej	Angielski, Francuski, Niemiecki, Hiszpański, Woski, Chiński, Koreański, Rosyjski, Japoński, Szwedzki, Portugalski, Czeski, Polski, Turecki, Holenderski, Węgierski, Grecki
Przeglądarka internetowa	Obsługiwany system operacyjny: Windows 7 / 8.1 / 10, MAC OS X 10.10, 10.11, 10.12 Zalecana przeglądarka: Google Chrome
	Obsługiwana przeglądarka : IE11 , MS Edge, Mozilla Firefox (Obsługiwana wyłącznie w systemie Windows 64bit), Apple Safari 10 (Obsługiwana wyłącznie w systemie Mac OS X)
Oprogramowanie do centralnego zarządzania	SmartViewer

Elementy	Opis	
Dane użytkowe	Temperatura robocza/ wilgotność	24 V AC : -50°C do +55°C (-58°F ~ +131°F) / Wilgotność względna (RH) poniżej 90% HPoE : -40°C ~ +55°C (-40°F ~ +131°F) / Wilgotność względna (RH) poniżej 90% * Uruchomienie powinno nastąpić w temperaturze powyżej -30°C (HPoE Mode)
	Temperatura przechowywania / Wilgotność	-50°C do +60°C (-58°F ~ +140°F) / Wilgotność względna (RH) poniżej 90%
	Stopień ochrony kamery	IP66
	Odporność na zniszczenia	IK10
Dane dotyczące zasilania	Napięcie i prąd wejściowy	24 V AC / HPoE
	Pobór Mocy	24 V AC : 92W HPoE : 60W
Dane zewnętrzne	Kolor/Materiał	czarny (głowica) + kość słoniowa (korpus) / aluminium, tworzywo sztuczne
	Wymiary (Ø x wys.)	Ø236,9 x wys.407,7 mm
	Waga	7,2kg

WIDOK URZĄDZENIA

Jednostka: mm (inch)



ROZWIĄZYWANIE PROBLEMÓW

PROBLEM	ROZWIĄZANIE
Nie wyświetli się żadne wideo poprzez dostęp do bezpłatnej przeglądarki na Safari poprzez HTTPS.	<ul style="list-style-type: none"> W oknie uwierzytelniania wyświetlonym przy pierwszym dostępie do protokołu https kliknij opcję „Pokaż certyfikat uwierzytelnienia” i zaznacz pole wyboru „Zawsze ufaj, nawiązując połączenie do określonego IP przeglądarki WebViewer”. Jeśli przeglądarka nadal odmawia wyświetlenia wideo po wyborze "Następny" w poniższym oknie komunikatów, należy nacisnąć klawisz polecenia + Q w celu opuszczenia przeglądarki Safari, uzyskać ponowny dostęp i wykonać podane wyżej procedury.
Nie mogę uzyskać dostępu do kamery z przeglądarki internetowej.	<ul style="list-style-type: none"> Sprawdź, czy ustawienia sieciowe kamery są odpowiednie. Sprawdź, czy wszystkie kable sieciowe zostały podłączone prawidłowo. W przypadku łączenia za pomocą DHCP sprawdź, czy kamera otrzymała dynamiczny adres IP. Jeśli kamera jest podłączona do Ruter szerokopasmowy, sprawdź, czy przekazywanie portów zostało skonfigurowane prawidłowo.
Program podglądu został odłączony podczas monitorowania.	<ul style="list-style-type: none"> Podłączone programy podglądu zostają odłączone przy każdej zmianie konfiguracji kamery lub sieci. Sprawdź wszystkie połączenia sieciowe. Jeśli kamera jest podłączona przez sieć PPPoE, możliwe jest odłączenie programu podglądu w przypadku pogorszenia warunków działania sieci.
Kamera podłączona do sieci nie jest wykrywana w programie Device Manager.	<ul style="list-style-type: none"> Wyłącz cz zaporę na komputerze PC i wyszukaj kamery ponownie.
Obrazy nakładają się na siebie.	<ul style="list-style-type: none"> Sprawdź, czy kilka kamer nie jest ustawionych na ten sam adres multiemisji. Jeśli jest używany ten sam adres przez wiele kamer, obrazy mogą się na siebie nakładać.
Brak obrazu.	<ul style="list-style-type: none"> Jeśli metoda transmisji to multiemisja, sprawdź, czy router w sieci lokalnej, do którego jest podłączona kamera, obsługuje multiemisję.

PROBLEM	ROZWIĄZANIE
Po ustawieniu <Wykrywanie ruchu> na "Włącz" w <Analizy>, żaden plik nie jest dostarczany za pośrednictwem poczty e-mail, pomimo wystąpienia w kamerze zdarzenia analizy wideo.	<ul style="list-style-type: none"> Sprawdź ustawienia w następującej kolejności: <ol style="list-style-type: none"> Sprawdź ustawienia opcji <Data i godzina>. Dla opcji <Wykrywanie ruchu> powinno być wybrane ustawienie <Włącz>. Zaznacz, jeśli wybrano użycie opcji <E-mail> w menu <Konfig. zdarzeń>.
W porcie wyjścia alarmu nie wykryto żadnego sygnału nawet podczas przeprowadzania inteligentnej analizy obrazu wideo.	<ul style="list-style-type: none"> Sprawdź ustawienia portu wyjścia alarmu.
Nagrywanie na karcie pamięci Micro SD jest niemożliwe.	<ul style="list-style-type: none"> Sprawdź, czy karta pamięci nie jest uszkodzona.
Karta pamięci Micro SD jest włożona, jednak kamera nie działa prawidłowo.	<ul style="list-style-type: none"> Sprawdź, czy karta pamięci została włożona odpowiednią stroną. Ta kamera nie gwarantuje działania karty pamięci sformatowanej w innych urządzeniach Sformatuj kartę pamięci ponownie w menu <Ustawienia> → <Zdarzenie> → <Pamięć>.
Nie można nagrywać w NAS.	<ul style="list-style-type: none"> Upewnij się, że informacja rejestrowana w NAS jest poprawna.
Raportuje że ustawienia NAS nie powiodły się.	<ul style="list-style-type: none"> Upewnij się, że adres IP NAS jest poprawny. Upewnij się, że ID/hasło NAS są poprawne. Korzystając z ID NAS, upewnij się, że jest dostęp do folderu wskazanego jako podstawowy. Upewnij się, że SMB/CIFS nie są zaznaczone. Upewnij się, że adres IP NAS oraz adres IP kamery mają taki sam format. Np.) Początkowa wartość maski podsieci NAS i kamery wynosi 255.255.255.0. Jeżeli adres IP jest 192.168.20.32 adres IP NAS IP powinien zawierać się w 192.168.20.1~192.168.20.255. Sprawdź czy podejmowałeś próbę dostępu jako inny użytkownik bez formatowania zapisanego bądź używanego podstawowego folderu. Upewnij się, że wykorzystywany jest zalecany sprzęt NAS.

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Component Name	License	URL
Base Kernel	GPL 2.0	
Busybox	GPL 2.0	http://www.busybox.net/downloads/snapshots
iproute2-4.3.0	GPL 2.0	
iptables-1.4.21	GPL 2.0	http://ftp.netfilter.org/pub/iptables
ethtool-4.2	GPL 2.0	
mtd-1.5.2	GPL 2.0	ftp://ftp.infradead.org/pub/mtd-utils
mi-diag-2.11	GPL 2.0	
rp-pppoe-3.11	GPL 2.0	http://www.roaringpenguin.com/pppoe/
wpa_supplicant-2.5	GPL 2.0	
bash-4.3.30	GPL 3.0	
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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- 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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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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1. This License Agreement sets forth copyrights and the terms and conditions of use applicable to the source code of T-Kernel distributed by T-Engine Forum and any derivative work created therefrom.

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1. "T-Kernel" means a real-time operating system controlled and distributed by T-Engine Forum on behalf of the copyright holder thereof.
2. "Source Code" means a source program, including related comments and documentations, for the T-Kernel and the Ported Source Code defined in Article 2.8 which is registered with T-Engine Forum.
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6. "T-Engine Hardware" means the hardware which is manufactured in accordance with the T-Engine Hardware specifications or the μ T-Engine Hardware specifications issued by T-Engine Forum, and registered with T-Engine Forum.
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9. "Modified Source Code" means a source program modified from the Source Code for the purpose of improving its performance, increasing or decreasing its function, and the like. The Ported Source Code shall not be included in the Modified Source Code.
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.
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13. "End User" means a consumer who uses the Embedded Product.
14. "System Developer" means any person who develops the Embedded Product by itself or has a third party develop the same, and provides, whether with or without payment, the End User with the Embedded Product.
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16. "Patch for Modification" means a difference, program, system, or the like in order to create the Modified Source Code from the Source Code or the Binary Code thereof.

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

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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.

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

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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.

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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

1. T-Engine Forum and the copyright holder of the Source Code warrant that the Source Code does not infringe third party's copyrights. Provided, however, that T-Engine Forum and the copyright holder of the Source Code make no warranty as to the Hardware-dependent Part and/or Compiler-dependent Part set forth in Article 6.2 in the Ported Source Code by any third party.

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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.

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bzip2-1.0.6	Bzip2	http://www.bzip.org/

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bzip2/libbzip2 version 1.0.5 of 10 December 2007

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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](http://www.ietf.org/rfc/rfc1951.txt) (deflate format) and [rfc1952.txt](http://www.ietf.org/rfc/rfc1952.txt) (gzip format).



Na wszystkich etapach produkcji firma Hanwha Techwin dba o środowisko naturalne i wykonuje wiele działań dążących do dostarczenia klientom produktów niegroźnych dla środowiska.

Oznaczenie „Eco” świadczy o tym, że firma Hanwha Techwin wytwarza produkty nieszkodliwe dla środowiska oraz wskazuje, że niniejszy produkt spełnia wymagania przedstawione w dyrektywie RoHS obowiązującej w UE.



Prawidłowe usuwanie produktu (zużyty sprzęt elektryczny i elektroniczny)

To oznaczenie umieszczone na produkcie, akcesoriach lub dokumentacji oznacza, że po zakończeniu eksploatacji nie należy tego produktu ani jego akcesoriów (np. ładowarki, zestawu słuchawkowego, przewodu USB) wyrzucać wraz ze zwykłymi odpadami gospodarstwa domowego. Aby uniknąć szkodliwego wpływu na środowisko naturalne i zdrowie ludzi wskutek niekontrolowanego usuwania odpadów, prosimy o oddzielenie tych przedmiotów od odpadów innego typu oraz o odpowiedzialny recykling i praktykowanie ponownego wykorzystania materiałów.

W celu uzyskania informacji na temat miejsca i sposobu bezpiecznego dla środowiska recyklingu tych przedmiotów, użytkownicy w gospodarstwach domowych powinni skontaktować się z punktem sprzedaży detalicznej, w którym dokonali zakupu produktu, lub z organem władz lokalnych.

Użytkownicy w firmach powinni skontaktować się ze swoim dostawcą i sprawdzić warunki umowy zakupu. Produktu ani jego akcesoriów nie należy usuwać razem z innymi odpadami komercyjnymi.



Sposób poprawnego usuwania baterii, w które wyposażony jest niniejszy produkt

(Dotyczy obszaru Unii Europejskiej oraz innych krajów europejskich posiadających oddzielne systemy zwrotu zużytych baterii.)

Niniejsze oznaczenie na baterii, instrukcji obsługi lub opakowaniu oznacza, że po upływie okresu użytkowania baterie, w które wyposażony był dany produkt, nie mogą zostać usunięte wraz z innymi odpadami pochodzącymi z gospodarstw domowych. Przy zastosowaniu takiego oznaczenia symbole chemiczne (Hg, Cd lub Pb) wskazują, że dana bateria zawiera rtęć, kadm lub ołów w ilości przewyższającej poziomy odniesienia opisane w dyrektywie WE 2006/66. Jeśli baterie nie zostaną poprawnie zutilizowane, substancje te mogą powodować zagrożenie dla zdrowia ludzkiego lub środowiska naturalnego.

Aby chronić zasoby naturalne i promować ponowne wykorzystanie materiałów, należy oddzielać baterie od innego typu odpadów i poddawać je utylizacji poprzez lokalny, bezpłatny system zwrotu baterii.

