Szünetmentes tápegység és szettajánlatok HD analóg és IP CCTV rendszerekhez

WISENET

Pulsar

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Modern Alarm

Tápegység, 8 IP kamerához és rögzítőhöz

SF108-CRB

Kifejezetten IP kamerák szünetmentes tápellátására tervezett tápegység, amelynek méretes fémházában elhelyezhető kényelmesen és megfelelően rögzítve az IP rögzítő is.

Rendszerösszetevők

SF108 switch

- Szünetmentes tápellátás 8 IP kamera számára (=52 V)
- Szünetmentes tápellátás IP rögzítő számára (= 12 V)
- 10 portos switch, 8 port PoE tápfeladóval
- 30 W portonkénti terhelhetőség

PSB-30024 100 kapcsolóüzemű tápegység

- =27,6 V-os kiementi feszültség
- 2 db 18 Ah kapacitású akku számára

DC/DC 52230 feszültségátalakító

- =52 V előállításához (PoE számára)

DC/DC 50SD feszültségátalakító

- = 12 V előállításához (rögzítőnek)

Egyéb

- = 185 W maximális összes teljesítményfelvétel
- 8 × 0,3 A / PoE csatorna
- Beépíthető IP rögzítő méretei: 380 × 230 × 65 mm (Szé × Ma × Mé)
- Töltőáram: 1 A
- Fedélkapcsoló
- Tömeg: 12 kg
- RAL 9003

2 év garancia

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IP

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Ráköthető IP kamerák száma:	**8 db** PoE 30 W / db	
Behelyezhető akkuk száma, kapacitása:	**18 Ah** =12 V 2 db	
Maximális szünetmentes működési idő:	**210** perc 3 óra 30 perc	

IP PoE

Tápegység, 8 HD kamerához és rögzítőhöz

Csavartérpáras adó-vevővekkel

PSUPS 10A 12CRT

Kifejezetten analóg, HD felbontású kamerák szünetmentes tápellátására tervezett tápegység, amelynek méretes fémházában elhelyezhető biztonságosan a rögzítő is. A kamerák biztos táp- és nagy távolságú jelátvitelét beépített, csavartérpáras adó-vevők segítik.

Rendszerösszetevők

PSU kapcsolóüzemű tápegység

- Szünetmentes táplálás 8 HD kamerának (= 13,8 V)
- Szünetmentes táplálás képrögzítőnek (= 12 V)
- 8 × = 13,8 V / 0,75 A kiemenet kameráknak (9 W)
- = 13,8 V / 1 A-es töltés 18 Ah kapacitású akkunak
- = 12 V / 4 A-es táp a rögzítőnek

Csavart érpáras táp- és jelátalakítók

- 2 × 4 db, RJ45 csatlakozóval

Egyéb

- Működési módtól függetlenül, folyamatosan rendelkezésre álló, = 12 V-os tápellátás
- = 150 W maximális összes teljesítményfelvétel
- 8 × 0,75 A kameráknak
- Beépíthető képrögzítő méretei: 380 × 320 × 65 mm (Szé × Ma × Mé)
- Töltőáram: 1 A
- Tömeg: 10,5 kg
- Fedélkapcsoló
- RAL 9003

HD ANALÓG

2 év garancia

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HD

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Ráköthető HD kamerák száma:	**8 db** 9 W / db	= 12 V
Behelyezhető akkuk száma, kapacitása:	**18 Ah** 1 db	= 12 V
Maximális szünetmentes működési idő:	**90** 1 óra 30 perc	perc

Pulsar-WISENET szettek

ANALÓG 4-es szett

- Rögzítő: DVR HRD-442
- Dómkamera: HCD-7020R
- Csőkamera: HCO-7020R

Dómkamera szett ár:

Csőkamera szett ár:

ANALÓG 8-as szett

- Rögzítő: DVR HRD-840
- Dómkamera: HCD-7020R
- Csőkamera: HCO-7020R
- HDD (a rögzítőben): WD 1TB

Dómkamera szett ár:

Csőkamera szett ár:

TÁPEGYSÉG ANALÓG szetthez

- PSUPS 10A 12CRT, fémdobozzal, csavartérpáras átalakítókkal:
- FIAMM 18 Ah akku (1 db):

Tápegység-szett ára:

ANALÓG 4-es szett
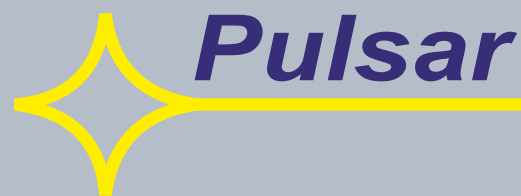+ táp + akku
DÓMKAMERÁKKAL

ANALÓG 8-es szett
+ táp + akku
CSŐKAMERÁKKAL

ANALÓG 8-as szett
+ táp + akku
DÓMKAMERÁKKAL

ANALÓG 8-es szett
+ táp + akku
CSŐKAMERÁKKAL

HD ANALÓG

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Pulsar-WISENET szettek

IP 4-es szett

- Rögzítő: QRN-410
- Dómkamera: LND-6020R
- Csőkamera: LNO-6020R
- HDD (a rögzítőben): WD 1 TB

Dómkamera szett ár:

Csőkamera szett ár:

IP 8-as szett

- Rögzítő: QRN-810
- Dómkamera: LND-6020R
- Csőkamera: LNO-6020R
- HDD (a rögzítőben): WD 1 TB

Dómkamera szett ár:

Csőkamera szett ár:

TÁPEGYSÉG 4-es IP szetthez

- S64-CRB, fémdobozzal:
- FIAMM 18 Ah akku (2 db):

Tápegység-szett ára:

TÁPEGYSÉG 8-as IP szetthez

- SF108-CRB, fémdobozzal:
- FIAMM 18 Ah akku (2 db):

Tápegység-szett ára:

IP 4-es szett, PoE + táp + akkuk DÓMKAMERÁKKAL

IP 4-es szett, PoE + táp + akkuk CSŐKAMERÁKKAL

IP 8-as szett, PoE + táp + akkuk DÓMKAMERÁKKAL

IP 8-as szett, PoE + táp + akkuk CSŐKAMERÁKKAL

IP PoE

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Kamerák IP szettekhez

LNO-6020R IP csőkamera

LND-6020R IP beltéri dómkamera

- 2 Mpx felbontás
- H.264 MJPEG kódolás
- Beépített infravető, 30 m-ig hatásos (LND-6020R: 20 m-ig)
- 4 mm-es, fix optika
- Valós D&N és WDR funkció (120 dB)
- Folyosó nézet (álló, azaz porté állású képkivágás)
- Mozgásérzékelés, szabotázsjelzés
- SD/SDHC kártyák fogadása max. 32 GB-ig
- PoE táplálás
- LNO-6020R: IP66 környezetállóság

LNO-6020R

HCD-7020R

Kamerák HD analóg szettekhez

HCO-7020R HD+ csőkamera

HCD-7020R HD+ beltéri dómkamera

- 4 Mpx felbontás (2560 × 1440)
- Beépített infravető, 20 m-ig hatásos (LND-6030R: 20 m-ig)
- AHD (ACD) és CVBS (Pelco-C) támogatás
- 500 m-es jelátvitel 5C2V koaxon
- 4 mm-es, fix optika
- Valós D&N és D-WDR funkció
- HNO-7020R: IP66 környezetállóság és IK10 rongálásállóság
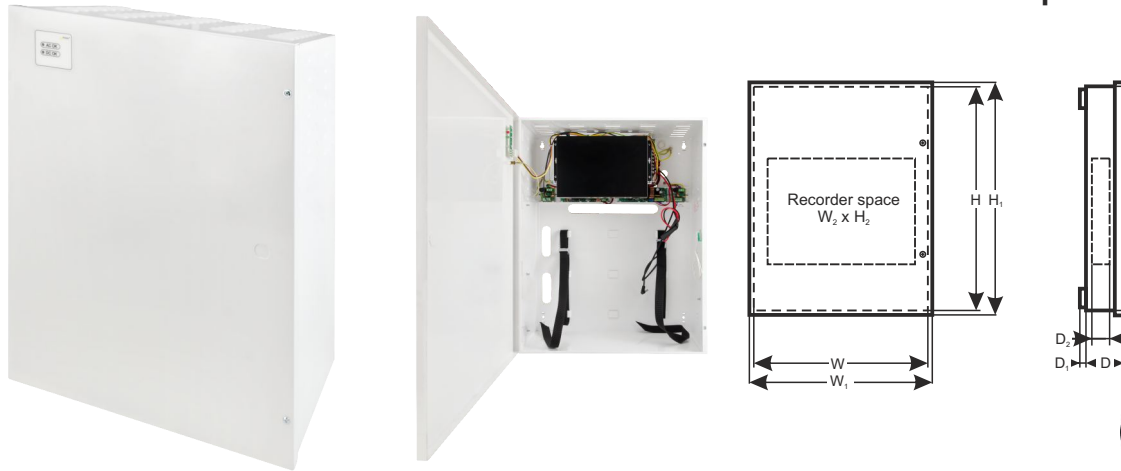- Max. 5 W teljesítmény-igény

LND-6020R

WISENET

HCO-7020R

CODE: **SF108-CRB** v.1.1/III **EN****

TYPE: **SF108-CRB 10-ports switch with buffer power supply for 8 IP cameras and recorder in recorder space.**

Features:

- Uninterruptible power supply of 8 IP cameras (52V DC)
- Uninterruptible power supply of the recorder (12V DC)
- Switch 10 ports
  8 PoE ports 10/100 Mb/s, (1÷8 ports) (data and power supply)
  2 ports 10/100/1000 Mb/s (G1/TP, G2/TP ports) (UpLink)
  2 ports 10/100/1000 Mb/s SFP (G1/SFP, G2/SFP ports)
- 30W for each PoE port, supports devices complaint with the IEEE802.3af/at standard
- Approximate backup time: 3h 30min

- LED indication
- Additional mounting elements (straps for mounting the recorder)
- Metal enclosure – color white RAL 9003 with space for two 17Ah/12V battery and offers the possibility of recorder installation
- Supports auto-learning and auto-aging of MAC addresses (1K size)
- Space for a recorder with the following dimensions 320x380x65 (WxHxD)
- warranty – 2 year from the production date

DESCRIPTION

The SF108-CRB is dedicated for uninterruptible power supply of 8 IP cameras (52V DC power supply) and uninterruptible power supply of the DVR (12V DC power supply). In addition, the large size of the enclosure allows installing the recorder inside.

The main elements of this system include:
- 10 ports PoE (SF108) switch
- buffer power supply unit 27,6V (PSB-30024100) which can accommodate two 2 x 17Ah / 12V batteries
- a converter (DC/DC52230) increasing the voltage to 52V DC (supply of the PoE switch)
- step down (DC/DC50SD) converter with adjustable output voltage to 12V DC (NVR power supply)

In case of power decay, a battery back-up is activated immediately.

The approximate backup time is given assuming that all output ports are used (using typical devices and 17Ah batteries). The electricity consumption for own needs and the energy efficiency of the power intake track were taken into account. The exact description of how to perform the calculations can be found at: "Approximate backup time - assumptions for calculations".

Automatic detection of any devices powered in the PoE standard is enabled at the 1 - 8 ports of the switch. The G1/TP, G2/TP ports is used for connection of another network device via RJ45 connector. The switch is fitted with SFP slots; the use of fiber optic module (GBIC) allows fiber optic transmission. The LEDs at the front panel indicate the operation status.

The switch is housed in a metal enclosure (color RAL 9003) which can accommodate a two 17Ah/12V batteries. The enclosure features a micro switch tamper indicating door opening (front panel). The SF108-CRB is fitted with two LEDs on the front panel (red LED – indicates 230V AC power supply of the PSU, green LED indicates the presence of DC voltage).

The PoE technology ensures a network connection and reduces installation costs by eliminating the need to supply a separate power cable for each device. This method allows supplying other network devices, such as IP phone, wireless access point or router.

PARAMETERS OF THE SWITCH

Ports	8 x PoE (10/100 Mb/s) (RJ-45) 2 x UPLINK (10/100/1000 Mb/s) (RJ-45) 2 x UPLINK (10/100/1000 Mb/s) (SFP) with connection speed auto-negotiation and MDI/MDIX Auto Cross)
PoE power supply	IEEE802.3af/at (1÷8 ports), 52V DC / 30W at each port * Used pairs 4/5 (+); 7/8 (-)
Protocols, Standards	IEEE802.3, 802.3u, 802.3x CSMA/CD, TCP/IP
Forwarding rate	10BASE-T: 14880pps/port
	100BASE-TX: 148800pps/port
Bandwidth	1,6 Gbps
Transmission method	Store-and-Forward
Optical indication of operation	Switch power supply; Link/Act; PoE Status

* The given value of 30W per port is the maximum value. The total power consumption should not exceed 96W when all PoE ports are being used.

ELECTRICAL PARAMETERS

Mains supply	176÷264V AC
Current up to	1,1A@230VAC max.
Supply power	185W
Output current at the PoE ports (RJ45)	8 x 0,3A ΣI=2A (max.)
Output voltage at the PoE ports (RJ45)	52V DC
Output current (power supply output)	5A
Output voltage (power supply input)	12V DC
Short-circuit protection SCP and overload protection OLP	105% ÷ 150% PSU power, automatic recovery (the fault requires disconnection of the DC output circuit)
PSU current consumption	250mA/27,6V
Battery charge current	1,0A max. / 2x17Ah (+/-5%)
Approximate backup time	3h 30min
Battery circuit protection SCP and reverse polarity connection	melting fuse
Deep discharge battery protection UVP	U<19V (± 5%) – disconnection of the batteries
Sabotage protection: - TAMPER output indicating enclosure opening	- microswitch, styki NC (obudowa zamknięta), 0,5A@50V DC (max.)

MECHANICAL PARAMETERS

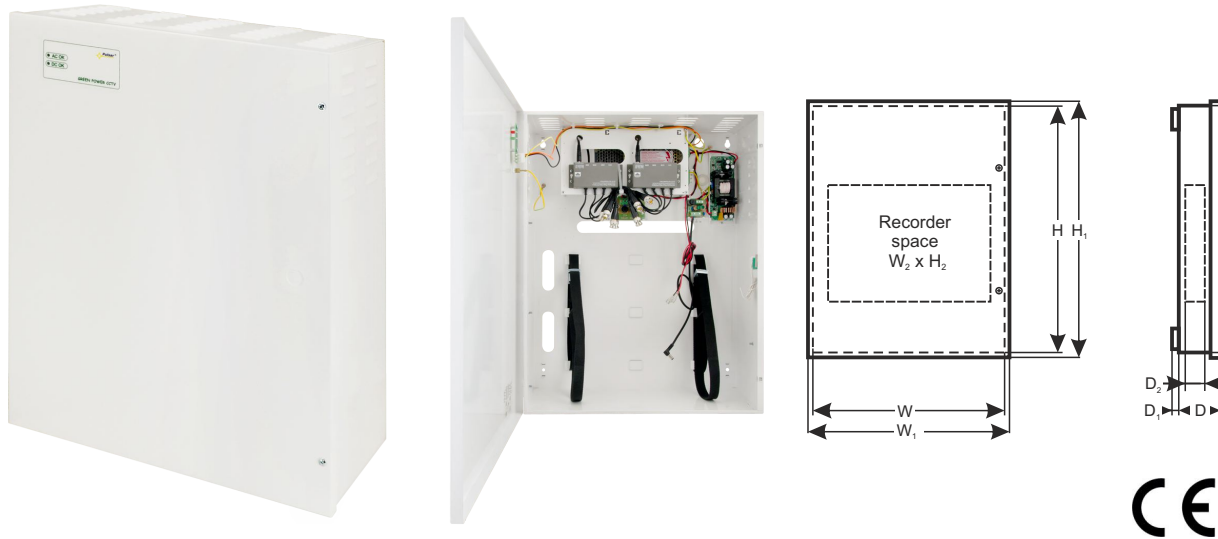| Dimensions	W=421, H=535, D+D$_1$=193+14 [+/- 2mm] W$_1$=426, H$_1$=540 [+/- 2mm]
The dimensions of the recorder compartment	W$_2$=380, H$_2$=320, D$_2$=65 [+/- 2mm]
The dimensions of the battery compartment	370x180x80 (WxHxD)
Gross/Net weight	11,2 / 12,0 kg
Enclosure	Steel plate, DC01 1,0mm color white RAL 9003
Closing	Cheese head screw x 2 (at the front), (lock assembly possible)
Connectors	Power supply of the cameras: RJ45 socket Power supply for recorder: DC2,1/5,5 plug Input 230V AC: Φ 0,63-2,50 (AWG 22-10), Battery output BAT: 6,3F-2,5 TAMPER output: wires
Warranty	2 year from the production date
Notes	The enclosure does not touch the assembly surface so that cables can be led.

PSUPS series power supply unit
Buffer power supply for up to 8 HD cameras and DVR with recorder space + transmitters

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CODE: **PSUPS 10A12CRT** v.1.0/II   **EN****

TYPE: **PSUPS 13,8V/12V/10A/17Ah Buffer power supply for up to 8 HD cameras and DVR with recorder space + transmitters.**

Recorder space W$_2$ x H$_2$

CE

Features:

- DC 13,8V uninterruptible power supply of HD cameras
- DC 12V uninterruptible power supply of the recorder
- fitting battery 17Ah/12V
- recorder space 380x320x65
- wide range of mains supply AC 176÷264V
- high efficiency 80%
- 8 RJ45 0,75A outputs supplying HD and digital cameras
- 12V/4A output dedicated to supply the recorder
- battery charge and maintenance control
- deep discharge battery protection (UVP)
- battery charging current 1A
- Approximate backup time: 1h 30min

- battery output protection against short circuit and reverse polarity connection
- LED indication
- protections:
    - SCP short-circuit protection
    - OLP overload protection
    - OVP over voltage protection
    - surge protection
    - against sabotage
- warranty – 2 years from the production date

DESCRIPTION

A buffer PSU is intended for an uninterrupted supply to CCTV system devices requiring stabilized voltage of **12V DC (+/-15%)**. The PSU has two circuits: first **1x4A / 12V DC** for supplying the recorder and **8x0,75A / 13,8V DC** to power the cameras through the transmitter using the RJ45 connector and UTP cable. Current efficiency of the PSU amounts to:

Output current 8x0,75A + 4A recorder + 1A battery charging *

Total current of the receivers + battery 11A* max.

In case of a mains power loss 230V a battery back-up is activated immediately.

The approximate backup time is given assuming that all output ports are used (using typical devices and 17Ah batteria). The electricity consumption for own needs and the energy efficiency of the power intake track were taken into account. The exact description of how to perform the calculations can be found at: "Approximate backup time - assumptions for calculations".

The power supply unit is placed in a metal enclosure (color RAL 9003) with space for 17Ah / 12V batteries. The enclosure is equipped with a micro-switch indicating unwanted opening of the door (faceplate).

* See chart 1

PSUPS series power supply unit
Buffer power supply for up to 8 HD cameras and DVR with recorder space + transmitters

Pulsar®

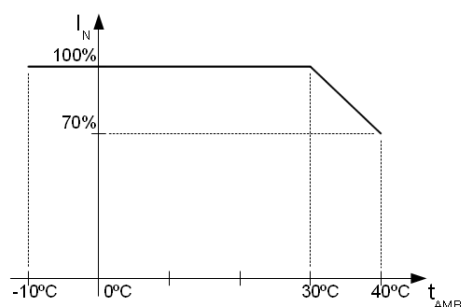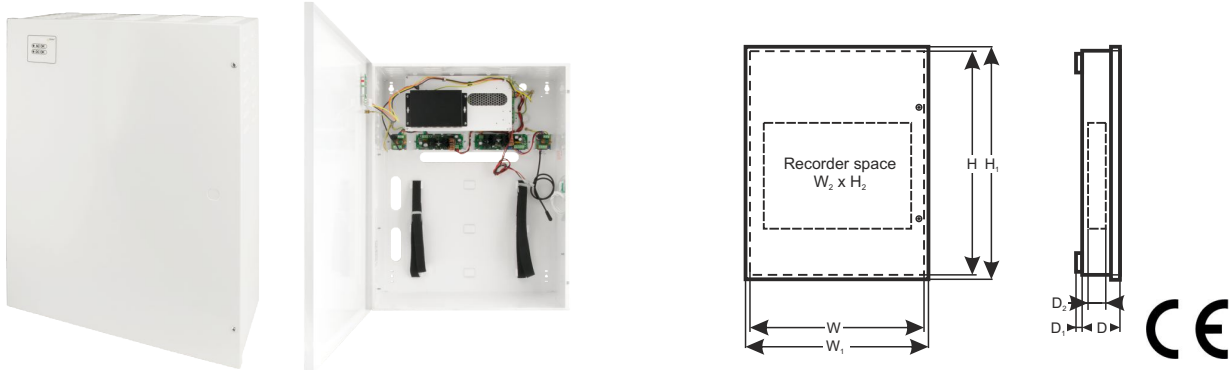| SPECIFICATIONS	
PSU type	A (EPS - External Power Source)
Mains supply	176÷264V AC / 50Hz
Current consumption	1,3A@230V AC
PSU's power	150W
Efficiency	80%
Output voltage – strips fuse base 8x	11V ÷ 13,8V DC – buffer operation 9,5V ÷ 13,8V DC – battery-assisted operation
Output voltage – recorder	**12V DC** maintained regardless of the state of battery charge
Output current t_{AMB}<30°C	**8x0,75A + 4A recorder + 1A battery charging*** **Total current of the receivers + battery 11A* max.** *** see chart 1**
Output current t_{AMB}=40°C	8x0,3A + 4A recorder + 1A battery charging * Total current of the receivers + battery 7,7A*max. * see chart 1
Output voltage adjustment range	12÷14V DC
Ripple voltage	120mV p-p max.
PSU current consumption	0,2A
Battery charging current	1A
Approximate backup time	1h 30min
Short-circuit protection SCP - circuit of cameras	F5A melting fuses in the fuse module
Short-circuit protection SCP - circuit of recorder	F5A melting fuse in the filter
Overload protection OLP	105% ÷ 150% of the PSU power, automatic recovery
Battery circuit protection SCP and reverse polarity connection	glass fuse 15A
Surge protection	varistors
Over voltage protection OVP	>16V (automatic recovery)
Deep discharge protection UVP	U<9,5V (± 5%) – disconnection of battery terminal
Sabotage protection: - TAMPER output indicating enclosure opening	- micro-switches, NC contacts (enclosure closed), 0,5A@50V DC (max.)
Optical indication: front panel of the PSU - AC OK.; LED indicating the AC power status - AUX OK.; LED indicating the DC supply at the PSU output	- red, normal status – on, failure: off - green, normal status – on, failure: off
Operating conditions	2nd environmental class, -10°C÷ +40°C
Enclosure	Steel plate DC01 1,0mm, RAL 9003
Dimensions	W=420, H=535, D+D_1=193+14 [+/- 2mm] W_1=425, H_1=540 [+/- 2mm]
The dimensions of the recorder compartment	W_2=380, H_2=320, D_2=65 [+/- 2mm]
The dimensions of the battery compartment	180 x 170 x 80 mm (WxHxD) max
Net/gross weight	10,5 / 11,0 kg
Closing	Cheese head screw x 2 (at the front), lock assembly possible
Deklarations, warranty	CE, 2 year from the production date
Notes	The enclosure does not adjoin the assembly surface so that cables can be led.

Chart 1. Acceptable output current from the PSU depending on ambient temperature.

CODE: **S64-CRB** v.1.1/II   **EN****

TYPE: **S64-CRB 6-port switch with buffer power supply for 4 IP cameras and recorder, with recorder space.**

Features:

- Uninterruptible power supply of 4 IP cameras (52V DC)
- uninterruptible power supply of the recorder (12V DC)
- 6 10/100 Mb/s ports
  4 PoE ports 10/100 Mb/s (data transfer and power supply)
  2 ports 10/100Mb/s (UP LINK)
- 30W for each PoE port, supports devices complaint with the IEEE802.3af/at standard
- Approximate backup time: 6h

- Metal housing - color white RAL 9003, which can accommodate two 17Ah/12V batteries and offers the possibility of recorder installation
- Supports auto-learning and auto-aging of MAC addresses (1K size)
- Space for a recorder with the following max. dimensions 380x320x65 (WxHxD)
- warranty – 2 year from the production date

DESCRIPTION

The S64-CRB is a complete solution for uninterruptible power supply of 4 IP cameras (52V DC power supply) and uninterruptible power supply of the DVR (12V DC power supply). In addition, the large size of the enclosure allows installing the recorder inside.

The main elements of this system include:
- 6 port PoE switch
- buffer power supply unit 27,6V which can accommodate 2 x 17Ah/12V batteries
- a converter (DC/DC52115) increasing the voltage to 52V DC (supply of the PoE switch)
- 12V DC (DC/DC50SD) buck converter (NVR power supply)

In case of power decay, a battery back-up is activated immediately.

The approximate backup time is given assuming that all output ports are used (using typical devices and 17Ah batteries). The electricity consumption for own needs and the energy efficiency of the power intake track were taken into account. The exact description of how to perform the calculations can be found at: "Approximate backup time - assumptions for calculations".

Automatic detection of any devices powered in the PoE standard is enabled at the 1 – 4 ports of the switch. The UP LINK ports is used for connection of another network device e.g. recorder. The LEDs at the front panel indicate the operation status.

The switch is housed in a metal enclosure (color RAL 9003) which can accommodate two 2x17Ah/12V battery. The enclosure features a micro switch tamper indicating door opening (front panel).
The S64-CRB is fitted with two LEDs on the front panel (red LED – indicates 230V AC power supply of the PSU, green LED indicates the presence of DC voltage).

The PoE technology ensures a network connection and reduces installation costs by eliminating the need to supply a separate power cable for each device. This method allows supplying other network devices, such as IP phone, wireless access point or router.

PARAMETERS OF THE SWITCH

Ports	6 10/100 Mb/s ports (4 x PoE + 2 x UP LINK) with connection speed auto-negotiation and MDI/MDIX Auto Cross)
PoE power supply	IEEE 802.3af/at (1÷4 ports), 52V DC / 30W at each port * Used pairs 4/5 (+), 7/8 (-)
Protocols, Standards	IEEE802.3, 802.3u, 802.3x CSMA/CD, TCP/IP
Bandwidth	1,6 Gbps
Transmission method	Store-and-Forward
Optical indication of operation	Switch power supply; Link/Act; PoE Status

* The given value of 30W per port is the maximum value. The total power consumption should not exceed 48W when all PoE ports are being used.

ELECTRICAL PARAMETERS

Mains supply	176÷264V AC
Current up to	1,4A@230V AC max.
Supply power	122W
Output current at the PoE ports (RJ45)	4 x 0,6A ΣI=1A (max.)
Output voltage at the PoE ports (RJ45)	52V DC
Output current (recorder)	5A
Output voltage (recorder)	12V DC
Short-circuit protection SCP and overload protection OLP	105% ÷ 150% PSU power, manual restart (the fault requires disconnection of the DC output circuit)
PSU current consumption	150mA / 27,6V
Battery charge current	0,5A max. /2x17Ah (+/-5%)
Approximate backup time	6h
Battery circuit protection SCP and reverse polarity connection	melting fuse
Deep discharge battery protection UVP	U<19V (± 5%) – disconnect of connection battery
Sabotage protection: - TAMPER output indicating enclosure opening	- microswitch, NC contacts (enclosure closed), 0,5A@50V DC (max.)

MECHANICAL PARAMETERS

Dimensions	W=421, H=535, D+D$_1$=193+14 [+/- 2mm] W$_1$=426, H$_1$=540 [+/- 2mm]
The dimensions of the recorder compartment	W$_2$=380, H$_2$=320, D$_2$=65 [+/- 2mm]
The dimensions of the battery compartment	370x180x80 (WxHxD)
Gross/Net weight	11,4 / 12 kg
Enclosure	Steel plate, DC01 1,0mm color white RAL 9003
Closing	Cheese head screw x 2 (at the front), (lock assembly possible)
Connectors	Power supply of the cameras: RJ45 socket Power supply for recorder: DC2,1/5,5 plug Input 230V AC: Φ 0,63-2,50 (AWG 22-10), Battery output BAT: 6,3F-2,5 TAMPER output: wires
Warranty	2 year from the production date
Notes	The enclosure does not touch the assembly surface so that cables can be led.

WISENET HD+

HCD-7010R/7020R/7030R

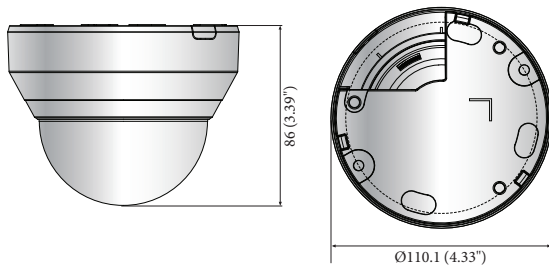QHD (4MP) Analog IR Dome Camera

Key Features

- QHD (2560 x 1440, 30fps) resolution
- 0.26 Lux@F1.8 (Color) (HCD-7010R),
  0.27 Lux@F2.0 (Color) (HCD-7020R/7030R),
  0 Lux (B/W : IR LED on)
- Built-in 2.8mm fixed lens (HCD-7010R)
        4.0mm fixed lens (HCD-7020R)
        6.0mm fixed lens (HCD-7030R)
- Day & Night (ICR), DWDR, Motion detection
- IR Viewable Length 20m (HCD-7010R), 25m (HCD-7020R),
                          30m (HCD-7030R)
- Transmission distance max.500m
- Easy installation (Plug & play)

Dimensions

Unit : mm (inch)

	HCD-7010R/7020R/7030RN/P	
VIDEO		
Imaging Device	1/3" 4M CMOS	
Total Pixels	2,720(H) x 1,536(V)	
Effective Pixels	2,688(H) x 1,520(V)	
Scanning System	Progressive Scan	
Min. Illumination	Color : 0.26 Lux (F1.8) (HCD-7010R), 0.27 Lux (F2.0) (HCD-7020R/7030R) B/W : 0 Lux (IR LED on)	
S / N Ratio	52dB (AGC off, Weight on)	
Video Output	BNC (AHD), Additional CVBS for installation (2Pin connector type)	
Resolution	2560 x 1440	
Max. Framerate	30fps@4M	25fps@4M
PAN / TILT / ROTATE		
Pan / Tilt / Rotate Range	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	
LENS TYPE		
Focal Length (Zoom Ratio)	2.8mm fixed (HCD-7010R), 4.0mm fixed (HCD-7020R), 6.0mm fixed (HCD-7030R)	
Max. Aperture Ratio	F1.8 (HCD-7010R), F2.0 (HCD-7020R/7030R)	
Angular Field of View	H : 107.48° / V : 59.67° / D : 122.01° (HCD-7010R) H : 78.22° / V : 41.21° / D : 87.91° (HCD-7020R) H : 49.01° / V : 27.61° / D : 55.6° (HCD-7030R)	
Min. Object Distance	0.5m (1.64ft)	
Lens Type	Fixed	
Mount Type	Board-in Type	
OPERATIONAL		
On Screen Display	Multi-language Support(14) English, Spanish, French, Portuguese, German, Italian, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish	
Day & Night	Auto (ICR) / Color / B/W	
Backlight Compensation	Off / User BLC / HLC	
Wide Dynamic Range	D-WDR (Off / On)	
Digital Noise Reduction	2D DNR	
Motion detection	Off / On (4 zones)	
Privacy Masking	Off / On (2 zones rectangle)	
Gain Control	Off / Low / Middle / High / Very High	
White Balance	ATW / Outdoor / Indoor / Manual / AWC (1,800K° ~ 10,500K°)	
Electronic Shutter Speed	1/30sec ~ 1/12,000sec	1/25sec ~ 1/12,000sec
Reverse	Off / H-Rev / V-Rev	
Remote Control Interface	Coaxial	
Protocol	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	
IR Distance	20m (65.62ft) : HCD-7010R, 25m (82.02ft) : HCD-7020R 30m (98.43ft) : HCD-7030R	
Video Transmission Distance	500m (5C2V Coaxial cable)	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH	
ELECTRICAL		
Input Voltage	12V DC ±10%	
Power Consumption	Max. 5.0W	
MECHANICAL		
Color / Material	Ivory / Plastic	
Dimensions (WxH)	Ø110.1 × 86.1mm (Ø4.33" × 3.39")	
Weight	240g (0.53 lb)	

* The lastest product information / specification can be found at hanwha-security.com
* Design and specifications are subject to change without notice.

Accessories (Optional)

SBP-120WM   SBP-300NB   SBP-300B   SBP-300PM

SBP-300HM7   SBP-300LM   SBP-300CM   SBP-300WM1   SBP-300WM   SBP-300KM

WISENET   SAMSUNG

WISENET HD+

HCO-7010R/7020R/7030R

QHD (4MP) Analog IR Bullet Camera

	HCO-7010R/7020R/7030RN/P	
VIDEO		
Imaging Device	1/3" 4M CMOS	
Total Pixels	2,720(H) x 1,536(V)	
Effective Pixels	2,688(H) x 1,520(V)	
Scanning System	Progressive Scan	
Min. Illumination	Color : 0.26 Lux (F1.8) (HCO-7010R), 0.27 Lux (F2.0) (HCO-7020R/7030R) B/W : 0 Lux (IR LED on)	
S / N Ratio	52dB (AGC off, Weight on)	
Video Output	BNC (AHD), Additional CVBS for installation (2Pin connector type)	
Resolution	2560 x 1440	
Max. Framerate	30fps@4M	25fps@4M
LENS TYPE		
Focal Length (Zoom Ratio)	2.8mm fixed (HCO-7010R), 4.0mm fixed (HCO-7020R), 6.0mm fixed (HCO-7030R)	
Max. Aperture Ratio	F1.8 (HCO-7010R), F2.0 (HCO-7020R/7030R)	
Angular Field of View	H : 107.48° / V : 59.67° / D : 122.01° (HCO-7010R) H : 78.22° / V : 41.21° / D : 87.91° (HCO-7020R) H : 49.01° / V : 27.61° / D : 55.6° (HCO-7030R)	
Min. Object Distance	0.5m (1.64ft)	
Lens Type	Fixed	
Mount Type	Board-in Type	
OPERATIONAL		
On Screen Display	Multi-language Support(14) English, Spanish, French, Portuguese, German, Italian, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish	
Day & Night	Auto (ICR) / Color / B/W	
Backlight Compensation	Off / User BLC / HLC	
Wide Dynamic Range	D-WDR (Off / On)	
Digital Noise Reduction	2D DNR	
Motion detection	Off / On (4 zones)	
Privacy Masking	Off / On (2 zones rectangle)	
Gain Control	Off / Low / Middle / High / Very High	
White Balance	ATW / Outdoor / Indoor / Manual / AWC (1,800K° ~ 10,500K°)	
Electronic Shutter Speed	1/30sec ~ 1/12,000sec	1/25sec ~ 1/12,000sec
Reverse	Off / H-Rev / V-Rev	
Remote Control Interface	Coaxial	
Protocol	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	
IR Distance	20m (65.62ft) : HCO-7010R, 25m (82.02ft) : HCO-7020R 30m (98.43ft) : HCO-7030R	
Video Transmission Distance	500m (5C2V Coaxial cable)	
ENVIRONMENTAL		
Operating Temperature / Humidity	-30°C ~ +55°C (-22°F ~ +131°F) / Less than 90% RH * Start up should be done at above -10°C (+14°F)	
Ingress Protection	IP66	
Vandal Resistance	IK10	
ELECTRICAL		
Input Voltage	12V DC ±10%	
Power Consumption	Max. 5.0W	
MECHANICAL		
Color / Material	Dark Gray / Aluminum	
Dimensions (WxH)	Ø70.0 x 246.0 mm (Ø2.76" x 9.69") (Without sunshield)	
Weight	670g (1.48 lb)	

* The lastest product information / specification can be found at hanwha-security.com
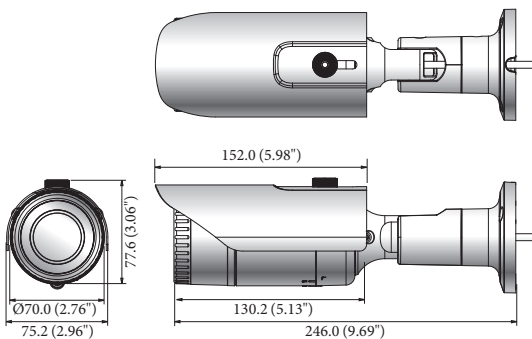* Design and specifications are subject to change without notice.

Key Features

- QHD (2560 x 1440, 30fps) resolution
- 0.26 Lux@F1.8 (Color) (HCO-7010R),
  0.27 Lux@F2.0 (Color) (HCO-7020R/7030R),
  0 Lux (B/W : IR LED on)
- Built-in 2.8mm fixed lens (HCO-7010R)
          4.0mm fixed lens (HCO-7020R)
          6.0mm fixed lens (HCO-7030R)
- Day & Night (ICR), DWDR, Motion detection
- IR Viewable Length 20m (HCO-7010R), 25m (HCO-7020R),
          30m (HCO-7030R)
- Transmission distance max.500m
- Easy installation (Plug & play), IP66, IK10 support

Dimensions

Unit : mm (inch)

152.0 (5.98")
77.6 (3.06")
Ø70.0 (2.76")
75.2 (2.96")
130.2 (5.13")
246.0 (9.69")

Accessories (Optional)

SBO-100B1   SBP-302PM

WISENET   SAMSUNG

WISENET HD+

HRD-442
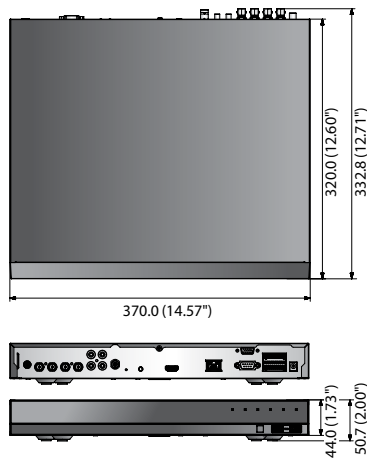
4CH 4M Analog HD DVR

Key Features

- 4CH 4MP AHD DVR
- TVI, CVI (Max. 2MP), Analog camera input support
- Up to 60 / 50 (4M)fps recording rate
- Up to 120 / 100 (1080p)fps recording rate
- HDMI / VGA video output
- 4CH audio inputs / 1CH audio output
- Up to 2 Internal HDDs
- Coaxial Cable (Pelco-C, ACP)
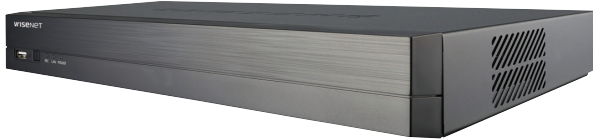- Smart phone support (Android, iOS)

Dimensions

Unit : mm (inch)

320.0 (12.60")
332.8 (12.71")
370.0 (14.57")
44.0 (1.73")
50.7 (2.00")

			HRD-442
DISPLAY			
Video		Inputs	4Channel BNC : AHD (4MP), TVI (2MP), CVI (2MP), NTSC / PAL
		Resolution	2560 x 1440, 1920 x 1080, 1280 x 720, 960 x 480, 704 x 480, 960 x 576, 704 x 576
Live		Frame Rate	120fps, 100fps
		Resolution	2560 x 1440, 1920 x 1080, 1280 x 720, 960 x 480, 704 x 480, 960 x 576, 704 x 576
		Multi Screen Display	1 / 4 / PIP / Sequence
PERFORMANCE			
Operating System	Embedded		Linux
	Compression		H.264, WiseStream
Recording	Record Rate		NTSC : Up to 60fps@4MP / PAL : Up to 50fps@4MP NTSC :Up to 120fps@1920 x 1080 / PAL : Up to 100fps@1920 x 1080 NTSC : Up to 120fps@1280 x 720, 928 x 480, 704 x 480, 704 x 240, 352 x 240 PAL : Up to 100fps@1280 x 720, 928 x 576, 704 x 576, 704 x 288, 352 x 288
	Mode		Manual, Schedule (Continuous / Event), Event (Pre / Post), Time Lapse (1 ~ 30fps (N), 1 ~ 25fps (P))
	Event		Video Loss, Motion (Level 1 ~ 10), Alarm Input (16), Tampering (Level Low, Medium, High)
	Overwrite Modes		Continuous
	Pre-alarm		Up to 30 Sec (5, 10, 20, 30 Sec)
	Post-alarm		Up to 6 Hour (5, 10, 20, 30 Sec,1, 3, 5, 10, 20 Min,1, 2, 3, 4, 5, 6 Hour)
Search & Playback	Search Mode		Date / Time, Event, Back up, POS (SD Signal only), Motion (※ All Search Included Preview Function)
	Playback Function		Fast forward / Backward (2x, 4x, 8x, 16x, 32x, 64x) *Backward play with i-frame only Slow forward / Backward (1/2x, 1/4x, 1/8x) Step Forward / Backward ※ Backward Play with I-frame only
Network (IPv4)	Transmission Speed		Record Stream : 4M : 15fps, 1080p / 720p / WD1 / 4CIF / CIF (NTSC : 30fps, PAL : 25fps) Network Stream : WD1 / 4CIF : 12fps, 2CIF / CIF / QVGA / QCUF (NTSC : 30fps, PAL : 25fps)
	Bandwidth		Up to 64Mbps
	Bandwidth Control		Selectable
	Stream		Record Stream and Network Stream Selectable (at Monitoring Viewer)
	Max. Remote Users		Search (3) / Live Unicast (10) / Live multicast (20)
	Protocol Support		TCP/IP, DHCP, PPPoE, SMTP, NTP, HTTP, DDNS, RTP, RTSP, SNMP
	Monitoring		SSM, Web Viewer, SmartViewer, iPOLiS Mobile Viewer
Smart Phone	Platform		Android, iOS
	Protocol Support		RTP, RTSP, HTTP
	Control		Live(8ch) : Multi-Profile Support Playback (1ch)
	Max. Remote Users		Search (3), Live Unicast (10), Multicast (20)
Storage	Internal HDD		Up to 2 SATA HDDs (0 ~ 8TB HDDs)
	External (e-SATA Interface)		USB (for Backup)
	File Format (Backup)		BU (DVR Player), SEC (Include Player), AVI
Security	Password Protection		1 Admin, 10 Group, 10 User per 1 Group
	Data Authentication		Watermark
INTERFACE			
Monitors	VGA		1 VGA (1920 x 1080, 1280 x 1024, 1280 x 720)
	HDMI		1 HDMI (4K (3840 x 2160), 2K (2560 x 1440), 1920 x 1080, 1280 x 1024, 1280 x 720)
	Spot Composite		BNC (1CH) ※ Included OSD On Screen, Multi Mode Support
Audio	Inputs / Output		4CH Line In / 1CH Line out
	Compression		G.711
	Sampling Rate		8KHz
Alarm	Inputs / Output		Terminal 4 Inputs (NO/NC) / Terminal 1 Relay Outputs (NO/NC), Rating : 30V DC / 2A, 250V AC / 0.25A
	Remote Notification		Notification via e-mail
Connections	Ethernet		1 RJ45 10/100/1000 Base-T
	Serial Interface		RS-485 (Full Duplex) for PTZ, Samsung System Keyboard
	USB		2 ports (Front)
	Application Support		Mouse, IR Remocon
	RS-485 Protocol		Samsung-E / Samsung-T / Pelco-D / Pelco-p / Panasonic / Phillips / AD / DIAMOND / ERNA / KALATEL / VCL TP / VICON / ELMO / GE
	Coax Protocol		NTSC / PAL : Pelco-C (Coaxitron), AHD : ACP (AHD Coax Protocol)
GENERAL			
Electrical	Input Voltage / Current		100 ~ 240 VAC ±10%, 50/60 Hz
	Power Consumption		Max. 18W (1 x 1T HDD)
Environmental	Operating Temperature		+0℃ ~ +40℃ (+32°F ~ +104°F)
	Operating Humidity		20% ~ 85% RH
Mechanical	Dimensions (WxHxD)		370.0 x 44.0 x 320mm (14.57" x 1.73" x 12.6")
	Weight (With hard disks)		Approx. 3.36kg (5.91 lb)
LAUGUAGE	GUI		English, French, German, Spanish, Italian, Russian, Polish, Czech, Turkish, Netherlands, Portuguese, Swedish, Danish, Rumania, Serbia, Croatia, Hungary, Greek, Finnish, Norwegian, Korean, Japanese, Chinese (Traditional), Thai
	Web Browser		English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese (Simplified), Japanese, Thai

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WISENET SAMSUNG

WISENET HD+

HRD-840
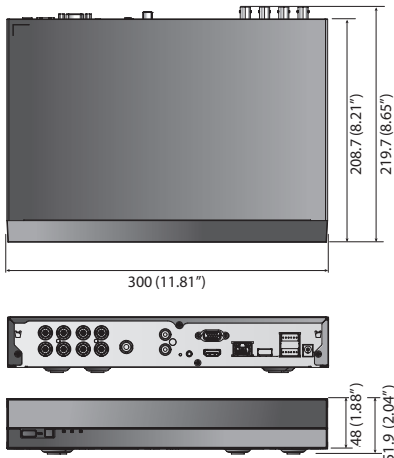
8CH 4M Analog HD DVR

Key Features

- 8CH 4MP AHD DVR
- TVI, CVI (Max. 2MP), Analog camera input
- Up to 120 / 100 (4MP)fps recording rate
- Up to 240 / 200 (1080p)fps recording rate
- HDMI / VGA video output
- 1CH audio input / 1CH audio output
- Up to 1 internal HDD (Max.6TB)
- Coaxial cable (Pelco-C, ACP)
- Smartphone support

Dimensions

Unit : mm (inch)

208.7 (8.21")
219.7 (8.65")
300 (11.81")
48 (1.88")
51.9 (2.04")

			HRD-840
DISPLAY			
Video		Inputs	8channel BNC : AHD (~4MP), TVI (2MP), CVI (2MP), NTSC / PAL
		Resolution	2560 x 1440, 1920 x 1080, 1280 x 720, 960 x 480, 704 x 480 / 960 x 576, 704 x 576
Live		Frame Rate	240fps / 200fps
		Resolution	2560 x 1440, 1920 x 1080, 1280 x 720, 960 x 480, 704 x 480 / 960 x 576, 704 x 576
		Multi Screen Display	1 / 4 / 7 / 9 / PIP / Sequence
PERFORMANCE			
Operating System	Embedded		Linux
Recording		Compression	H.264
		Record Rate (Analog)	NTSC : Up to 120fps@4MP / PAL : Up to 100fps@4MP NTSC : Up to 240fps@1920 x 1080 / PAL : Up to 200fps@1920 x 1080 NTSC : Up to 240fps @ 1280 x 720, 928 x 480, 704 x 480, 704 x 240, 352 x 240 PAL : Up to 200fps @ 1280 x 720, 928 x 576, 704 x 576, 704 x 288, 352 x 288
		Mode	Manual, Schedule (Continuous / Event), Event (Pre / Post), Time lapse (1 ~ 30 fps (N), 1 ~ 25fps (P))
		Event	Video Loss, Motion (Level 1 ~ 10), Alarm, Tampering (Level Low, Medium, High)
		Overwrite Modes	Continuous
		Pre-alarm	Up to 30 sec (5, 10, 20, 30 Sec)
		Post-alarm	Up to 6 hour (5, 10, 20, 30 Sec, 1, 3, 5, 10, 20 min, 1, 2, 3, 4, 5, 6 hour)
Search & Playback		Search Mode	Date / time, Event, Back up, Motion (※ All Search Included Preview Function)
		Playback Function	Fast forward / Backward (2x, 4x, 8x, 16x, 32x, 64x) *Backward play with i-frame only Slow forward / Backward (1/2x, 1/4x, 1/8x) Step Forward / Backward ※ Backward Play with I-frame only
Network (IPv4)		Transmission Speed	Record (Main) Stream) 4MP : 15fps / CH, 1080p / 720p / WD1 / 4CIF / CIF : 30fps / CH (N), 25fps / CH (P) Network (Sub) Stream) WD1 / 4CIF : 12fps / CH, 2CIF / CIF : 30fps / CH (N), 25fps / CH (P)
		Bandwidth	Up to 64Mbps
		Bandwidth Control	Selectable
		Stream	Record Stream and Network Stream Selectable (at monitoring Viewer)
		Max. Remote Users	Search (3) / Live Unicast (10) / Live Multicast (20)
		Protocol Support	TCP/IP, DHCP, PPPoE, SMTP, NTP, HTTP, DDNS, RTP, RTSP, SNMP, SUNAPI
		Monitoring	SSM, Webviewer, SmartViewer, iPOLiS mobile viewer
Smart Phone		Platform	Android, iOS
		Protocol Support	RTP, RTSP, HTTP
		Control	Live (8ch) : Multi-Profile Support Playback (1ch)
		Max. Remote Users	Search (3), Live Unicast (10), Multicast (20)
Storage		Internal HDD	1 SATA HDD (0 ~ 6TB HDD)
		External (e-SATA Interface)	USB (for Backup)
		File Format (Backup)	BU (DVR Player), SEC (Include Player), AVI
Security		Password Protection	1 Admin, 10 Group, 10 User per 1 Group
		Data Authentication	Watermark
INTERFACE			
Monitors		VGA	1 VGA (1920x1080, 1280 x1024, 1280 x 720)
		HDMI	1 HDMI (4K (3840 x 2160), 2K (2560 x 1440), 1920 x 1080, 1280 x 1024, 1280 x 720)
		Spot Composite	BNC (1CH) ※ Included OSD On Screen, Multi Mode Support
Audio		Inputs / Output	1CH line in / 1CH line out
		Compression	G.711
		Sampling Rate	8KHz
Alarm		Inputs / Output	Terminal 4 Inputs (NO/NC) / Terminal 1 relay Outputs (NO/NC)
		Remote Notification	Notification via e-mail
Connections		Ethernet	1 RJ45 10/100/1000 Base-T
		Serial Interface	RS-485 (Half Duplex) for PTZ, Samsung System Keyboard
		USB	1 ports (USB 3.0, Rear), 1 ports (USB 2.0, Front)
		e-SATA	N/A
		Application Support	Mouse, IR Remocon
		RS-485 Protocol	Samsung-E / Samsung-T / Pelco-D / Pelco-p / Panasonic / Phillips / AD / DIAMOND / ERNA / KALATEL / VCL TP / VICON / ELMO / GE
		Coax Protocol	NTSC / PAL : Pelco-C (Coaxitron), AHD : ACP (AHD Coax Protocol)
GENERAL			
Electrical		Input Voltage / Current	DC12V Adaptor (100~250V AC ±10% , 50/60Hz)
		Power Consumption	Max. 19W (1 x 4T HDD)
Environmental		Operating Temperature	+0°C ~ +40°C (+32°F ~ +104°F)
		Operating Humidity	20% ~ 85% RH
Mechanical		Dimensions (WxHxD)	300.0 x 48.0 x 208.7 (11.81" x 1.88" x 8.21")
		Weight (With hard disks)	Approx. 1.77Kg (3.9lb) (with 4TB HDDs)
LAUGUAGE		GUI	English, French, German, Spanish, Italian, Russian, Polish, Czech, Turkish, Netherlands, Portuguese, Swedish, Danish, Rumania, Serbia, Croatia, Hungary, Greek, Finnish, Norwegian, Korean, Japanese, Chinese(Traditional), Thai , Taiwanese(25 Language)
		Web Browser	English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese(Simplified), Japanese, Thai (23 Language)

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WISENET **SAMSUNG**

LNO-6010R/6020R/6030R
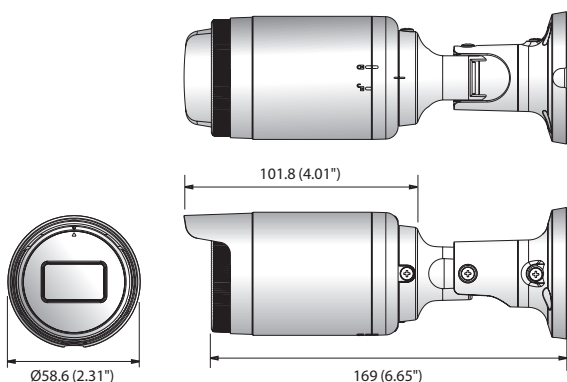
2M Network IR Bullet Camera

Key Features

- Max. 2megapixel (1920 x 1080) resolution
- Built-in 3mm fixed lens (LNO-6010R)
     4mm fixed lens (LNO-6020R)
     6mm fixed lens (LNO-6030R)
- Max. 30fps@all resolutions (H.264)
- H.264, MJPEG codec supported, Multiple streaming
- Day & Night (ICR), WDR (120dB)
- Tampering, Motion detection
- Micro SD/SDHC memory slot (Max. 32GB), PoE
- Hallway view, WiseStreamII support
- IR viewable length 30m
- IP66 support

Dimensions

Unit : mm (inch)

101.8 (4.01")

Ø58.6 (2.31")

169 (6.65")

	LNO-6010R/6020R/6030R
VIDEO	
Imaging Device	1/2.9" 2.19M CMOS
Total Pixels	2,000(H) x 1,121(V)
Effective Pixels	1,984(H) x 1,105(V)
Scanning System	Progressive Scan
Min. Illumination	Color : 0.18Lux (F2.0), B/W : 0Lux (IR LED on)
LENS	
Focal Length (Zoom Ratio)	3mm fixed (LNO-6010R), 4mm fixed (LNO-6020R), 6mm fixed (LNO-6030R)
Max. Aperture Ratio	F2.0
Angular Field of View	H : 102° / V : 54° / D : 120° (LNO-6010R) H : 80° / V : 43° / D : 94° (LNO-6020R) H : 51° / V : 29° / D : 58° (LNO-6030R)
Min. Object Distance	0.5m (1.64ft)
Lens / Mount Type	Fixed / Board-in type
OPERATIONAL	
IR Viewable Length	30m (98.43ft)
Camera Title	Off / On (Displayed up to 15 characters)
Day & Night	Auto (ICR) / Color / B/W / Schedule
Backlight Compensation	Off / BLC / WDR
Wide Dynamic Range	120dB
Contrast Enhancement	SSDR (Off / On)
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea rectangler zones)
Privacy Masking	Off / On (6ea rectangler zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
Flip / Mirror	Off / On, Hallway view
Video & Audio Analytics	Tampering, Motion detection
Alarm Triggers	Motion detection, Tampering detection, SD card error
Alarm Events	File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail
NETWORK	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.264, MJPEG
Resolution	1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 640 x 480, 640 x 360, 320 x 240
Max. Framerate	H.264 : Max. 30fps at all resolutions MJPEG : Max. 1fps at 1920 x 1080, 1280 x 1024, 1280 x 720, 1024 x 768, Max. 15fps at other resolution
WiseStream II	Support
Video Quality Adjustment	H.264, MJPEG : Target Bitrate Level Control
Bitrate Control Method	H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 3 profiles)
IP	IPv4, IPv6
Protocol	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, UPnP, Bonjour
Security	HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log, 802.1X authentication (EAP-TLS, EAP-LEAP)
Streaming Method	Unicast / Multicast
Max. User Access	6 users at unicast mode
Edge Storage	Micro SD/SDHC Max. 32GB - Motion images recorded in the SD memory card can be downloaded - Manual recording at local PC
Application Programming Interface	ONVIF profile S/G, SUNAPI (HTTP API)
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Denish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatia, Hungary, Greek, Finnish, Norwegian
Web Viewer	Supported OS : Windows 7, 8.1, 10, Mac OS X 10.10, 10.11, 10.12 Non-plugin Webviewer - Supported Browser : Google Chrome 63, MS Edge 41, Mozilla Firefox 57 (Window 64bit only), Apple Safari 11 (Mac OS X only) Plug-in Webviewer - Supported Browser : MS Explore 11
Central Management Software	SmartViewer, SSM
ENVIRONMENTAL	
Operating Temperature / Humidity	-30°C ~ +55°C (-22°F ~ +131°F) / Less than 90% RH * Start up should be done at above -20°C (-4°F)
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Ingress Protection	IP66
ELECTRICAL	
Input Voltage / Current	PoE (IEEE802.3af, Class3)
Power Consumption	6.5W
MECHANICAL	
Color / Material	Dark gray / Plastic
Dimensions (WxH)	Ø58.6 x 182.0mm (Ø2.31" x 7.17")
Weight	240g (0.53 lb)

* The lastest product information / specification can be found at hanwha-security.com
* Design and specifications are subject to change without notice.
* Wisenet is the proprietary brand of Hanwha Techwin, formerly known as Samsung Techwin.

Hanwha Techwin

LND-6010R/6020R/6030R
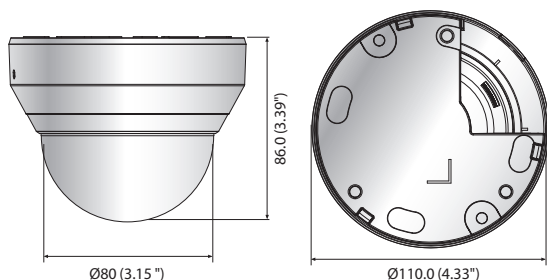
2M Network IR Dome Camera

Key Features

- Max. 2megapixel (1920 x 1080) resolution
- Built-in 3mm fixed lens (LND-6010R)
          4mm fixed lens (LND-6020R)
          6mm fixed lens (LND-6030R)
- Max. 30fps@all resolutions (H.264)
- H.264, MJPEG codec supported, Multiple streaming
- Day & Night (ICR), WDR (120dB)
- Tampering, Motion detection
- Micro SD/SDHC memory slot (Max. 32GB), PoE
- Hallway view, WiseStreamII support
- IR viewable length 20m

Dimensions

Unit : mm (inch)

86.0 (3.39")
Ø80 (3.15 ")
Ø110.0 (4.33")

Accessories (Optional)

SBP-122HMW   SBP-300WMW1   SBP-300CMW

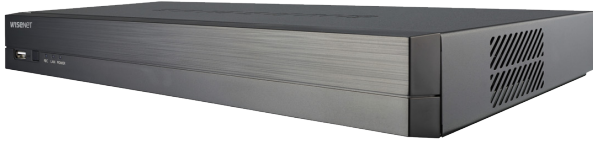|	LND-6010R/6020R/6030R
VIDEO	
Imaging Device	1/2.9" 2.19M CMOS
Total Pixels	2,000(H) x 1,121(V)
Effective Pixels	1,984(H) x 1,105(V)
Scanning System	Progressive Scan
Min. Illumination	Color : 0.18Lux (F2.0), B/W : 0Lux (IR LED on)
LENS	
Focal Length (Zoom Ratio)	3mm fixed (LND-6010R), 4mm fixed (LND-6020R), 6mm fixed (LND-6030R)
Max. Aperture Ratio	F2.0
Angular Field of View	H : 102° / V : 54° / D : 120° (LND-6010R) H : 80° / V : 43° / D : 94° (LND-6020R) H : 51° / V : 29° / D : 58° (LND-6030R)
Min. Object Distance	0.5m (1.64ft)
Lens / Mount Type	Fixed / Board-in type
PAN / TILT / ROTATE	
Pan / Tilt / Rotate Range	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
OPERATIONAL	
IR Viewable Length	20m (65.62ft)
Camera Title	Off / On (Displayed up to 15 characters)
Day & Night	Auto (ICR) / Color / B/W / Schedule
Backlight Compensation	Off / BLC / WDR
Wide Dynamic Range	120dB
Contrast Enhancement	SSDR (Off / On)
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea rectangler zones)
Privacy Masking	Off / On (6ea rectangler zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
Flip / Mirror	Off / On, Hallway view
Video & Audio Analytics	Tampering, Motion detection
Alarm Triggers	Motion detection, Tampering detection, SD card error
Alarm Events	File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail
NETWORK	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.264, MJPEG
Resolution	1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 640 x 480, 640 x 360, 320 x 240
Max. Framerate	H.264 : Max. 30fps at all resolutions MJPEG : Max. 1fps at 1920 x 1080, 1280 x 1024, 1280 x 720, 1024 x 768, Max. 15fps at other resolution
WiseStream II	Support
Video Quality Adjustment	H.264, MJPEG : Target Bitrate Level Control
Bitrate Control Method	H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 3 profiles)
IP	IPv4, IPv6
Protocol	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, UPnP, Bonjour
Security	HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log, 802.1X authentication (EAP-TLS, EAP-LEAP)
Streaming Method	Unicast / Multicast
Max. User Access	6 users at unicast mode
Edge Storage	Micro SD/SDHC Max. 32GB - Motion images recorded in the SD memory card can be downloaded - Manual recording at local PC
Application Programming Interface	ONVIF profile S/G, SUNAPI (HTTP API)
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Denish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatia, Hungary, Greek, Finnish, Norwegian
Web Viewer	Supported OS : Windows 7, 8.1, 10, Mac OS X 10.10, 10.11, 10.12 Non-plugin Webviewer - Supported Browser : Google Chrome 63, MS Edge 41, Mozilla Firefox 57 (Window 64bit only), Apple Safari 11 (Mac OS X only) Plug-in Webviewer - Supported Browser : MS Explore 11
Central Management Software	SmartViewer, SSM
ENVIRONMENTAL	
Operating Temperature / Humidity	-10°C ~ +55°C (-14°F ~ +131°F) / Less than 90% RH
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
ELECTRICAL	
Input Voltage / Current	PoE (IEEE802.3af, Class3)
Power Consumption	6.5W
MECHANICAL	
Color / Material	White (RAL-9003) / Plastic
Dimensions (WxH)	Ø110.0 x 86.0mm (Ø4.33" x 3.39")
Weight	230g (0.51 lb)

* The lastest product information / specification can be found at hanwha-security.com
* Design and specifications are subject to change without notice.
* Wisenet is the proprietary brand of Hanwha Techwin, formerly known as Samsung Techwin.

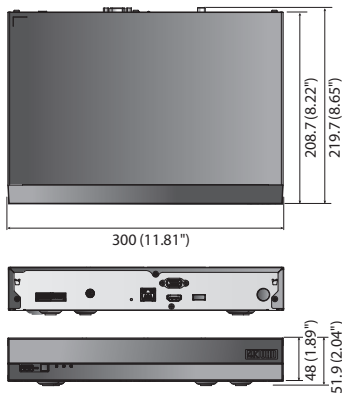Hanwha Techwin

QRN-410
4CH Network Video Recorder

Key Features

• Up to 4CH, 8megapixel camera supported

• H.265, H.264, MJPEG codec support

• 50Mbps network camera recording

• Max. 1HDD, e-SATA supported

• HDMI / VGA local monitor

• ARB supported

• P2P service(QR code connect) support

Dimensions

Unit : mm (inch)

208.7 (8.22")
219.7 (8.65")

300 (11.81")

48 (1.89")
51.9 (2.04")

		QRN-410
DISPLAY		
Video	Inputs	Up to 4CH
	Resolution	CIF ~ 8MP
	Protocols	Samsung, ONVIF
Live	Local Display	HDMI / VGA
	Multi Screen Display	[Local monitor] 1 / 2V / 3V / 4 / Auto sequence [Web] 1 / 4 / Auto sequence
	Performance	[Local monitor] 8MP (60fps), 5MP (90fps), 3MP (120fps), 2MP (240fps), 720p (240fps), D1 (240fps)
PERFORMANCE		
Operating System	Embedded	Linux
Recording	Compression	H.265, H.264, MJPEG
	Recording Bandwidth	50Mbps
	Resolution	CIF ~ 8MP
	Mode	Manual, Schedule (Continuous / Event), Event (Pre / Post)
	Event Trigger	Alarm input (4), Video loss, Camera event (Sensor, MD, Video analytics, Defocus)
	Event Action	E-mail, PTZ preset, Alarm out, Buzzer, Monitor out
Search & Playback	Playback Bandwidth	32Mbps (4CH simultaneously)
	Performance	Max. 3 users (Local 1, Remote 3)
	Mode	Date & Time (Calendar) / Event log list / Text search (POS, ANPR), ARB search, Smart search (Virtual Line w/ direction, Enter / Exit)
	Simultaneous Playback	Up to 4CH (Local, Network)
	Resolution	CIF ~ 8MP
	Playback Control	Fast/Slow Forward/Backward, Move one step up/down
Storage	Default Built-In	0TB ~ 6TB (Dependent on region)
	Internal	1(Max.6TB)
	Max. Capacity	6TB
Backup	File Backup	BU/EXE (USB), JPG/AVI (Web, CMS)
	Function	Multi channel (Up to 8CH) play, Date-time/title display
Sensor	Input / Output	4 / 2 (NO 1ea, NO/NC 1ea)
Audio	Input	4CH (Network)
	Compression	G.711, G.726, AAC (16/48KHz)
	Audio Communication	2-way
NETWORK		
Protocol Support		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 security DDNS
Transmission Bandwidth		64Mbps
Max. Remote Users		Search 3 / Live unicast 10 / Live multicast 20
IP		IPv4 / IPv6
Security		IP address filtering, User access log, 802.1x authentication, Encryption
Language	GUI / Web	English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese(Simplified), Japanese, Thai
OS		Supported OS : Windows 7, 8, 10, Mac OS X 10.8, 10.9, 10.10, 10.11
Web Browser		Non-plugin Webviewer Supported Browser : Google Chrome 47, MS Edge 20 Plug-in Webviewer Supported MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only
Viewer Software	Type	SSM, Webviewer, SmartViewer, Wisenet mobile
	CMS Support	SDK / CGI (SUNAPI)
FUNCTIONS		
Camera Setup	Register	Auto mode, Manual mode
	Setup Items	IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup, Camera video setup (Simple focus, Brightness / Contrast, Flip / Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye dewarping (Web), Hallway view setup, Camera webpage
Easy Configuration		Setup wizard (Date/Time, Network, Auto camera configuration), P2P (QR code)
Redundancy	ARB	Yes
PTZ	Control / Preset	Via GUI, Webviewer, 255 presets
Smart Phone	OS	Android, iOS
	Protocol Support	RTP, RTSP, HTTP, CGI (SUNAPI)
	Control	Live (4CH) : Multi-profile support, Playback (1CH), Event push
	Max. Remote Users	Search 3 / Live unicast 10 / Live multicast 20
System Control		Mouse, IR Remocon, Web
INDICATOR / INTERFACE		
Front	Indicator	Power status LED 1ea, LAN LED 1ea, Record status LED 1ea
Connections	VGA	1ea
	HDMI	1ea - Support up to 4K (3840 x 2160)
	Audio	Out 1ea (RCA, Line)
	Ethernet	1ea (WAN, 1Gbps) - WAN : Uplink to CMS
	Alarm	In 4ea (Terminal block) / Out 2ea (Terminal block)
	USB	2ea (Front 1, Rear 1)
	Reset	Switch (1ea)
	Power Cord	Included
SYSTEM		
Log	Log List	Max. 20,000 (System log, Event log each)
GENERAL		
Electrical	Input Voltage / Current	12V DC / 4A
	Power Consumption	MAX. 9W(31BTU, 2TB HDD x 1ea)
Environmental	Operating Temperature	+0°C ~ +40°C (+32°F ~ +104°F)
	Operating Humidity	20% ~ 85% RH
Mechanical	Color / Material	Black / Metal
	Dimensions (WxHxD)	300.0 x 48.0 x 208.7mm (17.32" x 1.89" x 8.22") (1U)
	Weight	1.66Kg (3.66 lb) (2TB HDD)

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