16 Channel Video Recorder

GU-RN-BC8116P



Type: Standalone NVR - IP - Recorder
Item Code: GU-RN-BC8116P
EAN CODE: 4260573066971

SMART-PLUS

The SMART-PLUS product line comprehensively covers modern video systems and offers versatile solutions for various areas of application.

Highlights

H.265+

H.265pro+ utilizes the standard H.265/High Efficiency Video Coding (HEVC) format, but boasts advanced technologies that enable it to substantially reduce the necessary transmission bandwidth and storage capacity for maximum efficiency.

Smartphone App

The mobile application was developed to facilitate operators in effectively controlling and managing video systems remotely, at any time. It allows for live image viewing, playback of recorded video data, and receipt of remote notifications.

Object Classification

This technology employs a highly advanced deep learning algorithm that can discern whether the alarm was triggered by a human, a vehicle or some other object.

Deep Learning

Deep Learning is inspired by the complex structure of the human brain. This innovative method allows processing of information and performing corresponding actions based on analysis.

Features

- Many intelligent functions: deep learning distinguishing between human and vehicles, detection of line crossing, intrusion, queue length, crowd density, lost objects and display of heat map. Recognition of car license plates and faces including allowed and blocked lists. Counting of different Objects.
- Controlled locally by USB mouse or remotely through Ethernet connection with CMS, Web page and mobile Apps, IVA support (intelligent virtual assistant) Amazon Alexa and Google Assistant

NDAA compliant

GRUNDIG Security's SMART line is fully compliant with the National Defense Authorization Act (NDAA), which prohibits U.S. federal agencies and their partners from using video surveillance and telecommunications equipment or services from certain Chinese companies. This law is part of the John S. McCain NDAA and is effective August 2020.
With our SMART product line, you can be confident that your security system complies with this important regulation. Our products meet the highest standards of quality and reliability, providing you with the security you need to protect your assets and personnel.

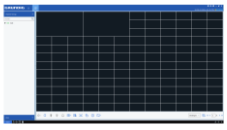
Specifications GU-RN-BC8116P

Video	
IP Inputs:	16 channels
Recording / Playback	
Recording Bandwidth:	128 Mbps in
Outgoing Bandwidth:	128 Mbps out
Recording Resolution:	12 MP, 8 MP, 5 MP, 3 MP, 1080P, 960P, 720P
Recording Mode:	Continuous, Event Alarm, Motion, Schedule
Search Mode:	Date, Time, Event Alarm, Motion, Search Backup
Smart Search Function:	Search for people, motorized vehicles, non-motorized vehicles, intrusion and line crossing, thumbnails, tags, faces and characteristics, attendance, visit frequency and license plates
Playback:	Synchronised playback of max. 16 cameras
Frame Rate(R):	4K: 60fps, 4MP: 120fps, 2MP: 240fps
Audio	
Audio Compression:	G.711
General	
External Backup:	USB HDD, USB Memory, Network
Max. Storage Capacity:	Up to 10 TB capacity for each HDD
Languages:	Czech, Dutch, English, Finnish, French, German, Italian, Portuguese, Spanish, Russian, Turkish, Polish
PTZ Control:	Pan, Tilt, Zoom, Preset set and call
Basic Internal Storage:	No
Accessories included:	Mouse, external power supply, sata cable
Network	
Video Compression:	H.264, H.264+, H.265, H.265+ , MJPEG
Streaming Method:	Unicast, Multicast
Network Protocol:	TCP/IP, IPv4, HTTP, HTTPS, DHCP, DNS, DDNS, RTP, RTSP, NTP, SMTP
Cyber Security:	Different password levels, password protection, complicated password, HTTPS encryption, digest authentication for HTTP/HTTPS , IP address filter, WSSE and digest authentication for ONVIF, RTP/RTSP over HTTPS, control timeout settings, security audit log, TLS 1.0, TLS 1.1 & TLS 1.2, TLS 1.2 with updated cipher suites including AES 256 encryption, Brute Force Delay Protection, Signed Firmware.
Remote Connections:	32
I/O Interface	
HDMI Output:	4K (3840 × 2160), 2K (2560 × 1440), 1920 × 1080, 1600 x 1200, 1900 x 1200, 1440 x 900, 1280 × 1024, 1280 × 720, 1024 × 768
VGA Output:	1920 × 1080, 1600 x 1200, 1900 x 1200, 1440 x 900, 1280 × 1024, 1280 × 720, 1024 x 768
Audio Input/Output:	1-ch audio input and 1-ch audio output

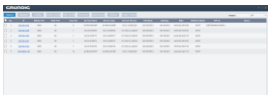
I/O Interface	
Alarm Input/Output:	8 alarm-inputs, 1 alarm-output
Harddisk bay:	2 x SATA 2.0
Network Interface:	1x 100 Base T (Ethernet), TX (RJ-45)
Power over Ethernet:	16 independent 10, 100 Mbps PoE Ethernet interfaces
ISO Standard:	PoE IEEE 802.3 af, at
PoE Budget:	148 W
Serial Interface(s):	Front panel: 1 × USB 2.0, Rear panel: 1 × USB 2.0, 1 x RS485
Intelligent Functions	
Audio Detection:	Detects unusual noises: dogs barking, babies crying, gunshots, sudden sound increase and decrease
Crowd Density:	Counts people in a predefined area. The area, the maximum number of people in it can be set
Face Detection:	Human face appears in the image can be detected and trigger event action
Face Recognition:	Detects and recognizes faces by comparing them to stored portrait images. Actions can be triggered via the allowed, blocked and other list
Dynamic face masking:	Supports dynamic mosaic mask
Fire Detection:	Detects smoke and fire in the image scene
Heat Map:	Visualizes the number of people in the surveillance area over a period of time with a simple and user-friendly color scheme
Object Classification:	Detects people, non-motorized vehicles and/or vehicles in full screen or a defined image section
Intrusion Detection:	People, motorized vehicles or non-motorized vehicles, enter, exit or drive over a predefined virtual area, up to 4 rules are supported
License Plate Recognition:	Detects and recognizes car number plates. Data- import- export function, actions can be triggered via the allowed, blocked and other list
Object Counting:	People, motorized vehicles, non-motorized vehicles or other movements are counted when crossing a virtual line and the result is displayed on the screen in real time
Line Crossing:	People, motorized vehicles or non-motorized vehicles cross a pre-defined virtual line, up to 4 rules are supported
Object Removal:	Detects within a predefined, adjustable area objects that were originally placed in a specific location and have been removed, as well as objects that have been left behind there
People & Vehicle Detection:	Adjustable whether people, motorized or non-motorized vehicles should be detected.
Queue Length:	Counts people in a predefined area and measures service time. The area, the maximum number of people in it and the maximum service time can be set
Motion Detection:	Adjustable whether people, motorized or non-motorized vehicles or only movements should be detected. The detection area and sensitivity can also be adjusted.
Region Entrance:	Enter a pre-defined virtual region from the outside place
Region Exiting:	Exit from a pre-defined virtual region
Sound Alarm:	A siren or freely configurable voice output can be triggered upon an event.
Tamper Protection:	Detection of scene change, defocus, sudden audio increase/decrease or audio loss.
Multi-target-type Detection:	Supports the detection of a wide range of objects, person attributes, animals, and vehicles.
Visual Alarm:	Red & Blue light alarm with adjustable flashing frequencies
Limits of intelligent functions:	Some functions are only available if supported by the connected camera. Some features are limited by the number of supported channels.
Event Source:	Motion, AI Functions, Video Loss, Network Interruption, Video Tampering, HDD Full, HDD Error, Audio Detection and Alarm Inputs
Event Action:	Send e-mail, trigger alarm output, push notification for GSVM App and C-WERK, upload to FTP/Cloud, trigger HDD recording and/or image capture, show message on screen, PTZ linkage, voice prompt, buzzer

Approvals	
Regulation:	CE, EAC, FCC, RoHS Compliant
Standard:	ONVIF (Profile S, Profile G, Profile T), SDK/API
MTBF at 25° C:	>60.000 hours
Environmental	
Operating Temperature:	-10 °C ~ +50 °C (+14°F~ + 122°F)
Humidity:	Less than 90%, non condensing
Electrical	
Supply Voltage:	48 VDC, Power Adapter 100 ~ 240 VAC 50, 60Hz included
Power Consumption:	≤ 8 W without harddisk
Mechanical	
Dimensions:	300 x 302 x 53 mm (11.81 x 11.81 x 2.08 Inch)
Weight:	1650 g (3.3 lb)
Packaging	
Package Dimensions:	400 x 95 x 350 mm (15.7 x 3.7 x 13.8 inch)
Package Weight:	2100 g (4.6 lbs)
Packaging Unit:	5
Bulk Package Dimensions:	490 x 415 x 365 mm (19.3 x 16.3 x 14.4 inch)
Bulk Package Weight:	11800 g (26 lbs)

Accessories



GU-SW-VMS



GU-SW-IP-FINDER



GU-SW-PLAYER



GU-KB-AP4450M



S300 4TB



S300 6TB

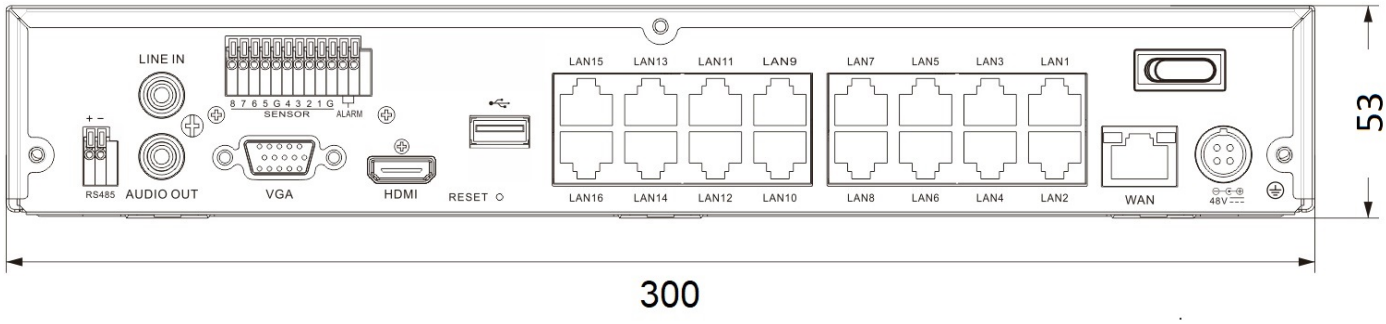


S300 Pro 8TB



S300 Pro 10TB

Dimensions



Smart Line

In addition to the usual reliability, the SMART product line from GRUNDIG Security offers numerous image analysis functions, supported by artificial intelligence (AI). For example, use the LPR function to recognize license plates or facial recognition to identify people. Or reduce the number of false alarms by classifying objects as 'Vehicle', 'Person' or 'Other'. GRUNDIG Security's SMART cameras are able to detect people in crowds, count the number of heads and measure the length of queues, e.g. B. to be determined in the checkout area. In this way, they help you to use your resources optimally. They also inform you if unauthorized people cross predefined lines or enter certain areas.

Environmentally friendly packaging

Our environmentally friendly packaging with less colour print is made from 100% recyclable material. To save resources, our detailed operating instructions are available online for download. The quick reference guides that come with the devices are printed on 100% recycled paper.