



Type: PTZ Dome - IP - Camera

Item Code: GU-CI-AP5647P

EAN CODE: 4260573064878

SMART

The SMART product line offers comprehensive coverage of modern video systems with advanced AI analysis and solutions for various application areas.

Highlights

H.265+



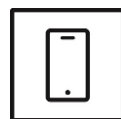
H.265pro+ utilizes the standard H.265/High Efficiency Video Coding (HEVC) format, but boasts advanced technologies that enable it to substantially reduce the necessary transmission bandwidth and storage capacity for maximum efficiency.

Object Classification



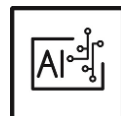
This technology employs a highly advanced deep learning algorithm that can discern whether the alarm was triggered by a human, a vehicle or some other object.

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.

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

- Reduction of unwanted alarms (false alarms) by classifying target objects using deep learning algorithms. This significantly reduces false alarms generated by objects other than people or vehicles. This makes finding events easier and saves hard drive capacity
- High Frame Rate of 50/60 Frames Per Second: Captures more frames per second to ensure fast movements are recorded with greater clarity and detail. This reduces motion blur in both still images and video playback, resulting in sharper visuals and easier identification of passing objects.
- Many AI functions integrated such as face detection, intrusion detection, object counting, queues, heat map and much more

NDA 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-CI-AP5647P

Camera

Image Sensor:	1/2.7" progressive Scan CMOS
Video Resolution:	2592 x 1944
Sensitivity Colour:	0.003 Lux @ F1.6 (AGC ON)
Sensitivity B/W:	0 Lux LED IR on
Shutter Speed:	1/5 ~ 1/20000 s
Slow Shutter:	Support
White Balance:	Auto, Manual

Lens

Lens Focal Length:	4.3 ~ 142 mm motorized, autofocus
Iris F-Number:	F1.6
Optical Zoom Ratio:	33x
Digital Zoom:	16x
Field of View:	55° ~ 2.3° (horizontal), 42° ~ 1.7° (vertical), 68° ~ 2.8° (diagonal)

Illuminator

Max. IR Distance:	Up to 150m
-------------------	------------

Video

Col/B&W:	Auto (Electronic) , Colour , B&W
Wide Dynamic Range:	120 dB
Image Enhancement:	BLC, 3D DNR, HLC
Image Settings:	Rotate mode, Saturation, Brightness, Contrast, Sharpness and white balance adjustable by client software or web browser
Day/Night Switch:	Support auto, scheduled, day, night
Privacy zones:	6 zones, rectangle

Audio

Audio Compression:	G.711
Audio Detection:	Detects unusual noises: dogs barking, babies crying, gunshots, sudden sound increase and decrease

General

Accessories included:	Wall mount bracket
-----------------------	--------------------

Frame Rate

Main Stream:	50 Hz: 25 fps (2592 x 1944, 2592 x 1520, 2048 x 1536, 2304 x 1296) 50 fps* (1920 x 1080, 1280 x 960, 1280 x 720) 60 Hz: 30 fps (2592 x 1944, 2592 x 1520, 2048 x 1536, 2304 x 1296) 60 fps* (1920 x 1080, 1280 x 960, 1280 x 720) * High frame rate 50/60 fps only possible under certain settings.
--------------	---

Frame Rate

Sub- Stream:	50 Hz: 25 fps (1280 x 720, 640 x 480, 320 x 240)
	60 Hz: 30 fps (1280 x 720, 640 x 480, 320 x 240)
3rd Stream:	50 Hz: 25 fps (640 x 480, 320 x 240)
	60 Hz: 30 fps (640 x 480, 320 x 240)

Network

Functions:	Anti-flicker, mirror, password protection, privacy mask, watermark
Video Compression:	H.264, H.264+, H.265, H.265+ , MJPEG
H.264 code profile:	Baseline Profile / Main Profile / High Profile
Bit Rate:	8 Kbps to 8 Mbps
Bitrate control:	Constant Bitrate (CBR), Variable Bitrate (VBR)
Streaming Method:	Unicast, Multicast
SD Memory:	Built-in Micro SD up to 512 GB, NAS (Support NFS, SMB/CIFS)
Web Browser:	Safari V12.1+, Mozilla Firefox V.52+, Google chrome V.57+, MS Edge V.79+
Network Protocol:	TCP/IP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, NTP, UPnP, SMTP, SNMP, 802.1X, IPv4/IPv6, PPPoE
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.

Pan Tilt Zoom

Number of Privacy Zones:	4 zones, rectangle
Number of Patrols:	1 Scan / 4 Tours
Number of Pattern:	4 pattern scans, record time over 10 minutes for each scan
Number of Preset:	255
Pan Speed:	Configurable, from 0.6°/sec to 200°/sec, Preset Speed: 200°/sec
Tilt Speed:	Configurable from 0.6°/sec to 90°/sec, Preset Speed: 100°/sec
Range Panning:	360° endless
Range Tilting:	-10° ~ 90° (auto flip) 215° total
Tracking Functions:	Manual Tracking, Auto Tracking

I/O Interface

CVBS Output:	1-ch, BNC (1.0 Vp-p, 75 Ω) , resolution: PAL: 704 × 576, NTSC: 704 × 480
Audio Input/Output:	1-ch audio input and 1-ch audio output
Alarm Input/Output:	1, 1
Network Interface:	1x 10, 100 Base T (Ethernet), TX (RJ-45)
Serial Interface(s):	1x RS-485

Intelligent Functions

Crowd Density Detection:	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
Heat Map:	Visualizes the number of people in the surveillance area over a period of time with a simple and user-friendly color scheme
Intrusion Detection:	People, motorized vehicles or non-motorized vehicles, enter, exit or drive over a predefined virtual area, up to 4 rules are supported
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

Intelligent Functions

Line Crossing:	Cross a pre-defined virtual line with target classification Pedestrian, Motor vehicle and non-motorized Vehicle. 4 different rules can be configured.
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 Detection:	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:	On, Off, Area Setting, Sensitivity
Region Entrance:	Enter a pre-defined virtual region from the outside place
Region Exiting:	Exit from a pre-defined virtual region
Limits of intelligent functions:	Only one of the AI functions can be selected at a time
Event Source:	Video tampering, network disconnected, IP address conflicted, motion, various AI functions, sudden audio increase-decrease
Event Action:	Send E-mail, trigger alarm output, notify surveillance C-WERK, upload to FTP/NAS, trigger SD-card recording and/or image capture.

Approvals

Protection Rating:	IP66 (IEC 60529-2013)
Regulation:	CE, EAC, FCC, RoHS Compliant
Standard:	ONVIF (Profile S, Profile G, Profile T, Profile M), SDK/API
MTBF at 25° C:	>50,000 hours

Environmental

Operating Temperature:	-40 °C ~ 60 °C (-40 °F ~ 140 °F)
Humidity:	Less than 90%, non condensing

Electrical

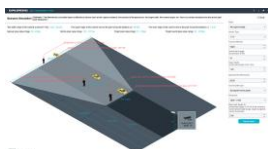
Supply Voltage:	12 VDC, PoE (IEEE 802.3at)
Power Consumption:	Max. 25 W

Mechanical

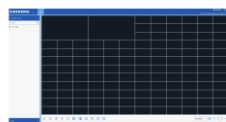
Dimensions:	Ø 206 x 352 mm (Ø 8.13 x 13.85 inch)
Weight:	3800 g (8.4 lb)

Packaging

Package Dimensions:	310 x 305 x 590 mm (13.2 x 12 x 23.2 inch)
Package Weight:	6100 g (13.4 lbs)
Packaging Unit:	1

Accessories

GU-SW-INST-TOOL



GU-SW-VMS



GU-SW-IP-FINDER



GU-SW-PLAYER



GD-HW-SD-128GB



GD-HW-SD-256GB



GD-KB-AP1420P



GD-BR-AMA01



GD-BR-AMC04



GD-BR-AMP01



GD-BR-AMP04



GD-BR-AMP06



GD-BR-AMP07



GD-BR-AMS01

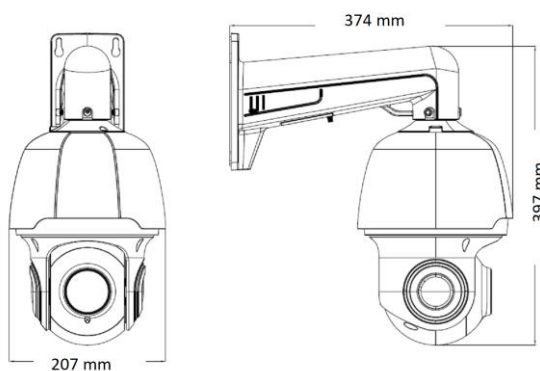


GD-BR-AMW09



GD-BR-AWJ03

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.

Guarantee

All cameras in the "SMART", "PRO" and "PREMIUM" product lines have an extended warranty period of 5 years on electronic parts, mechanical wear and tear on moving parts is not included. Please note our general delivery terms and conditions.

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.