



Type: Board - IP - Camera

Item Code: GU-CI-AC5612M

EAN CODE: 4260573067244

SMART-PLUS

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

Highlights

H.265+



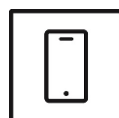
H.265pro+ utilizes the standard H.265/High Efficiency Video Coding (HEVC) format, but boasts advanced technologies that enable it to substantially reduce the necessary transmission bandwidth and storage capacity for maximum efficiency.

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.

Essential Line

Many small to medium-sized systems are capable of operating without any specific requirements. Simply storing video sequences is often sufficient in the event of an incident, allowing for the course of events to be determined through recorded footage. GRUNDIG Security provides a comprehensive range of standard applications to meet these needs, including cameras that capture high-resolution images regardless of lighting conditions and recorders capable of storing video sequences for weeks or months, although privacy concerns may prevent this practice. The "Essential" product line offers high image quality, making it ideal for meeting basic requirements.

Features

- 5 Megapixel IP Camera with real time video streaming
- 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
- Many AI functions integrated such as face detection, intrusion detection, object counting, queues, heat map and much more
- Privacy Zone Masking Function

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-CI-AC5612M

Camera	
Image Sensor:	1/2.7" progressive Scan CMOS
Video Resolution:	2880 x 1620
Sensitivity Colour:	0.004 Lux @ F1.6 (AGC ON)
Sensitivity B/W:	0 Lux with white light on
Shutter Speed:	1/5 ~ 1/20000 s
White Balance:	Auto, Manual
Lens	
Lens Focal Length:	2 mm
Iris F-Number:	F2.8
Lens Drive Type:	Fixed Iris
Field of View:	96° (horizontal), 52° (vertical), 113° (diagonal)
Video	
Col/B&W:	Auto (Electronic) , Colour , B&W
Wide Dynamic Range:	120 dB
Image Enhancement:	BLC, 3D DNR, HLC
Image Settings:	Corridor 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:	4 zones, rectangle
Audio	
Audio Compression:	G.711
Frame Rate	
Main Stream:	50 Hz: 25 fps (2880 x 1620, 2560 x 1440, 2304 x 1296, 1920 x 1080, 1280 x 720) 60 Hz: 30 fps (2880 x 1620, 2560 x 1440, 2304 x 1296, 1920 x 1080, 1280 x 720)
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:	One-key reset, anti-flicker, three streams, mirror, password protection, privacy mask, IP-address filter
Video Compression:	H.264, H.264+, H.265, H.265+ , MJPEG
Bitrate control:	Constant Bitrate (CBR), Variable Bitrate (VBR)
Streaming Method:	Unicast, Multicast
Web Browser:	Safari V12.1+, Mozilla Firefox V.52+, Google chrome V.57+, MS Edge V.79+

Network

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, password change prompt at first startup, 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.

I/O Interface

Audio Input/Output:	1-ch audio input and 1-ch audio output
Network Interface:	1x 10, 100 Base T (Ethernet), TX (RJ-45)

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
Deep Learning Analytics:	Face Capture, Line crossing detection, intrusion detection, region entrance detection, region exiting detection, human, vehicle
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
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:	Cross a pre-defined virtual line with target classification Pedestrian, Motor vehicle and non-motozed 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:	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 or 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
Tamper Protection:	Scene change
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

Approvals

Regulation:	CE, EAC, FCC, RoHS Compliant
Standard:	ONVIF (Profile S, Profile G, Profile T, Profile M), SDK/API

Environmental

Operating Temperature:	-35 °C ~ 60 °C (-31 °F ~ 140 °F)
Humidity:	Less than 90%, non condensing

Electrical

Supply Voltage:	12 VDC, PoE (IEEE 802.3af)
Power Consumption:	Max. 3.2 W

Mechanical

Dimensions:	38 × 38 × 20 mm (1.5 × 1.5 × 0.8")
Weight:	128 g (0.3 lb)