PRODUCT DATASHEET · CYGNUS NETWORK VIDEO RECORDERS

0070-10403-A

Cygnus-BX-16CH-HYBRID · 16-Channel 5MP Hybrid Video Recorder

Keep the coax, add IP

A 16-channel hybrid recorder for AHD, TVI, CVI and CVBS cameras, plus up to 24 IP cameras.

NDAA COMPLIANT | HYBRID + IP | ONVIF



16 CH	+8 IP	8 MP	4K	2 × 8 TB	5 YR
ANALOG BNC	UP TO 24 IP	ANALOG INPUT	HDMI OUTPUT	SATA HDD	WARRANTY

Product overview

The **Ernitec Cygnus-BX-16CH-HYBRID** is a hybrid video recorder that lets existing coax installations grow into IP. Its sixteen BNC inputs take AHD, TVI and CVI cameras up to 8 MP as well as classic CVBS, and up to eight IP cameras can be added on top, or up to 24 in IP-only mode.

Perimeter protection with human and vehicle detection runs on four channels, and live view goes out on HDMI up to 4K, VGA and CVBS at the same time. Two SATA bays take disks of up to 8 TB each, eight audio inputs support two-way audio, and two Gigabit ports keep networks apart.

Key features

- **Hybrid inputs** 16 × BNC: AHD, TVI, CVI, CVBS
- **IP channels** 8 extra, or up to 24 IP-only
- **Recording** up to 5 MP @ 7 fps, 4K-N @ 8 fps
- **Triple output** HDMI 4K, VGA and CVBS at once
- **Storage** 2 SATA bays, up to 8 TB each
- **Audio** 8 inputs, two-way audio via RCA

Analytics & integration

- **Perimeter** 4 ch intrusion, human and vehicle
- **Smart search** and smart playback
- **Coaxial control** over the BNC cable
- **Dual network** 2 × Gigabit RJ-45
- **Remote access** P2P, iOS and Android, 4 users
- **Open integration** ONVIF, SDK, CGI, 802.1X

Typical applications

Upgrades of existing coax installations · Shops and retail chains · Offices and schools · Warehouses and workshops · Hotels and restaurants.

Recorder specification

Video & audio	
Analog video input	16 × BNC, coaxial control supported
AHD / TVI / CVI input	8 MP, 5 MP, 4 MP, 1080P, 720P
CVBS input	PAL/NTSC
IP video input	8 channels, each up to 1080P (IP-only mode: up to 24 channels)
HDMI output	3840 × 2160, 1920 × 1080, 1280 × 1024, 1024 × 768
VGA output	1920 × 1080, 1280 × 1024, 1024 × 768
CVBS output	PAL/NTSC
Simultaneous output	CVBS, VGA and HDMI
Audio input / output	8 × RCA / 1 × RCA
Two-way audio	Supported via RCA (analog input/output)

Recording	
Video compression	H.265, H.264
Encoding resolution	4K-N, 5 MP, 4 MP, 1080P, 720P, 960H, D1, CIF
Frame rate	4K-N @ 8 fps, 5 MP @ 7 fps, 4 MP @ 8 fps, 1080P @ 15 fps, 720P @ 30 fps
Video bit rate	Main stream 16 kbps to 4096 kbps; sub stream 16 kbps to 1024 kbps
Dual stream	Supported
Audio compression	G.711

Perimeter protection	
Intrusion detection	4 channels, accurate detection of human and vehicle

Playback & backup	
Recording mode	Manual, alarm, motion detection, timing
Recording playback	16/9/4/1
Search mode	Time/date, alarm, picture grid, event
Smart search & playback	Supported
Backup mode	USB device, network

Storage	
HDD	2 × SATA interfaces
Capacity	Up to 8 TB per disk
Disk group	Supported

Network	
Protocols	HTTP, HTTPS, TCP/IP, IPv4, IPv6, UPnP, UDP, RTSP, SMTP, NTP, DNS, DHCP, P2P, IP filter, DDNS, 802.1X, SNMP
Remote users	4
Smart phone	iPhone, iPad, Android
Interoperability	ONVIF, SDK, CGI

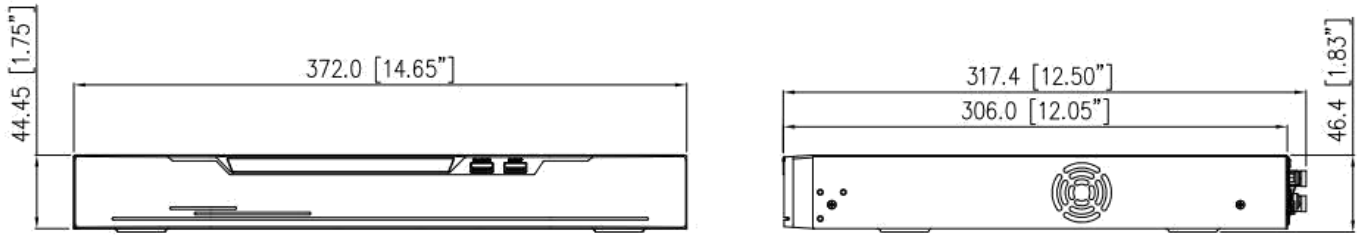
Interfaces & general

Interface	
Network interface	2 × RJ-45, 10/100/1000 Mbps self-adaptive Ethernet
Video input	16 × BNC
Video output	1 × HDMI, 1 × VGA, 1 × CVBS (BNC)
Audio	8 × input, 1 × output (RCA)
Alarm in / out	8 / 1
RS-485	1
USB	3 × USB 2.0 (2 front, 1 rear)

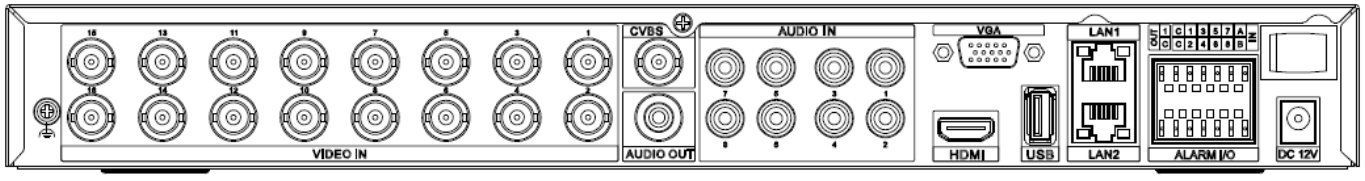
General	
Power supply	12 VDC / 3 A
Power consumption	Max. 15 W (without HDD)
Operating temperature	−10 °C to 50 °C (14 °F to 122 °F)
Operating humidity	< 90% RH
Dimensions	372 × 317.4 × 46.4 mm (14.65 × 12.50 × 1.83 in)
Net weight	Approx. 1.92 kg (4.23 lb) without HDD
Languages	Multiple languages

Certifications & compliance	
Certifications	CE
EMC	2014/30/EU: EN 55032, EN IEC 61000-3-2, EN 61000-3-3, EN 55035
Safety	LVD 2014/35/EU: EN IEC 62368-1
Environmental	RoHS 2011/65/EU; REACH EC 1907/2006 (no SVHC above 0.1% w/w)
Compliance	NDAA

Dimensions (mm)



Rear panel



Rear panel, left to right: 16 × BNC video in, CVBS out, audio out, 8 × audio in, VGA, HDMI, USB, LAN 1/LAN 2, alarm I/O, power switch, 12 VDC input.

Specifications are subject to change without notice. Ernitec® is a registered trademark.