

WiSeNet

NETZWERK VIDEO RECORDER

Produktspezifikationshandbuch

XRN-2010/2011/2010A/2011A
XRN-3010/3010A
XRN-1610/1610S/1610A/1610SA



Netzwerk Video Recorder

Produktspezifikationshandbuch

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- ❖ Das Design und die technische Daten können ohne vorherige Ankündigung geändert werden.
Die neueste Softwareversion kann von der Hanwha Techwin Electronics-Website heruntergeladen werden. (www.hanwha-security.com)
- ❖ Die Erst Administrator-ID lautet "admin" und das Passwort muss bei der der allerersten Anmeldung eingestellt werden.
Ändern Sie Ihr Passwort alle drei Monate, damit persönliche Angaben geschützt sind und Schäden durch Informationsdiebstahl verhindert werden.
Beachten Sie bitte, dass der Benutzer die Verantwortung für die Sicherheit und alle Probleme, die sich aus einem mangelhaften Umgang mit dem Passwort ergeben, trägt.

WICHTIGE SICHERHEITSHINWEISE

Lesen Sie diese Bedienungsanleitung sorgfältig durch, bevor Sie das Gerät in Betrieb nehmen. Beachten Sie alle nachstehend aufgeführten Sicherheitshinweise. Halten Sie diese Bedienungsanleitung für den künftigen Gebrauch bereit.

- 1) Lesen Sie diese Anweisungen.
- 2) Bewahren Sie diese Anweisungen auf.
- 3) Beachten Sie alle Warnhinweise.
- 4) Befolgen Sie alle Anweisungen.
- 5) Verwenden Sie das Gerät nicht in der Nähe von Wasser.
- 6) Die verunreinigte Stelle auf der Produktoberfläche mit einem weichen, trockenen oder feuchten Tuch reinigen. (Keine Reinigungs- oder kosmetischen Mittel verwenden, die Alkohol, Lösungsmittel oder Ölbestandteile enthalten, da diese das Produkt deformieren oder schädigen können.)
- 7) Blockieren Sie nicht die Lüftungsöffnungen. Stellen Sie das Gerät gemäß den Anweisungen des Herstellers auf.
- 8) Stellen Sie das Gerät nicht in der Nähe von Wärmequellen wie Heizkörpern, Wärmespeichern, Öfen oder anderen Geräten (z. B. Verstärkern) auf, die Wärme produzieren.
- 9) Die Erdung des Steckers dient Ihrer Sicherheit. Setzen Sie diese Sicherheitsfunktion unter keinen Umständen außer Kraft. Falls der vorhandene Stecker nicht in Ihre Steckdose passt, lassen Sie die Steckdose durch einen qualifizierten Elektriker austauschen.
- 10) Netzkabel müssen so verlegt werden, dass niemand auf die Kabel treten kann und sie nicht durch Gegenstände gequetscht werden. Dies gilt insbesondere für die Kabelenden am Gerät bzw. am Stecker.
- 11) Verwenden Sie nur vom Hersteller spezifiziertes Zubehör.
- 12) Verwenden Sie für das Gerät nur Gestelle, Ständer, Stative, Konsolen und Tische, die vom Hersteller empfohlen oder in Verbindung mit dem Gerät verkauft werden. Bewegen Sie das Gestell mit dem Gerät nur mit äußerster Vorsicht, um Verletzungen durch Umkippen zu vermeiden.
- 13) Trennen Sie das Gerät bei Gewitter oder längerer Abwesenheit vom Netz.
- 14) Überlassen Sie Reparatur und Wartung stets Fachpersonal. Eine Wartung ist immer dann erforderlich, wenn das Gerät auf irgendeine Weise beschädigt wurde, beispielsweise bei beschädigtem Netzkabel oder Stecker, bei in das Gerät gelangter Flüssigkeit oder Objekten, wenn das Gerät Regen oder Feuchtigkeit ausgesetzt war, nicht ordnungsgemäß arbeitet oder fallengelassen wurde.



VOR DEM START

Diese Bedienungsanleitung stellt Informationen für den Betrieb bereit, die für die Nutzung des Geräts erforderlich sind. Darüber hinaus enthält es eine Beschreibung aller Bestandteile und Funktionen sowie über das Menü und die Netzwerkeinstellungen.

Sie müssen folgende Hinweise berücksichtigen:

- Hanwha Techwin bewahrt sich das Urheberrecht auf diese Anleitung vor.
- Diese Anleitung darf ohne das vorherige, schriftliche Einverständnis von Hanwha Techwin nicht vervielfältigt werden.
- Wir haften nicht für irgendwelche oder alle Schäden am Gerät, die durch die Verwendung eines nicht standardmäßigen Produktes oder eines Verstoßes gegen die in dieser Anleitung aufgeführten Anweisungen, anfallen.
- Wenn Sie das Gerät wegen der Überprüfung eines Problems öffnen möchten, wenden Sie sich bitte an einen Fachmann in dem Geschäft, in dem Sie das Produkt erworben haben.
- Bevor Sie ein Festplattenlaufwerk oder ein externes Speichergerät hinzufügen (USB-Speicher, U, usw.), stellen Sie sicher, ob es mit diesem Gerät kompatibel ist. Das Verzeichnis der kompatiblen Geräte erhalten Sie bei Ihrem Fachhändler.

Warnung

Batterie

Ein falscher Batterietausch in Ihrem Gerät kann zu einer Explosion führen. Deshalb müssen Sie denselben Batterietyp verwenden, wie der im Gerät verwendete.

Nachfolgend die Spezifikationen der Batterie, die Sie gerade verwenden.

- Normalspannung: 3 V
- Normalleistung: 210 mAh
- Dauernde Regellast: 0,4 mA
- Betriebstemperatur: -20°C ~ +60°C (-4°F ~ +140°F)

Achtung

- Den Netzstecker nur an eine geerdete Steckdose anschließen.
- Der Netzstecker dient zur Trennung des Geräts von der Netzspannung und muss jederzeit frei zugänglich sein.
- Batterien dürfen keinen starken Wärmequellen, wie Sonneneinstrahlung, Feuer oder ähnliches ausgesetzt werden.
- Wenn die Batterie gegen einen falschen Typ ausgetauscht wird, besteht Explosionsgefahr. Verbrauchte Batterien gemäß den Anweisungen entsorgen.
- Wenn die Lebensdauer der Festplatte (HDD) beendet ist, könnten die gespeicherten Videodaten beschädigt und nicht mehr wiederhergestellt werden.
- Prüfen Sie regelmäßig die HDD-Status-LED, um zu sehen, ob diese kontinuierlich blinkt, wodurch angegeben wird, dass die Verbindung des Systems mit der HDD normal ist. Prüfen Sie regelmäßig die HDD-Status-LED, um zu sehen, ob diese kontinuierlich blinkt. Bei einem Defekt der HDD ist eine Aufzeichnung vielleicht nicht möglich. Prüfen Sie in regelmäßigen Abständen den Aufnahmestatus und sichern Sie wichtige Daten regelmäßig.

Systemabschaltung

Das Abschalten der Netzversorgung während das Gerät in Betrieb ist oder das Durchführen unerlaubter Aktionen kann Schäden an der Festplatte oder dem Gerät verursachen.

Schalten Sie den Strom auf sichere Weise aus, indem Sie im Menü Beenden wählen, dann auf dem Pop-up-Bildschirm auf <OK> klicken und das Stromkabel vom Netz trennen.

Sie möchten eventuell ein USV-System für sicheren Betrieb installieren, um Schäden durch unerwarteten Netzausfall zu vermeiden. (Wenn Sie Fragen zu USV haben, wenden Sie sich an Ihren USV-Händler.)



- Wenn die Netzspannung des Geräts nicht regulär ausgeschaltet wurde, kann der Neustart länger dauern, da die Daten von der Festplatte für den fehlerfreien Betrieb wiederhergestellt werden müssen.

Betriebstemperatur

Der garantierte Betriebstemperaturbereich dieses Geräts beträgt 0°C ~ 40°C (32°F ~ 104°F).
Das Gerät kann eventuell nicht korrekt funktionieren, wenn Sie es nach einer langen Aufbewahrungszeit bei einer Temperatur unterhalb der garantierten, in Betrieb nehmen.
Wenn Sie das Gerät nach einer langen Aufbewahrungszeit bei niedrigen Temperaturen benutzen, stellen Sie es zuerst einige Zeit bei Raumtemperatur auf und nehmen Sie es dann in Betrieb.
Insbesondere für die im Gerät eingebaute Festplatte beträgt der garantierte Temperaturbereich 5°C ~ 55°C (41°F ~ 131°F).
Die Festplatte kann ebenfalls bei Temperaturen unterhalb der garantierten nicht funktionieren.

Ethernetanschluss

Dieses Gerät ist für den Gebrauch in Gebäuden bestimmt, weshalb sämtliche Datenübertragungskabel nur im Innenbereich benützt werden können.

Sicherheitsmaßnahmen

Die Erst Administrator-ID lautet **“admin”** und das Passwort muss bei der allerersten Anmeldung eingestellt werden. Ändern Sie Ihr Passwort alle drei Monate, damit persönliche Angaben geschützt sind und Schäden durch Informationsdiebstahl verhindert werden.
Beachten Sie bitte, dass der Benutzer die Verantwortung für die Sicherheit und alle Probleme, die sich aus einem mangelhaften Umgang mit dem Passwort ergeben, trägt.

NVR-Produkte, die jede Funktion unterstützen

Funktion	Produkte
Lüfter	XRN-3010, XRN-3010A, XRN-2010, XRN-2010A, XRN-2011, XRN-2011A, XRN-1610, XRN-1610A, XRN-1610S, XRN-1610SA
RAID	XRN-2011, XRN-2011A
iSCSI	XRN-2010, XRN-2010A, XRN-2011, XRN-2011A, XRN-1610, XRN-1610A, XRN-1610S, XRN-1610SA
PoE	XRN-1610S,XRN-1610SA
P2P	XRN-3010A, XRN-2010A, XRN-2011A, XRN-1610A, XRN-1610SA
Fernsteuerung	XRN-1610, XRN-1610A, XRN-1610S, XRN-1610SA
Joystick	XRN-3010, XRN-3010A, XRN-2010, XRN-2010A, XRN-2011, XRN-2011A, XRN-1610, XRN-1610A, XRN-1610S, XRN-1610SA
Erweiterter Monitor	XRN-3010, XRN-3010A, XRN-2010, XRN-2010A, XRN-2011, XRN-2011A, XRN-1610, XRN-1610A, XRN-1610S, XRN-1610SA
Failover	XRN-3010, XRN-3010A, XRN-2010, XRN-2010A, XRN-2011, XRN-2011A
Verteilte Aufnahme	XRN-3010, XRN-3010A

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FUNKTIONEN

Dieses Gerät zeichnet Video- und Audiodaten von Netzwerkkameras auf eine Festplatte auf und ermöglicht die Wiedergabe von der Festplatte. Es stellt ebenfalls die Möglichkeit zur Fernüberwachung mittels Übertragung von Videobildern und Ton über das Netzwerk und mithilfe eines Computers bereit.

- Bedienungsfreundliche Benutzeroberfläche
- Unterstützt einen Bereich an 4K-Kamera-Auflösungen (3840X2160, 4096X2160, 4000X3000)
- Gibt mittels HDMI ein 4K-HD-Bild aus
- Video Aufnahme und Wiedergabe
- Audio Aufnahme und Wiedergabe
- Es werden der ONVIF Profile S-Standard und die RTP / RTSP Protokolle unterstützt
- Anzeige des Betriebszustands der Festplatten mit Hilfe von HDD SMART
- Überschreiben der Festplatte möglich
- Datensicherung über USB 2.0, 3.0 und externe Festplatte
- Gleichzeitige Wiedergabe von 16 Kanälen
- Verschiedene Suchmodi (Zeit, Ereignis, Intel.,Text, Backup, ARB)
- Verschiedene Aufnahmemodi (Normal, Ereignis, Aufnahme nach Zeitplan)
- Alarm Eingang / Ausgang
- Fernüberwachungsfunktion über Windows Network Viewer
- Live Überwachung über Netzwerkkamera
- Installation Assistentenfunktion (Einfaches Setup, Schnelles Setup)
- Unterstützt die Smartphone-Fernüberwachungsfunktion durch P2P-Unterstützung (XRN-2010A/2011A/3010A/1610A/1610SA)

Lieferumfang

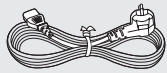
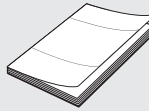
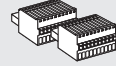
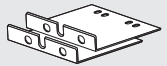
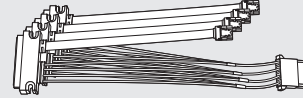
Entnehmen Sie das Produkt aus der Verpackung und positionieren Sie es auf einem ebenen Untergrund oder an seinem Installationsort.

Bitte kontrollieren Sie, ob im Lieferumfang zusätzlich zum Hauptgerät die folgenden Teile inkludiert sind.

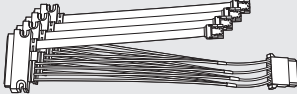
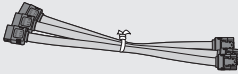


- Das Erscheinungsbild der Komponenten kann vom gezeigten Bild abweichen.
- Zubehörkategorie und Qualität können je nach Verkaufsregion verschieden sein.
- Für einige Regionen ist HDD nicht vorinstalliert. Die Anzahl der HDD-Befestigungsschrauben, SATA-Stromkabel, SATA-Datenkabel und SATA Strom-/Datenkabel variieren je nach Modell.

XRN-2010/2011/2010A/2011A/3010/3010A

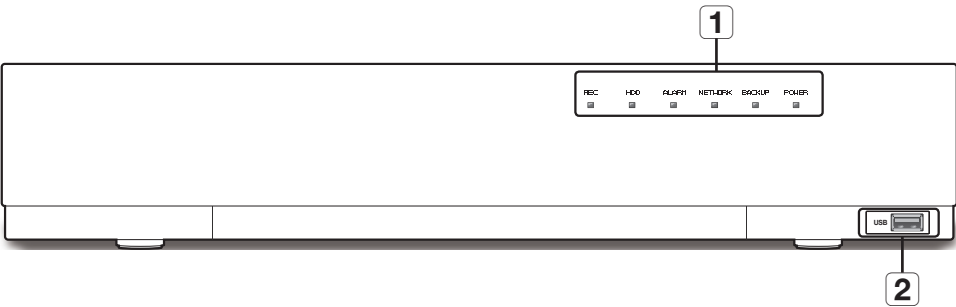
		
NVR	Maus	Netzkabel
		
Kurzanleitung	Anschlussklemme	Konsole
		
Befestigungsschraube der Halterung	HDD SATA/Stromkabel (N/A bei XRN-2011/2011A)	HDD-Fixierschraube (N/A bei XRN-2011/2011A)

XRN-1610/1610S/1610A/1610SA

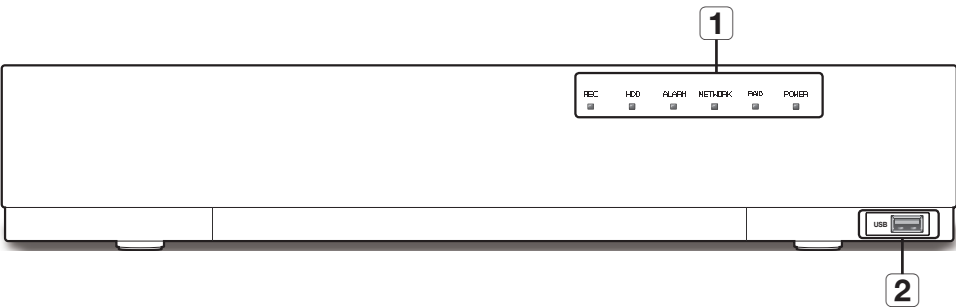
		
NVR	Maus	
		
Netzkabel	Anschlussklemme	
		
Kurzanleitung	Konsole	HDD-Fixierschraube
		
Befestigungsschraube der Halterung	HDD SATA/Stromkabel (XRN-1610/1610A)	SATA-Stromkabel (XRN-1610S/1610SA)
		
SATA-Datenkabel (XRN-1610S/1610SA)		

ELEMENTBEZEICHNUNGEN UND FUNKTIONEN (VORDERSEITE)

XRN-2010/2010A/3010/3010A/1610/1610S/1610A/1610SA



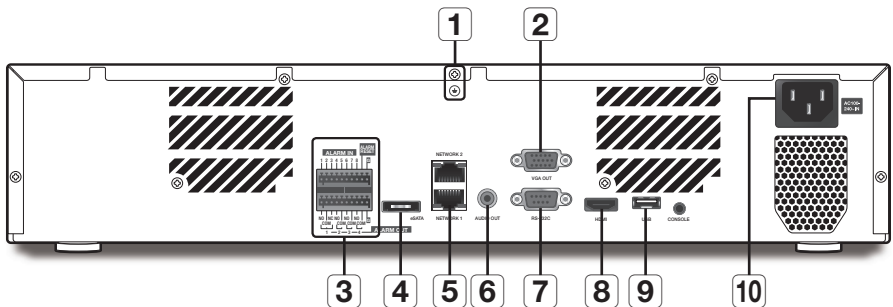
XRN-2011/2011A



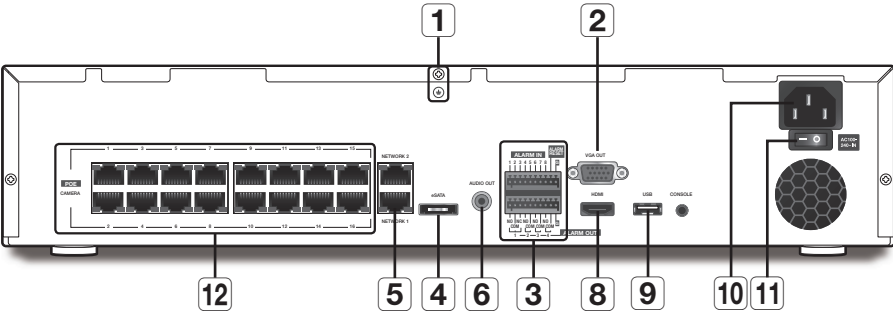
Elementbezeichnung		Funktionen
1	LED Indicator	REC : Leuchtet bei der Aufnahme auf.
		HDD : Zeigt den normalen Festplattenzugriff an. Bei Zugriff auf die Festplatte leuchtet die LED auf.
		ALARM : Leuchtet auf, wenn ein Ereignis eintritt.
		NETWORK : Zeigt sowohl den Status der Netzwerkverbindung als auch der Datenübertragung an.
		BACKUP : Bleibt EIN, wenn Backup ausgeführt wird. (XRN-2010/2010A/3010/3010A/1610/1610S/1610A/1610SA)
		RAID : Bleibt EIN, wenn RAID benutzt wird. Flackert, bei Aktivierung des Backups, wenn RAID benutzt wird. (XRN-2011/2011A)
		POWER : Zeigt den Netzstatus AN/AUS.
2	USB	Anschluss für USB-Geräte. (USB 2.0 unterstützt)

ELEMENTBEZEICHNUNGEN UND FUNKTIONEN (RÜCKSEITE)

XRN-2010/2011/2010A/2011A/3010/3010A/1610/1610A



XRN-1610S/1610SA



Elementbezeichnung		Funktionen
1	Masseverbindung	Terminal zum Anschluss eines separaten Massekabels. ■ Nehmen Sie ein Massekabel hinzu, um den sicheren Betrieb des Geräts zu unterstützen.
2	VGA OUT	VGA Video Ausgang.
3	ALARM	- ALARM IN : Alarm Eingänge. (1~8 CH) - ALARM RESET : Alarm zurücksetzen - ALARM OUT : Alarm Ausgänge. (1~4 CH)
4	eSATA	Terminal zum Anschluss eines externen Speichergeräts.
5	NETWORK1	Port empfohlen für Kamera-Anschluss, der ein Bild von der Kamera empfängt.
	NETWORK2	Port empfohlen für Verbindung mit einem Netzwerk, Webviewer oder iSCSI.
6	AUDIO OUT	Audio Ausgang (RCA Buchse).
7	RS-232C	Kabelterminal für serielle Kommunikation (Ersatz).
8	HDMI	HDMI-Anschluss.
9	USB	Anschluss für USB-Geräte. (USB 3.0 unterstützt)
10	Netzschalter	Terminal für den Anschluss mit der Stromversorgung.
11	Power Switch	Strom an-/aus-schalten. (XRN-1610S/1610SA)
12	PoE (CAMERA)	Der Stromversorgungsport ist mit einer Kamera verbunden. (XRN-1610S/1610SA)

■ [CONSOLE] ist ausschließlich für Servicereparaturen bestimmt.

Vor der Verwendung des Produkts möchten wir Sie über Folgendes informieren.

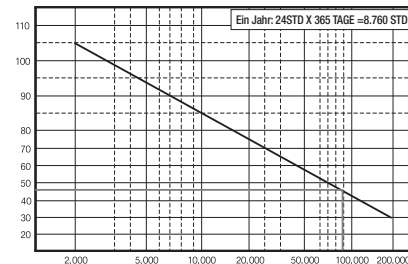
- Verwenden Sie das Produkt nicht im Freien.
- Achten Sie darauf, dass weder Wasser noch Flüssigkeiten in die Anschlussteile des Produkts gelangen.
- Setzen Sie das System keinen starken Stößen oder einer großen Krafteinwirkung aus.
- Vermeiden Sie es, den Netzstecker mit voller Kraft herauszuziehen.
- Nehmen Sie das Gerät nicht selbst auseinander.
- Überschreiten Sie nicht die Eingangs-/Ausgangsleistung.
- Verwenden Sie ausschließlich ein geprüftes Netzkabel.
- Für Geräte mit einem geerdeten Eingang verwenden Sie bitte einen geerdeten Netzstecker.

PRÜFUNG DER INSTALLATIONSUMGEBUNG

Bei diesem Gerät handelt es sich um ein Sicherheitsgerät der Spitzenklasse, das mit einer Hochleistungsfestplatte und anderen hochwertigen Leiterplatten ausgerüstet ist.

Es ist zu beachten, dass eine hohe Temperatur im Innern des Geräts zu Fehlfunktionen oder zu einer kürzeren Lebensdauer führen kann (siehe Abbildung rechts). Vor der Installation des Geräts die folgenden Anweisungen nicht außer acht lassen.

Temperatur
Einheit: °C

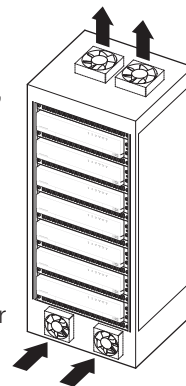


Lebensdauer (Einheit: STUNDEN)

[Abbildung 1]

Bei der Montage in einem Rack sind die folgenden Anweisungen zu befolgen.

1. Es muss sichergestellt werden, dass das Rack innen nicht verschlossen ist.
2. Sicherstellen, dass die Luft durch den Ein- und Austrittsöffnung, wie auf der Abbildung gezeigt, zirkulieren kann.
3. Wenn sie das Gerät oder andere für die Rack-Montage bestimmten Geräte wie in der Abbildung dargestellt übereinander aufstellen, stellen Sie genug Freiraum für die Lüftung sicher oder installieren Sie einen Lüfter.
4. Für eine natürliche Konvektion, die Einlassöffnung am Boden und die Auslassöffnung oben anordnen.
5. Es wird dringend empfohlen, für eine bessere Luftzirkulation ein Gebläse an der Einlass- und der Auslassöffnung zu installieren. (Am Einlass einen Filter vorsehen, um Staub und Fremdkörper fernzuhalten.)
6. Die Temperatur im Innern des Racks oder der Umgebung, wie in der Abbildung 1 dargestellt, in einem Bereich von 0°C - 40°C (32°F ~ 104°F) halten.

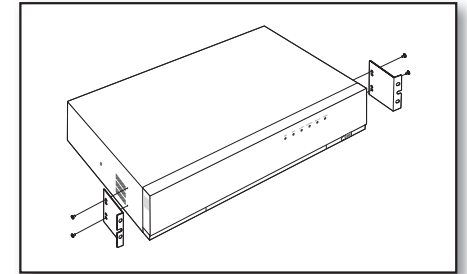


[Abbildung 2]

INSTALLATION IM RACK

Die Rack-Halterung wie in der Abbildung dargestellt montieren und anschließend die Schrauben auf beiden Seiten festziehen.

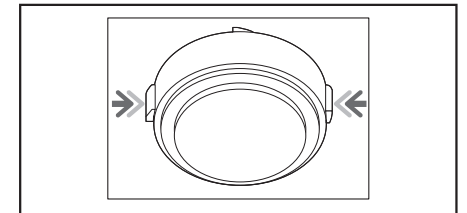
- Die Schrauben fest genug anziehen, damit sie durch die Vibrationen nicht gelöst werden.



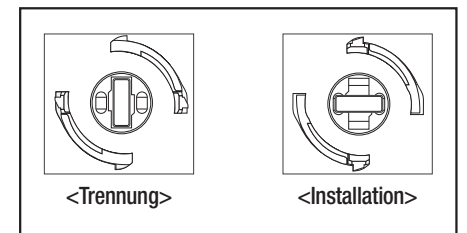
Hinweise zur ordnungsgemäßen Installation des Racks

Um mehrere NVRs in dem Rack zu installieren, trennen Sie das FOOT auf der unteren Seite jeder einzelnen NVR.

1. Es gibt vier FOOTs auf der unteren Seite einer NVR. Drücken Sie die herausstehenden Teile auf beiden Enden jedes einzelnen "FOOT" und drehen Sie sie im Uhrzeigersinn.



2. Das "FOOT" wird von dem Hauptkörper abgetrennt wenn es bis zum Ende der Befestigungsnut gedreht wird.



ZUSÄTZLICHE FESTPLATTEN

Sicherstellen, dass der Netzstecker gezogen ist, um einen Stromschlag oder die Beschädigung des Geräts zu verhindern.

Ziehen Sie Ihren Händler zu rate, wenn Sie zusätzliche Festplatten installieren wollen, da eine falsche Installation oder Einstellungen das Gerät beschädigen können.

- Anzahl der unterstützten Festplatten : Bis zu 8 Festplatten
- Bevor mit der Installation fortgefahren wird sicherstellen, dass der Netzstecker gezogen ist.



■ Vorbeugen von Datenverlust (Festplattenpflege)

Darauf achten, dass die Daten auf der Festplatte nicht beschädigt werden.

Bevor Sie eine Festplatte hinzufügen, prüfen Sie bitte die Kompatibilität zu diesem Gerät.

Die Festplatte ist aufgrund ihres empfindlichen Charakters störungsanfällig. Insbesondere reagiert sie empfindlich auf Stöße während des Betriebs.

Es muss sichergestellt werden, dass die Festplatte keinen Stößen ausgesetzt wird.

Samsung übernimmt keine Haftung für Schäden an der Festplatte, die auf unvorsichtige Behandlung oder falsche Nutzung durch den Benutzer zurückzuführen sind.

■ Fälle die zu einer Beschädigung der Festplatte oder der aufgezeichneten Daten führen können

Um das Risiko eines Datenverlusts aufgrund einer beschädigten Festplatte zu minimieren, müssen die Daten so oft wie möglich gesichert werden.

Wenn das Gerät beim Ein- oder Ausbau Stößen ausgesetzt wird, können die auf der Festplatte gespeicherten Daten beschädigt werden.

Ein plötzlicher Stromausfall oder das Ausschalten des Geräts, während die Festplatte in Betrieb ist, kann zu einer Beschädigung der Festplatte führen.

Die Festplatte oder die gespeicherten Daten können beschädigt werden, wenn das Gerät während des Betriebs bewegt wird oder Stößen ausgesetzt ist.

Vorsichtsmaßnahmen für die Installation einer Festplatte

1. Üben Sie auf die Festplatte keinen übermäßigen Druck aus.
2. Darauf achten, dass die Montageschrauben und das Montagezubehör nicht verloren gehen.
 - Wenn die Schrauben oder das Montagezubehör nicht richtig zusammengesetzt werden, kann das Gerät auseinanderfallen oder nicht richtig funktionieren.
3. Bitte unbedingt vor dem Hinzufügen einer Festplatte die Kompatibilität der Festplatte prüfen.
 - Setzen Sie sich mit ihrem nächsten Händler in Verbindung, um eine Liste der kompatiblen Geräte zu erhalten.

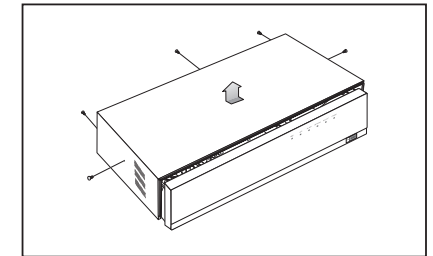
Installieren der Festplatte



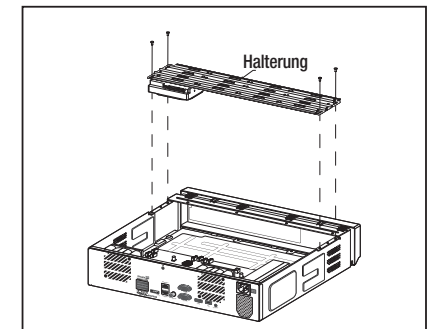
- Wenn Sie eine neue oder verwendete HDD zu diesem Produkt hinzufügen zusätzlich zu den ursprünglich installierten HDD(s), dann formatieren Sie die neue HDD manuell in der Einstellung vor der Verwendung. Unter „Gerät/Format“ in der Wisenet-NVR-Bedienungsanleitung erfahren Sie, wie die Formatierung funktioniert.

So montieren Sie eine Festplatte im XRN-2010/2010A/3010/3010A/1610/1610A/1610S/1610SA

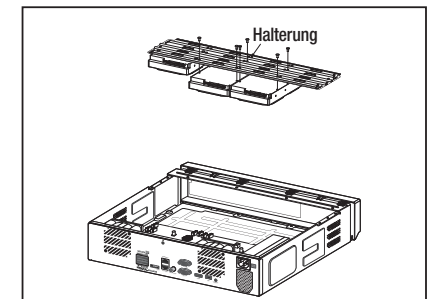
1. Entfernen Sie zunächst die Schrauben auf der linken/rechten Seite sowie hinten und dann das Gehäuse.



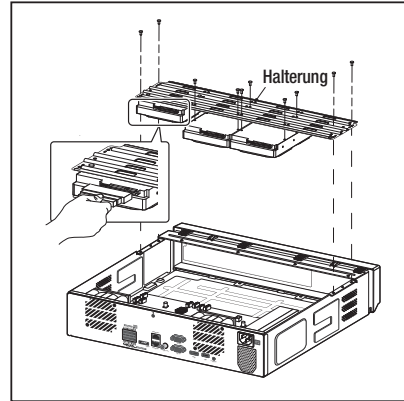
2. Entfernen Sie die Schrauben auf der linken/rechten Seite (4 Schrauben) und entfernen Sie die Halterung.



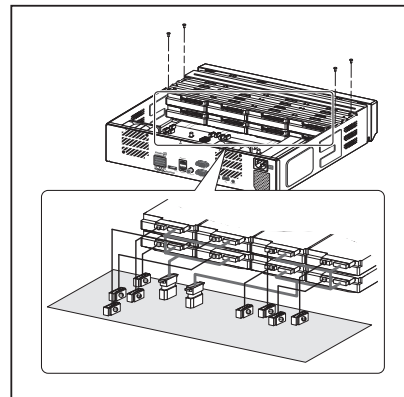
3. Montieren Sie eine Festplatte auf der Halterung und befestigen Sie sie mit Schrauben.



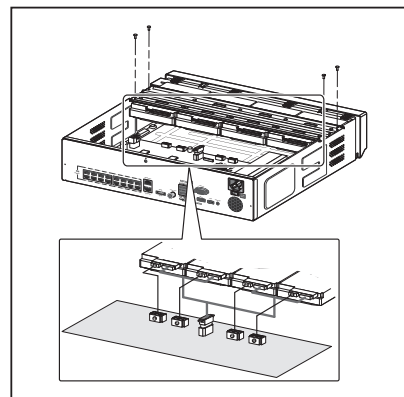
4. Schließen Sie das Kabel an die Festplatte an, indem Sie die HDD SATA/Stromkabelnummer mit der HDD-Positionsnummer auf der Halterung abgleichen.
 - Die HDD-Position auf der Halterung finden Sie in der Abbildung unten.



5. Montieren Sie die Halterung, auf der sich eine weitere Festplatte befindet, an den NVR und befestigen Sie sie mit Schrauben. Schließen Sie dann das SATA/Stromkabel am Anschluss mit der entsprechenden Nummer auf dem Mainboard an.
 - Die Anschlussziffern finden Sie in der Abbildung unten.

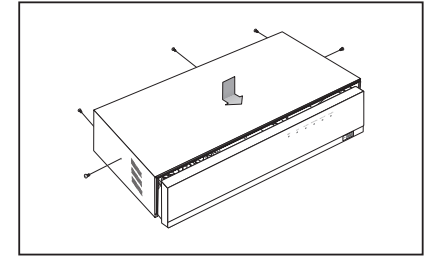


<XRN-2010/2010A/3010/3010A/1610/1610A>



<XRN-1610S/1610SA>

6. Überprüfen Sie das Verbindungsterminal und die Verkabelung im Produkt auf Probleme, schließen Sie das Gehäuse und befestigen Sie es mit Schrauben.

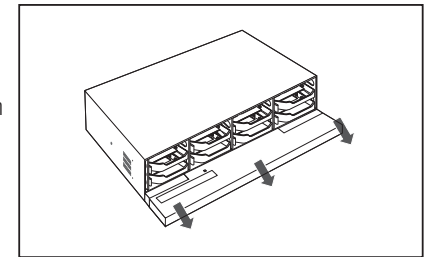


So montieren Sie eine Festplatte im XRN-2011/2011A

1. Öffnen Sie den vorderen Deckel und überprüfen Sie die Montagehalterung der Festplatte.



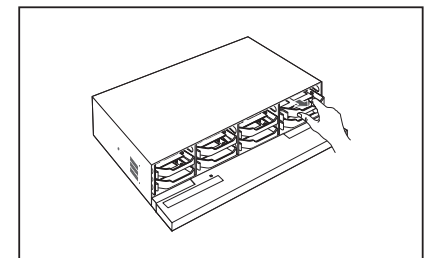
- Ziehen Sie den USB-Stecker, bevor Sie den vorderen Deckel öffnen, um eine Beschädigung der USB-Ports zu verhindern.



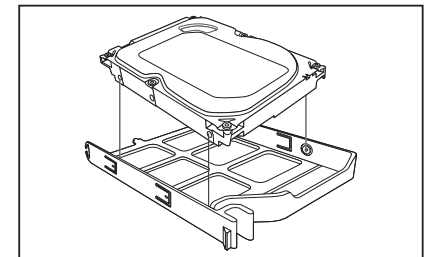
2. Schieben Sie die Verriegelung nach rechts und entfernen Sie die Festplattenhalterung.



- Gehen Sie behutsam vor, um sich beim Entfernen der Festplattenhalterung keine Kratzer hinzuzufügen.



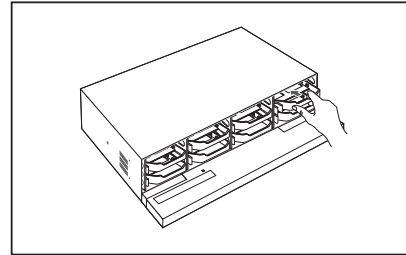
3. Richten Sie die Festplatte in der Halterung aus und fügen Sie sie ein. Drücken Sie nach Einfügen einer Seite die andere Seite leicht und fügen Sie sie ein.



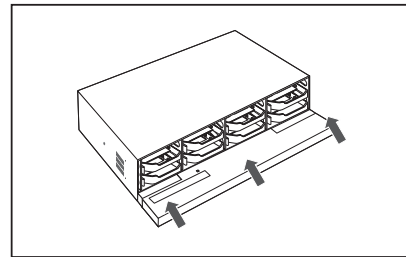
4. Richten Sie die Halterung mit montierter Festplatte mit der Verriegelung aus und drücken Sie die Halterung in Boardrichtung.



- Drücken Sie sie, bis Sie die Verriegelung einrasten hören. Wenn die Festplatte nicht vollständig verbunden ist, kann sie erkannt werden.



5. Drücken Sie den vorderen Deckel hoch und schließen Sie ihn.

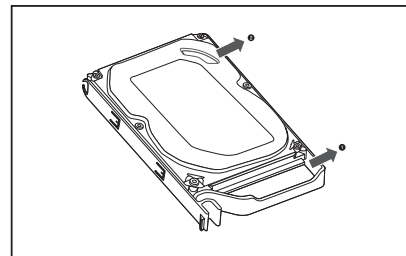


• So tauschen Sie eine montierte Festplatte aus

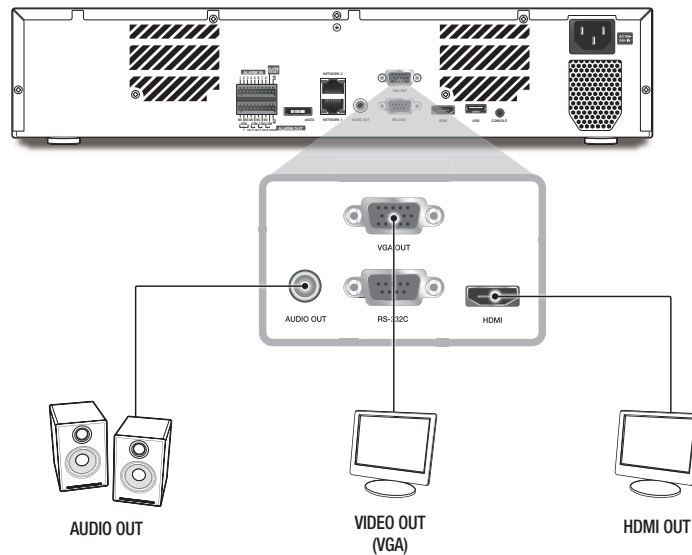
1. Öffnen Sie eine Halterung weit in Pfeilrichtung und entfernen Sie den Halter von der Festplatte.
2. Öffnen Sie die Halterung weit und entfernen Sie sie vom Halter.



- Der Prozess nach dem Austausch der Festplatte ist derselbe wie "Installieren der Festplatte".



ANSCHLUSS AN EIN EXTERNES GERÄT

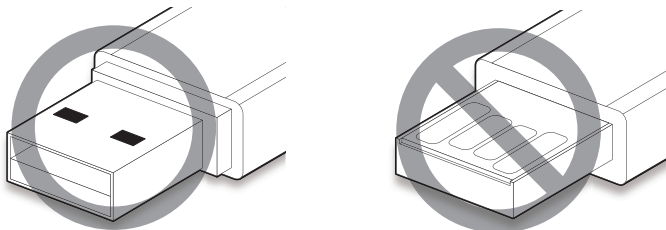


- ! Eine falsche oder unpassende Stromversorgung kann zu einer Beschädigung des Systems führen. Vor der Betätigung des Netzschalters sicherstellen, dass nur eine geeignete Stromquelle verwendet wird.

USB-ANSCHLUSS

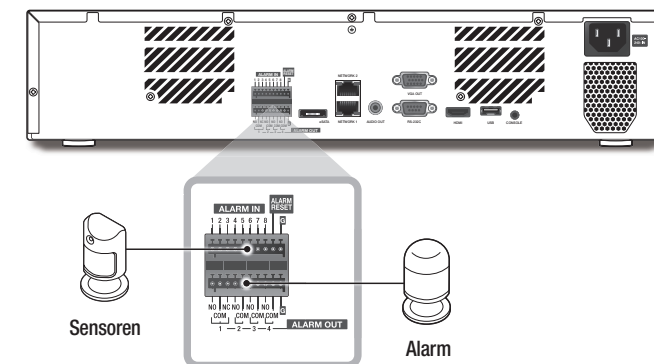
1. Vorne am Produkt befindet sich ein USB-Port.
2. Es kann eine USB-Festplatte, ein USB-Speichergerät oder eine Maus an den USB-Anschluss angeschlossen werden.
3. Wenn Ihre USB-Festplatte an das System angeschlossen ist, kann sie erkannt und eingerichtet werden, indem Sie die Schritte unter „Menü > Gerät > Speichergerät“ in der Wisenet-NVR-Bedienungsanleitung befolgen.
4. Das Gerät unterstützt die Hot Plug Funktion, die das Anschließen und Abtrennen von USB-Geräten bei laufendem System ermöglicht.

- ! Wenn ein USB-Gerät für Datensicherungszwecke verwendet und nicht auf dem NVR formatiert wird, das Gerät über den PC mit dem FAT32 Format formatieren.
- Einige USB-Geräte können aufgrund von Kompatibilitätsproblemen eventuell nicht einwandfrei funktionieren. Prüfen Sie das Gerät vor der Nutzung auf Kompatibilität.
- Nur USB-Speichergeräte, die den Standards entsprechen, (mit Metallgehäuse) sind für die Datenübertragung geeignet.
- Falls die elektrischen Kontakte des USB-Geräts verschlissen sind, kann es zu Fehlern bei der Datenübertragung kommen.

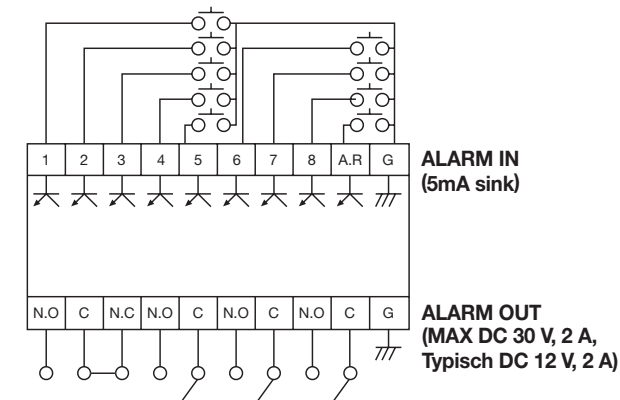


ANSCHLUSS AN DEN ALARM EINGANG/AUSGANG

Der Alarm Eingang/Ausgang auf der Geräterückseite besteht aus Folgendem.



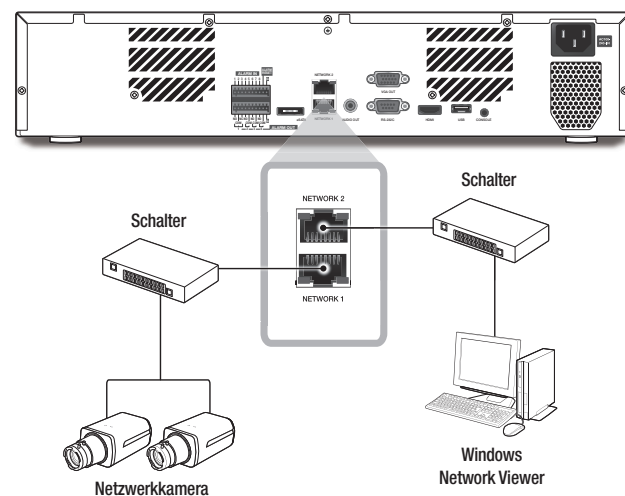
- ALARM IN 1 ~ 8 : Alarmeingang
- ALARM RESET : Wenn ein Alarm Reset Signal empfangen wird, bricht das System den aktuellen Alarm ab und fährt mit der Überwachung fort.
- ALARM OUT 1 ~ 4 : Alarmausgang



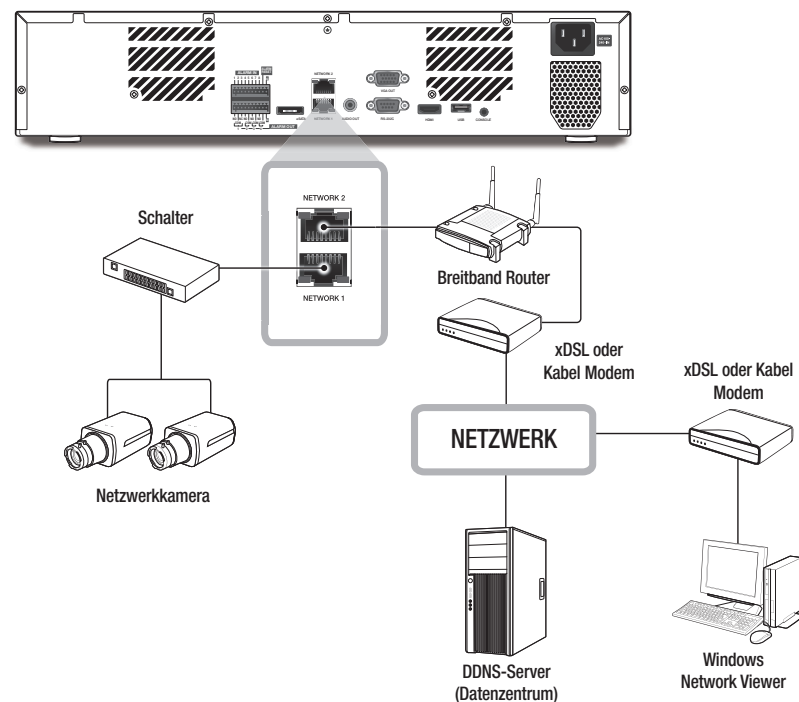
ANSCHLIESSEN AN DAS NETZWERK

- Weitere Informationen Netzwerkverbindungen finden Sie unter „Netzwerkconfiguration“ in der Wisenet-NVR-Bedienungsanleitung.

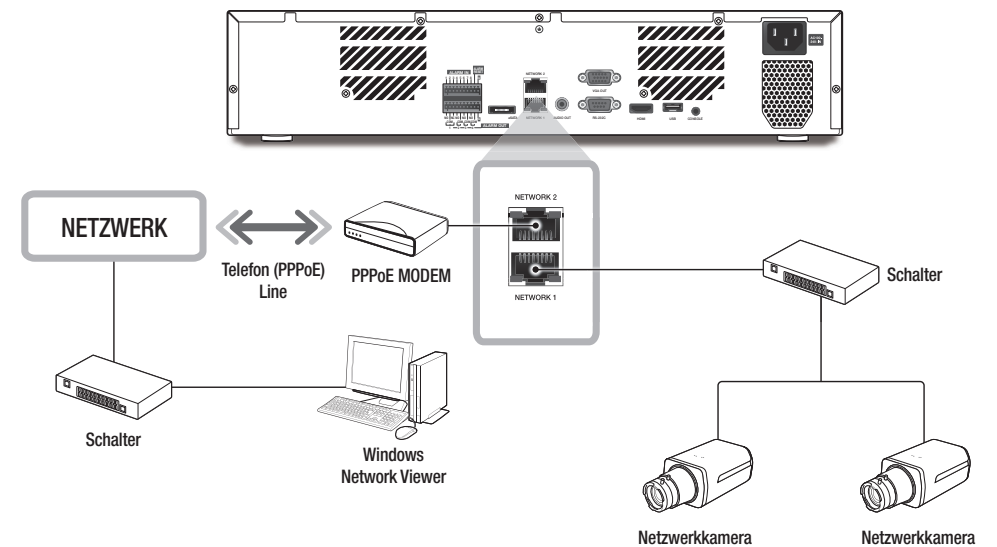
Netzwerkanschluss über Ethernet (10/100/1000BaseT)



Netzwerkanschluss über Router

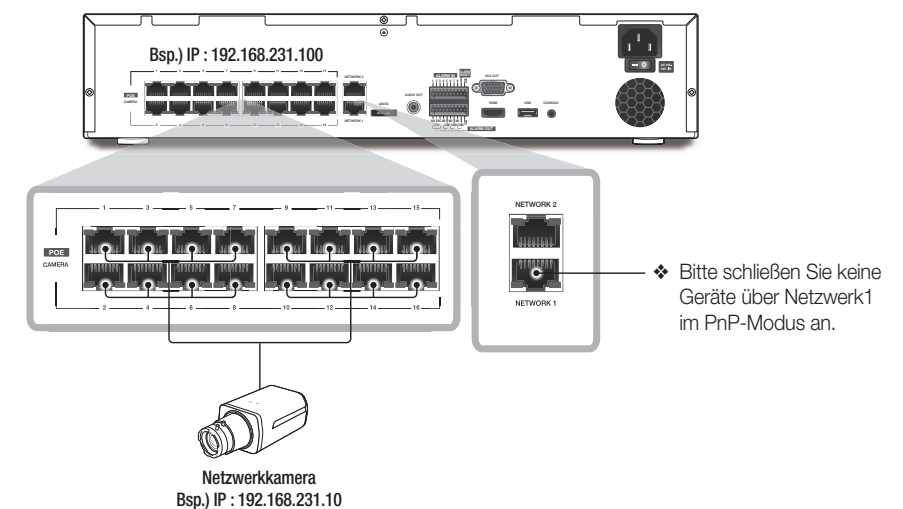


Anschluss an das Internet über PPPoE

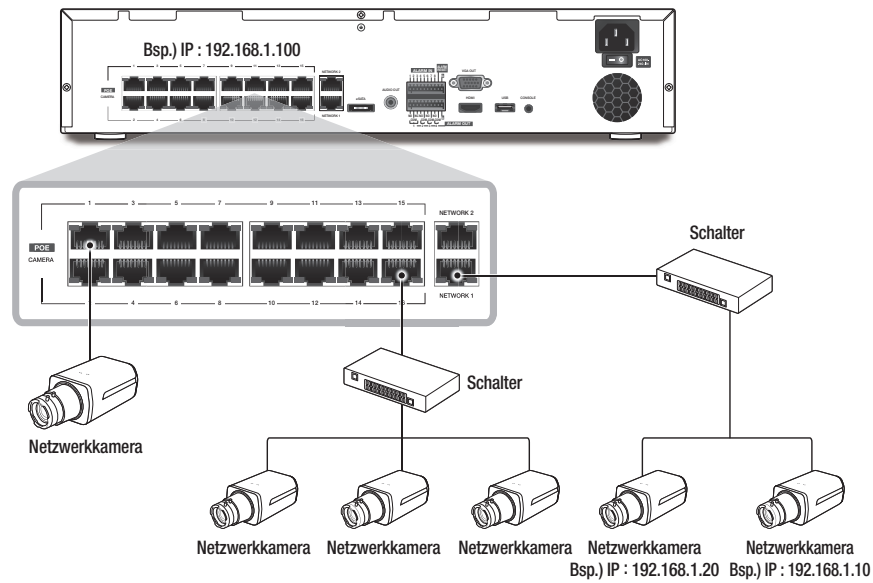


Anschließen der Netzwerkkamera (XRN-1610S/1610SA)

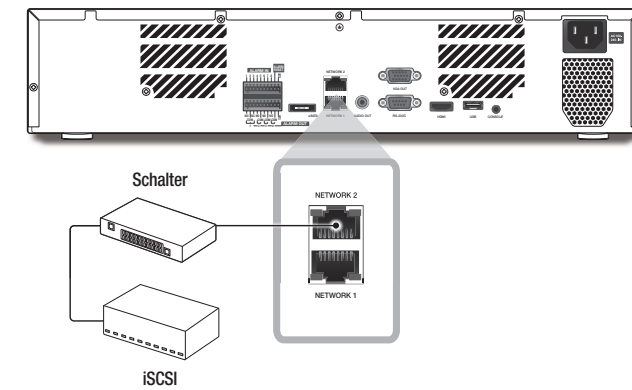
Z.B. 1)



Z.B. 2)

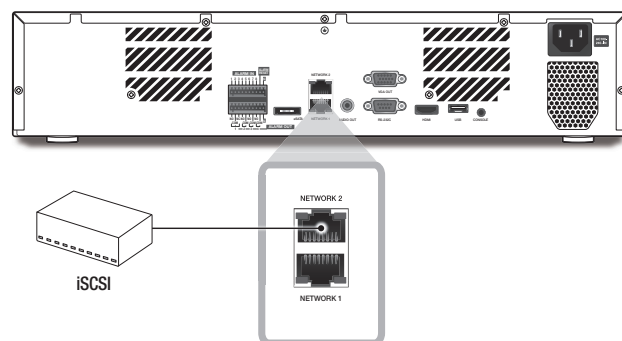


Für die Verbindung kann ein Schalter verwendet werden



Das iSCSI verbinden

Direkte Verbindung mit dem NVR



• XRN-2010/2011/2010A/2011A

Element		Details	
		XRN-2010/2010A	XRN-2011/2011A
Anzeige			
Netzwerkamera	Eingänge	Max. 32	
	Auflösung	CIF ~ 12MP	
	Protokolle	Wisenet, ONVIF	
Live	Lokale Anzeige	1x HDMI / 1x VGA	
Funktionen			
Betriebssystem	Verankert	Linux	
Aufnahme	Kompression	H.265, H.264, MJPEG	
	Aufnahmebandbreite	Max. 256 Mbps(2 MP 32 Kamera Echtzeitaufnahme)	Max. 100 Mbps(RAID-5 Modus)
	Auflösung	CIF ~ 12MP	
Suche und Wiedergabe	Wiedergabe-Bandbreite	32 Mbps(16 Ch gleichzeitig)	
	Gleichzeitige Wiedergabe	16 Kanäle (Lokaler Monitor, CMS)	
	Auflösung	CIF ~ 12MP	
	Wiedergabesteuerung	Schneller/Langasamer Vorlauf/Rücklauf, Einzelbildwiedergabe vorwärts/ Einzelbildwiedergabe rückwärts	
Speicherkapazität	Integriert	Je 1	
	Interne Festplatte	8 (RAID5 : Hot-Swap) - Max. 48TB(Non-RAID), Max. 36TB(RAID-5)	
	Extern	iSCSI-Speicher (Max. 384 TB)	
	RAID	-	RAID-5 (Array-Größe: 4-HDD x 2 Array)
Backup	Datei Backup (über Web)	BU/Exe(GUI), JPG/AVI(Netzwerk)	
	Funktion	Max. 16CH Wiedergabe, Datum-Uhrzeit/Titel Anzeige	

Element		Details	
		XRN-2010/2010A	XRN-2011/2011A
Sensor	I/O	8/4 (NO/NC wählbar)	
Audio	Eingang	32 Kanäle (Netzwerk)	
	Kompression	G.711, G.726, AAC(16/48KHz)	
	Audiokommunikation	2-Wege	
Netzwerk			
Schnittstelle		RJ-45, Gigabit Ethernet x2	
Protokoll		TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTSP, NTP, HTTP, DHCP (Server, Client), PPPoE, SMTP, ICMP, IGMP, ARP, DNS, DDNS, uPnP, HTTPS, SNMP, ONVIF (Profile-S), SUNAPI(Server, Client)	
DDNS		Hanwha DDNS	
Übertragungsbandbreite		512 Mbps (iSCSI aus), 256 Mbps (iSCSI ein)	
Max. Anzahl an externen Nutzern		Suche (3) / Live Unicast(10) / Live Multicast(20)	
IP Version		IPv4/v6	
Sicherheit		Protokoll Benutzerzugriff, IP Filtern, 802.1x, Verschlüsselung	
Sprache		Englisch, Französisch, Deutsch, Italienisch, Spanisch, Russisch Türkisch, Polnisch, Holländisch, Schwedisch, Tschechisch, Portugiesisch, Dänisch, Rumänisch, Serbisch, Kroatisch, Ungarisch, Griechisch, Norwegisch, Finnisch, Koreanisch, Chinesisch, Japanisch, Thailändisch	
OS		Windows 7, 8.1, 10, Mac OS X 10.9, 10.10, 10.11	
Webbrowser		MS IE, Google Chrome, Mac Safari	
Viewer Software	Typ	SSM, Webviewer, SmartViewer, Wisenet Mobile Viewer	
	Unterstützt CMS	SDK/CGI	
Smartphone	Support-Modell	Android, iOS	
	Unterstützte Protokolle	RTP, RTSP, HTTP, CGI	
	Steuerung	Live (16ch), Playback(1ch)	
	Max. Anzahl an Fernnutzern	Suche (3) / Live Unicast(10)	

Element		Details	
		XRN-2010/2010A	XRN-2011/2011A
Funktion			
PTZ	Steuerung	Über GUI, WebViewer, SPC-2000	
	Voreinstellung	300 Voreinstellungen	
Redundanz	Failover	32 (Normal) + 1 (Standby)	
	ARB	Ja	
Systemsteuerung		Maus, Web, SPC-2000 (Controller)	
Anzeigeleuchte/Schnittstelle			
Vorderseite	Anzeigeleuchte	LED-Status Anzeigeleuchte : Festplatten Aktion(1), Alarm(1), Leistung(1), Aufnahme(1), Backup(1), Netzwerk(1)	LED-Status Anzeigeleuchte : Festplatten Aktion(1), Alarm(1), Leistung(1), Aufnahme(1), RAID(1), Netzwerk(1)
	Schalter	N/A	
Anschlusstecker	VGA	Je 1 (Bis z u 16 geteilter Bildschirm-Modus-Live-Support)	
	HDMI	Je 1 (Live/PB/Einrichtung-Unterstützung) - Max. 4K-Unterstützung (3840 x 2160)	
Anschlusstecker	Audio	Ausgang (je 1, RCA, Leitung)	
	Ethernet	RJ-45 2EA (LAN/WAN, 1Gbps)	
	Alarm	1) Eingang(8EA, Anschlussblock) 2) Alarm Reset(je 1) 3) Ausgang (je 4, Anschlussblock) - Relais Ausgänge1(NO/NC/COM) - Relais Ausgänge2~4(NO/COM)	
	USB	Je 2 (Vorderseite1, Rückseite 1(USB3.0))	
	Speicher	1 e-SATA	
	Seriell	RS-232C	
	Zurücksetzen	-	
	Netzkabel	Je 1 AC Anschluss	

Element		Details	
		XRN-2010/2010A	XRN-2011/2011A
System			
Protokoll	Protokollliste	Max. 20000 (Systemprotokoll, je Ereignisprotokoll)	
Betriebsbedingungen			
Betriebstemperatur / Feuchtigkeit		+0° bis +40° (+32°F to +104°F)	
Luftfeuchtigkeit		20% ~ 85% RH	
Elektrisch			
Netzschalter		100 bis 240 VAC ±10%; 50/60 Hz, 4~1.5A	
Leistungsaufnahme		99W (6TB HDD x Je 8)	
Mechanisch			
Farbe/Material		Schwarz / Metall	
Abmessungen (B x H x T)		440 x 88 x 384.8 (17.32" x 3.46" x 15.15") (2U)	
Gewicht		4,86 kg (Basierend auf keiner Festplatte)	5,43 kg (Basierend auf keiner Festplatte)
Standards			
Zulassungen		UL, FCC, KC, CB, CE-EMC, CCC, EAC, PSE	

Aufnahmeleistungs-Spezifikationen für den Festplattenzustand.

Nr	Festplattenzustand	Empfangen (Mbps)	Aufnehmen (Mbps)	
			Intern	iSCSI
1	Festplatte für CE / Kein RAID	256	256	-
2	Festplatte für CE / RAID 5	100	100	-
3	Festplatte für Server / Kein RAID	256	256	256
4	Festplatte für Server / RAID 5	100	100	100

• XRN-3010/3010A

Element		Details
Anzeige		
Netzwerkamera	Eingänge	Max. 64
	Auflösung	CIF ~ 12MP
	Protokolle	Wisenet, ONVIF
Live	Lokale Anzeige	1x HDMI / 1x VGA Dual-Monitor
	Funktionen	[Lokaler Monitor] - 12M (30fps) - 8.3M(120fps) - 1080p(480fps) - 720P(960fps) - D1(1560fps)
Funktionen		
Betriebssystem	Verankert	Linux
Aufnahme	Kompression	H.256, H.264, MJPEG, WiseStream(H.265, H.264)
	Aufnahmebandbreite	Max. 300 Mbps
	Auflösung	CIF ~ 12MP
Suche und Wiedergabe	Wiedergabe-Bandbreite	32 Mbps(16 Ch gleichzeitig)
	Benutzer	Max. 4 Benutzer (lokal 1, Remote 3)
	Gleichzeitige Wiedergabe	Max. 16 Kanäle (Lokaler Monitor, CMS)
	Auflösung	CIF ~ 12MP
	Fischauge-Entzerrung	Web / CMS
	Wiedergabesteuerung	Schneller/Langsamere Vorlauf/Rücklauf, Einzelbildwiedergabe vorwärts/ Einzelbildwiedergabe rückwärts
Speicherkapazität	Integriert	0TB ~ 8TB
	Interne Festplatte	8 (Max. 64TB)
	Extern	-

Element		Details
Backup	Datei Backup (über Web)	BU/Exe(GUI), JPG/AVI(Netzwerk)
	Funktion	Mehrfachkanal (bis zu 16 K.)-Abspielen, Datum/Zeit/Titel-Anzeige
Sensor	I/O	8/4 (NO/NC wählbar)
Audio	Eingang	64 Kanäle (Netzwerk)
	Kompression	G.711, G.726, AAC(16/48KHz)
	Audiokommunikation	2-Wege
Netzwerk		
Schnittstelle		RJ-45, Gigabit Ethernet x2
Protokoll		TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTSP, NTP, HTTP, DHCP (Server, Client), PPPoE, SMTP, ICMP, IGMP, ARP, DNS, DDNS, uPnP, HTTPS, SNMP, ONVIF (Profile-S), SUNAPI(Server, Client)
DDNS		Hanwha DDNS
Übertragungsbandbreite		XRN-3010 : 512Mbps XRN-3010A : 512Mbps(P2P Off), 256Mbps(P2P On)
Max. Anzahl an externen Nutzern		Suche (3) / Live Unicast(10) / Multicast(20)
IP Version		IPv4/v6
Sicherheit		Protokoll Benutzerzugriff, IP Filtern, 802.1x, Verschlüsselung
Sprache		Englisch, Französisch, Deutsch, Italienisch, Spanisch, Russisch Türkisch, Polnisch, Holländisch, Schwedisch, Tschechisch, Portugiesisch, Dänisch, Rumänisch, Serbisch, Kroatisch, Ungarisch, Griechisch, Norwegisch, Finnisch, Koreanisch, Chinesisch, Japanisch, Thailändisch
OS		Window 7, 8, 10, Mac OS X(10.8 oder höher)
Webbrowser		MS IE, Google Chrome, Mac Safari
Viewer Software	Typ	SSM, Webviewer, SmartViewer, Wisenet Mobile Viewer
	Unterstützt CMS	SDK/CGI (SUNAPI)
Funktion		
PTZ	Steuerung	Über GUI, WebViewer, SPC-2000
	Voreinstellung	300 Voreinstellungen

Element		Details
Smartphone	Support-Modell	Android, iOS
	Unterstützte Protokolle	RTP, RTSP, HTTP, CGI(SUNAPI)
	Steuerung	Live(16ch) : Mehrfach-Profil-Support Playback(1ch)
	Max. Anzahl an Fernnutzern	Suche (3) / Live Unicast(10) / Multicast (20)
Redundanz	Failover	N+1 (Include Fail-Back)
	ARB	Ja
Systemsteuerung		Maus, Web, SPC-2000 (Controller)
Anzeigeleuchte/Schnittstelle		
Vorderseite	Anzeigeleuchte	LED-Status Anzeigeleuchte (6EA) : Festplatten Aktion(1), Alarm(1), Leistung(1), Aufnahme(1), Backup(1), Netzwerk(1)
Anschlusstecker	VGA	Sub: 1 (Support-Live-Bildschirm bis zu 16 div. Modus)
	HDMI	Haupt: 1 (Sowohl Unterstützt Live / PB / Einrichtung) - Unterstützt bis zu 4 K (3840 x 2160, Einzelmonitormodus)
Anschlusstecker	Audio	Ausgang (je 1, RCA, Leitung)
	Ethernet	RJ-45 2EA (LAN/WAN, 1Gbps)
	Alarm	1) Eingang(8EA, Anschlussblock) 2) Alarm Reset(je 1) 3) Ausgang (je 4, Anschlussblock) - Relais Ausgänge1(NO/NC/COM) - Relais Ausgänge2~4(NO/COM)
	USB	Je 2 (Vorderseite1, Rückseite 1)
	Speicher	1 e-SATA
	Seriell	RS-232C
	Zurücksetzen	Switch (1EA)
	Netzkabel	Je 1 AC Anschluss

Element		Details
System		
Protokoll	Protokollliste	Max. 20000 (Systemprotokoll, je Ereignisprotokoll)
Betriebsbedingungen		
Betriebstemperatur / Feuchtigkeit		+0° bis +40° (+32°F to +104°F)
Luftfeuchtigkeit		20% ~ 85% RH
Elektrisch		
Netzschalter		100 bis 240 VAC ±10%; 50/60 Hz, 4~1.5A
Leistungsaufnahme		Max. 99W (338BTU, 6TB HDD x Je 8)
Mechanisch		
Farbe/Material		Schwarz / Metall
Abmessungen (B x H x T)		B 440 x H 88 x T 384.8 (17.32" x 3.46" x 15.15") (2U)
Gewicht		4.86Kg(10.71 lb, HDD nicht inbegriffen)

Aufnahmeleistungs-Spezifikationen für den Festplattenzustand.

Modus	Festplatten-Bedingung	Aufnahmen
		Intern
Allgemeiner Modus	-	150
Verteilter Modus	1 Festplatte	150
	2 oder mehr Festplatten	300

• XRN-1610/1610S/1610A/1610SA

Element		Details	
		XRN-1610/1610A	XRN-1610S/1610SA
Anzeige			
Netzwerkamera	Eingänge	Max. 16	
	Auflösung	CIF ~ 12MP	
	Protokolle	Wisenet, ONVIF	
Live	Lokale Anzeige	1x HDMI / 1x VGA Dual-Monitor	
	Funktionen	[Lokaler Monitor] 12MP (30fps) 8MP(120fps) 5MP(180fps), 3MP(240fps), 2MP(480fps), 720p(480fps), D1(480fps) [Web] 5MP(30fps), 3MP(60fps), 2MP(120fps), 720p(240fps), D1(480fps)	
Funktionen			
Betriebssystem	Verankert	Linux	
Aufnahme	Kompression	H.265, H.264, MJPEG, WSESTREAM(H.265, H.264)	
	Aufnahmebandbreite	180 Mbps	
	Auflösung	CIF ~ 12MP	
Suche und Wiedergabe	Wiedergabe-Bandbreite	32 Mbps(16 Ch gleichzeitig)	
	Funktionen	Max. 4 Benutzer (Set 1, Remote 3)	
	Gleichzeitige Wiedergabe	Max. 16CH (Lokal, Netzwerk)	
	Auflösung	CIF ~ 12MP	
	Fischaugen-Entzerrung	WEB / CMS	
	Wiedergabesteuerung	Schneller/Langasamer Vorlauf/Rücklauf, Einzelbildwiedergabe vorwärts/ Einzelbildwiedergabe rückwärts	
Speicherkapazität	Standardmäßig integriert	0TB ~ 6TB	
	Interne	8 SATA (Max. 48TB)	4 SATA (Max. 24TB)
	Extern	1 eSATA, iSCSI (max. 384 TB)	
Backup	Dateiformat	BU/Exe(GUI), JPG/AVI(Netzwerk)	
	Funktion	Max. 16CH Wiedergabe, Datum-Uhrzeit/Titel Anzeige	

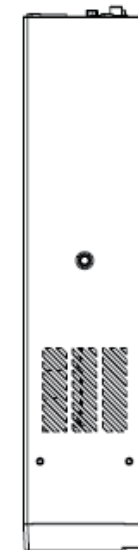
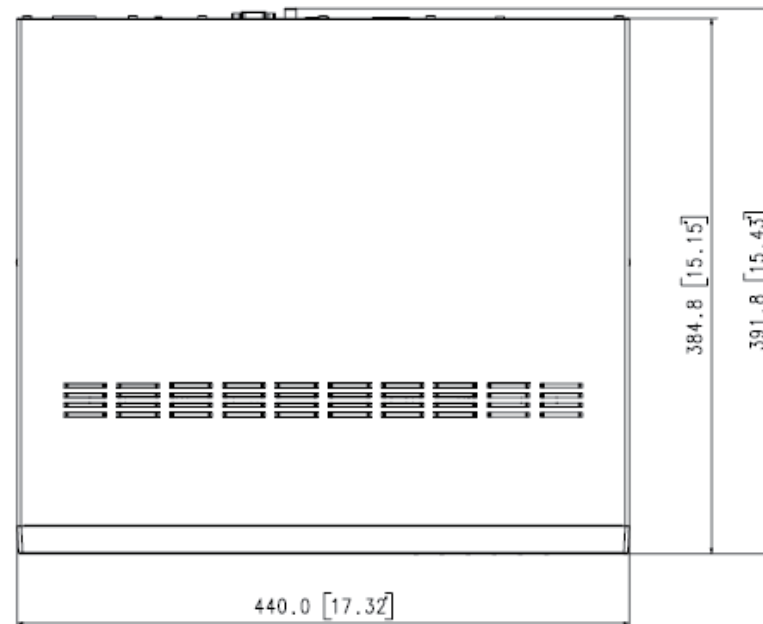
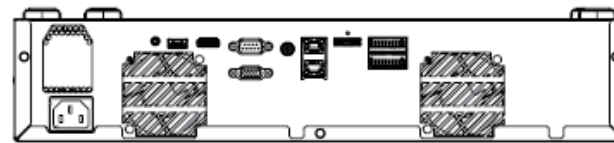
Element		Details	
		XRN-1610/1610A	XRN-1610S/1610SA
Sensor	I/O	8/4 (NO/NC wählbar)	
Audio	Eingang	16 Kanäle (Netzwerk)	
	Kompression	G.711, G.726, AAC(16/48KHz)	
	Audiokommunikation	2-Wege (Durchgehend zwischen Kamera und SSM)	
Netzwerk			
Protokoll		TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTSP, NTP, HTTP, DHCP (Server, Client), PPPoE, SMTP, ICMP, IGMP, ARP, DNS, DDNS, uPnP, HTTPS, SNMP, ONVIF (Profile-S), SUNAPI(Server, Client)	
DDNS		Hanwha DDNS	
Übertragungsbandbreite		Max. 256Mbps (iSCSI aus) Max. 128 Mbps (iSCSI ein)	
Max. Anzahl an externen Nutzern		Suche (3) / Live Unicast(10) / Live Multicast(20)	
IP Version		IPv4/v6	
Sicherheit		Protokoll Benutzerzugriff, IP Filtern, 802.1x, Verschlüsselung (ID/PW, Aufzeichnung, Übertragung, Sicherung)	
Sprache	GUI	Englisch, Französisch, Deutsch, Italienisch, Spanisch, Russisch Türkisch, Polnisch, Holländisch, Schwedisch, Tschechisch, Portugiesisch, Dänisch, Rumänisch, Serbisch, Kroatisch, Ungarisch, Griechisch, Norwegisch, Finnisch, Koreanisch, Chinesisch, Japanisch, Thailändisch	
	Web	Englisch, Französisch, Deutsch, Italienisch, Spanisch, Russisch Türkisch, Polnisch, Holländisch, Schwedisch, Tschechisch, Portugiesisch, Dänisch, Rumänisch, Serbisch, Kroatisch, Ungarisch, Griechisch, Norwegisch, Finnisch, Koreanisch, Chinesisch, Japanisch	
OS		Windows XP (Service Pack 2 oder höher), Vista, 7, 8, 10, Mac OS X (10.7 oder höher)	
Webbrowser		Non-Plugin-Webviewer Unterstützte Browser: Google Chrome 47, MS Edge 20 WMF : 1 CH LIV E(800X600), Einrichtung Plug-in-Webviewer Unterstützte Browser: MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * nur Mac OS X	
Viewer Software	Typ	SSM, Webviewer, SmartViewer, Wisenet Mobile Viewer	
	Unterstützt CMS	SDK/CGI (SUNAPI)	

Element		Details	
		XRN-1610/1610A	XRN-1610S/1610SA
Smartphone	Support-Modell	Android, iOS	
	Unterstützte Protokolle	RTP, RTSP, HTTP, CGI (SUNAPI)	
	Steuerung	Live (16 Kan.) : Multi-Profil-Unterstützung Wiedergabe (1 Kan., Max 2MP)	
	Max. Anzahl an Fernnutzern	Suche (3) / Live Unicast(10) / Live multicast (20)	
Funktion			
Kamerasteuerung	PoE	-	1) Monitor PoE-Stromverbrauch 2) Ein/Aus-Steuerung für jede PoE-Kamera 3) Remote-Zurücksetzen für jede PoE-Kamera
	Zeitsynch.	-	NVR-Zeitsteuerung für PoE-Kamera (Zeitsynchr. basierend auf NVR-Zeit)
Einfache Konfiguration		Einrichtungs-Hilfsprogramm (Sprache, Zeit/Datum, Netzwerk, Autom. Kamerakonfiguration)	Einrichtungs-Hilfsprogramm (Sprache, Zeit/Datum, Netzwerk, Autom. Kamerakonfiguration) ※ Wählbar zwischen PnP- und manuellem Modus
ARB (Sicherung von automat. Recovery)		Ja	
PTZ	Steuerung	Über GUI, WebViewer, SPC-2000 (USB)	
	Voreinstellung	300 Voreinstellungen	
Systemsteuerung	Regelanwendungen	Maus, IR Remocon, Web, SPC-2000 (USB)	
Anzeigeleuchte/Schnittstelle			
Vorderseite	Anzeigeleuchte	Stromstatus LED JE 1 Festplatte Aktion LED JE 1 Alarm Status LED JE 1 Aufnahme Status LED JE 1 Netzwerkaktion LED JE 1 SICHERUNGS-Status LED JE 1	
Anschlussstecker	VGA	Sub: 1 (Support-Live-Bildschirm bis zu 16 div. Modus)	
	HDMI	Haupt: 1 (Unterstützung Live / PB / Einrichtung) - Unterstützung bis 4K (3840 x 2160, Einzelmonitormodus)	

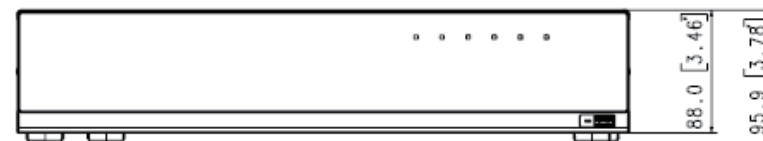
Element		Details	
		XRN-1610/1610A	XRN-1610S/1610SA
Anschlussstecker	Audio	Ausgang je 1(RCA, Leitung)	
	Ethernet	2 (LAN/WAN, 1Gbps) - LAN : Downlink zu Kamera/ PoE(PoE+) -Hub - WAN : Uplink zu CMS	16EA (PoE(PoE+), 100Mbps) 2 (LAN/WAN, 1Gbps) - LAN : Downlink zu Kamera/ PoE(PoE+) -Hub - WAN : Uplink zu CMS
	Alarm	Eingang(8EA, Anschlussblock) Ausgang (je 4, Anschlussblock)	
	USB	Je 2 (Vorderseite1, Rückseite 1)	
	Seriell	1ea für RS-232C (Plan einer Unterstützung als Projektbasis)	-
	Zurücksetzen	Ja (Werksrücksetzen, Alarmrücksetzen)	
System	Netzkabel	Inbegriffen	
	Protokoll	Protokollliste	Max. 20000 (Systemprotokoll, je Ereignisprotokoll)
	Betriebsbedingungen		
	Betriebstemperatur / Feuchtigkeit		+0° bis +40° (+32°F to +104°F)
	Luftfeuchtigkeit		20% ~ 85% RH
	Elektrisch		
Leistungsaufnahme	100 ~ 240V AC		
	Leistungsaufnahme	Max. 76.3W (8 HDDs)	Max. 271,9 W (4 HDDs, PoE (PoE+) ein), Max. 51,9 W (4 HDDs, PoE (PoE+) aus) ※ PoE (PoE +) Budget: max. 200 W
Mechanisch			
Farbe/Material		Schwarz / Metall	
Abmessungen (B x H x T)		440 x 88 x 384.8mm (17.32" x 3.46" x 15.15") (2U)	
Gewicht		5,44kg	5,1kg

- XRN-2010/2011/2010A/2011A

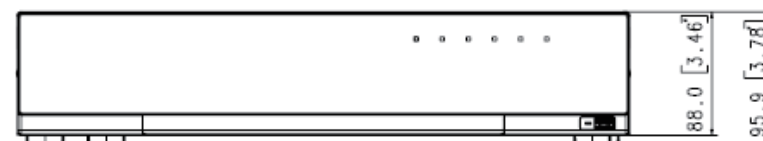
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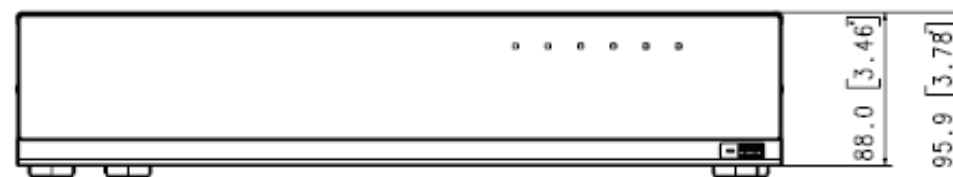
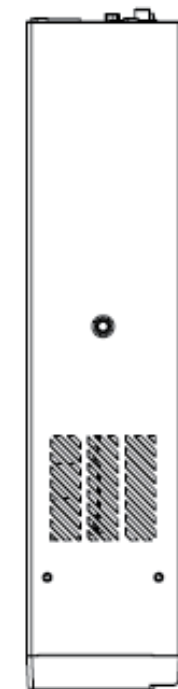
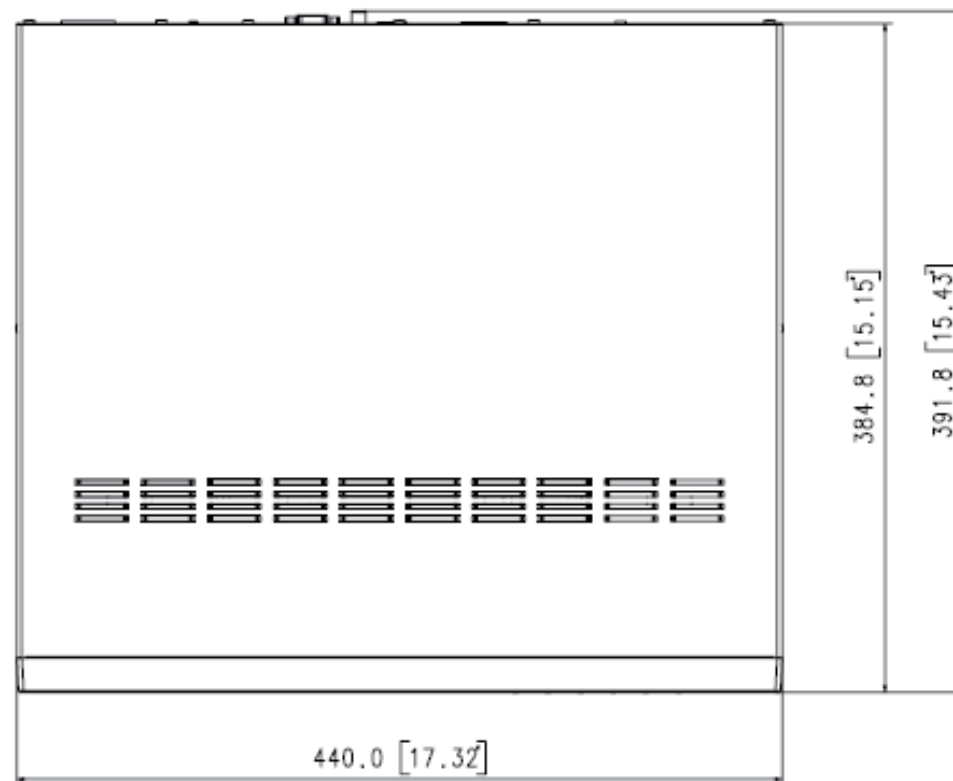
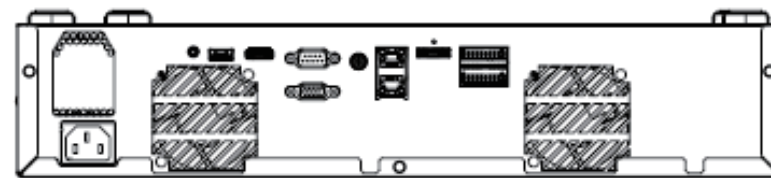


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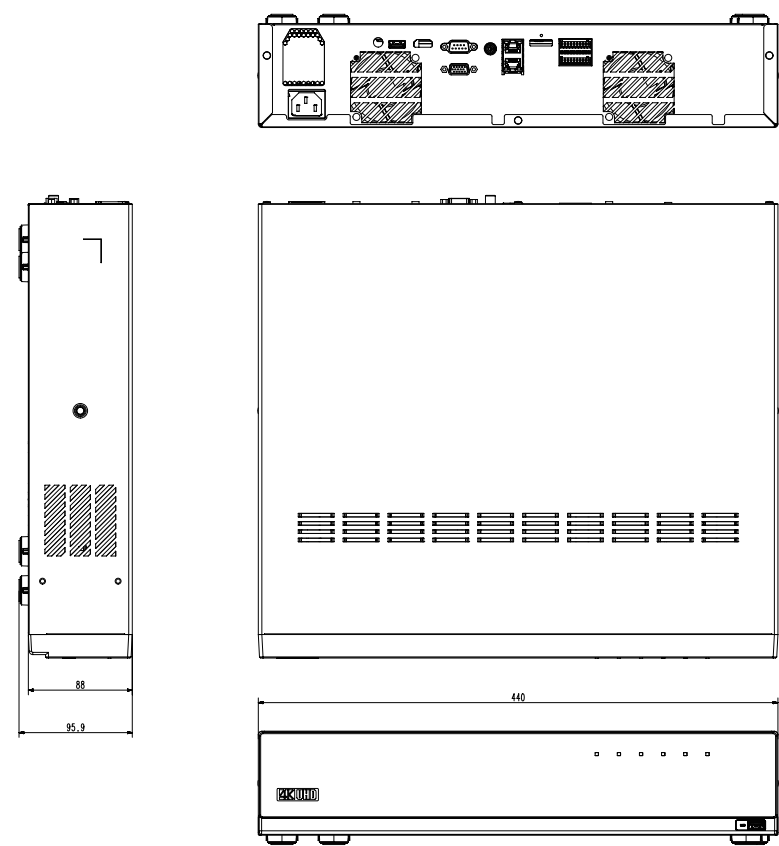
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Einheit: mm (zoll)



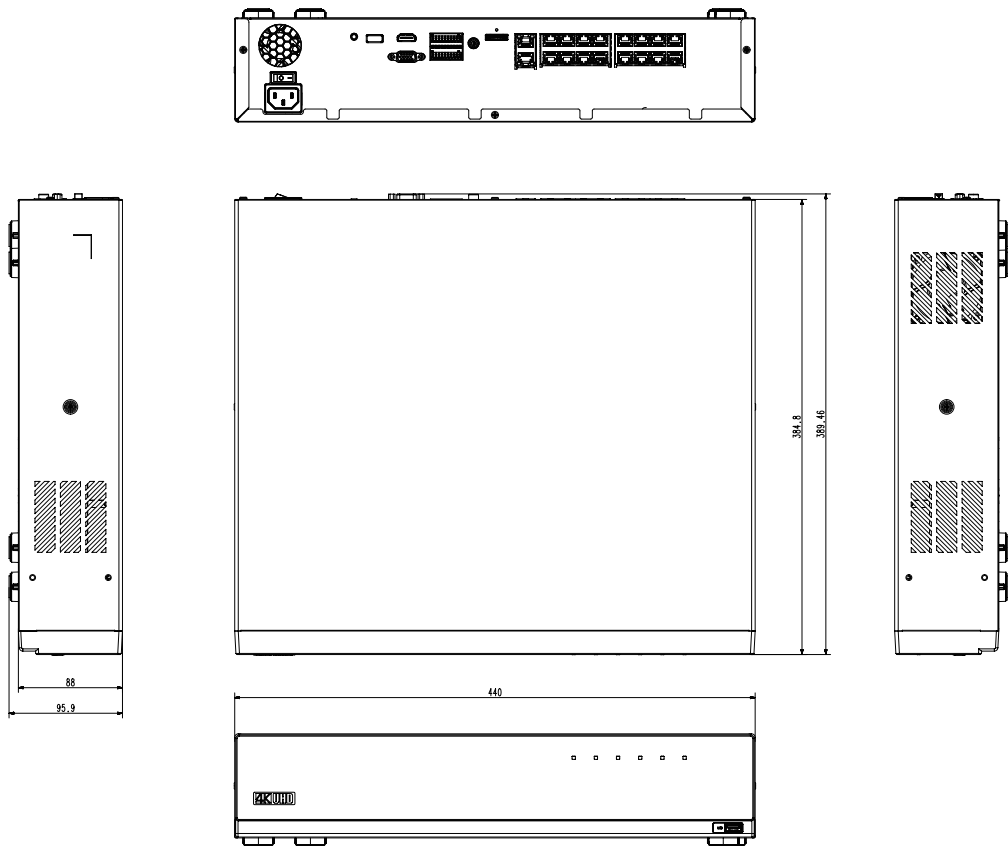
• XRN-1610/1610A

Einheit: mm (zoll)



• XRN-1610S/1610SA

Einheit: mm (zoll)



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Version 2, June 1991

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[sheepb.jpg] "Clone me," says Dolly sheepishly

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3. [3]Viraj Bais <vbais@mailman1.intel.com> and [4]Clayton Kirkwood <kirkwood@striderfm.intel.com> port to WindowsNT 3.5

4. [5]Michael Barone <michael.barone@lmco.com> GPSVME fixes

5. [6]Karl Berry <karl@owl.HQ.ileaf.com> syslog to file option

6. [7]Greg Brackley <greg.brackley@bigfoot.com> Major rework of WINNT port. Clean up recvbuf and iosignal code into separate modules.

7. [8]Marc Brett <Marc.Brett@westgeo.com> Magnavox GPS clock driver

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12. [13]Sven Dietrich <sven_dietrich@trimble.com> Palisade reference clock driver, NT adj. residuals, integrated Greg's Winnt port.

13. [14]John A. Dundas III <dundas@salt.jpl.nasa.gov> Apple A/UX port

14. [15]Torsten Duwe <duwe@immd4.informatik.uni-erlangen.de> Linux port

15. [16]Dennis Ferguson <dennis@mrbill.canet.ca> foundation code for NTP Version 2 as specified in RFC-1119

16. [17]Glenn Hollinger <glenn@herald.usask.ca> GOES clock driver

17. [18]Mike Iglesias <iglesias@uci.edu> DEC Alpha port

18. [19]Jim Jagielski <jim@jagubox.gsfc.nasa.gov> A/UX port

19. [20]Jeff Johnson <jbj@chatham.usdesign.com> massive prototyping overhaul

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23. [26]William L. Jones <jones@hermes.chpc.utexas.edu> RS/6000 AIX modifications, HPUX modifications

24. [27]Dave Katz <dkatz@cisco.com> RS/6000 AIX port

25. [28]Craig Leres <leres@ee.lbl.gov> 4.4BSD port, ppsclock, Magnavox GPS clock driver

26. [29]George Lindholm <lindholm@ucs.ubc.ca> SunOS 5.1 port

27. [30]Louis A. Mamakos <louie@ni.umd.edu> MD5-based authentication

28. [31]Lars H. Mathiesen <thorinn@diku.dk> adaptation of foundation code for Version 3 as specified in RFC-1305

29. [32]David L. Mills <mills@udel.edu> Version 4 foundation: clock discipline, authentication, precision kernel; clock drivers: Spectracom, Austron, Arbiter, Heath, ATOM, ACTS, KSI/Odetics; audio clock drivers: CHU, WWW/H, IRIG

30. [33]Wolfgang Moeller <moeller@gwdgv1.dnet.gwdg.de> VMS port

31. [34]Jeffrey Mogul <mogul@pa.dec.com> ntptrace utility

32. [35]Tom Moore <tmoore@fiemel.daytonoh.ncr.com> i386 svr4 port

33. [36]Kamal A Mostafa <kamal@whence.com> SCO OpenServer port

34. [37]Derek Mulcahy <derek@toybox.demon.co.uk> and [38]Damon Hart-Davis <d@hd.org> ARCRON MSF clock driver

35. [39]Rainer Pruy <Rainer.Pruy@informatik.uni-erlangen.de> monitoring/trap scripts, statistics file handling

36. [40]Dirce Richards <dirce@zk3.dec.com> Digital UNIX V4.0 port

37. [41]Wilfredo Sánchez <wsanchez@apple.com> added support for NetInfo

38. [42]Nick Sayer <mrapple@quack.kfu.com> SunOS streams modules

39. [43]Jack Sasportas <jack@innovativeinternet.com> Saved a Lot of space on the stuff in the html/pic/ subdirectory

40. [44]Ray Schnitzler <schnitz@unipress.com> Unixware1 port

41. [45]Michael Shields <shields@tembel.org> USNO clock driver

42. [46]Jeff Steinman <jss@pebbles.jpl.nasa.gov> Datum PTS clock driver

43. [47]Harlan Stenn <harlan@pfcs.com> GNU automake/autoconfigure makeover, various other bits (see the ChangeLog)

44. [48]Kenneth Stone <ken@sdd.hp.com> HP-UX port

45. [49]Ajit Thyagarajan <ajit@ee.udel.edu> IP multicast/anycast support

46. [50]Tomoaki TSURUOKA <tsuruoka@nc.fukuoka-u.ac.jp> TRAK clock driver

47. [51]Paul A Vixie <vixie@vix.com> TrueTime GPS driver, generic TrueTime clock driver

48. [52]Ulrich Windl <Ulrich.Windl@rz.uni-regensburg.de> corrected and validated HTML documents according to the HTML DTD

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