



Type: Panoramic - IP - Camera

Item Code: GU-CI-AP8616Q

EAN CODE: 4260573065202

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+



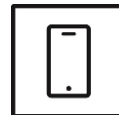
H.265pro+ utilizes the standard H.265/High Efficiency Video Coding (HEVC) format, but boasts advanced technologies that enable it to substantially reduce the necessary transmission bandwidth and storage capacity for maximum efficiency.

Object Classification



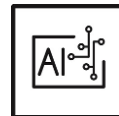
This technology employs a highly advanced deep learning algorithm that can discern whether the alarm was triggered by a human, a vehicle or some other object.

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

- Many AI functions integrated such as face detection, intrusion detection, object counting, queues, heat map and much more
- Built-in microphone
- 0 Lux: Integrated LED IR Illuminator viewable distance up to 30m
- Built-in Speaker
- White light flash and audible alarm deterrent function
- Micro SD/SDHC memory card slot for alarm image recording

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-AP8616Q**Camera**

Image Sensor:	1/2.7" progressive Scan CMOS
Resolution (MP):	8 MP
Video Resolution:	5120 x 1440
Sensitivity Colour:	0.001 Lux @ F1.6 (AGC ON)
Sensitivity B/W:	0 Lux LED IR on
Shutter Speed:	1/5 ~ 1/20000 s
White Balance:	Auto, Manual

Lens

Lens Focal Length:	2 x 2.8 mm
Iris F-Number:	F1.0
Lens Mount:	M12
Lens Drive Type:	Fixed Iris
Field of View:	180° (horizontal), 57.6° (vertical)

Illuminator

Max. IR Distance:	Up to 30 m
White Light Distance:	Up to 15 m
White LED:	yes

Video

Col/B&W:	On, Off, Auto, IR-cut filter removable (ICR)
Wide Dynamic Range:	Digital WDR
Image Enhancement:	BLC, 3D DNR, HLC
Day/Night Switch:	Support auto, scheduled, day, night
Privacy zones:	6 zones, rectangle

Audio

Audio Compression:	G.711
Environment Noise Filtering:	yes
Audio Detection:	Sudden audio increase, decrease

General

DRI Range:	Detection Range: 56 m Observe Range: 22.4 m Recognition Range: 11.2 m Identification Range: 5.6 m
------------	--

The DORI (detect, observe, recognize, identify) distance gives the general idea of the camera ability to distinguish persons or objects within its field of view. It is calculated based on the camera sensor specification and the criteria given by EN 62676-4: 2015.

General

Reset Button:	yes
---------------	-----

Frame Rate

Main Stream:	50 Hz: 15 fps (5120 x 1440, 4608 x 1296, 4096 x 1152, 3840 x 1080, 3072 x 864) 60 Hz: 15 fps (5120 x 1440, 4608 x 1296, 4096 x 1152, 3840 x 1080, 3072 x 864)
Sub- Stream:	50 Hz: 15 fps (1536 x 432, 1024 x 288) 60 Hz: 15 fps (1536 x 432, 1024 x 288)

Network

Video Compression:	H.264, H.264+, H.265, H.265+ , MJPEG
Region of Interest:	8 fixed regions for each stream
H.264 code profile:	Baseline Profile / Main Profile / High Profile
Bit Rate:	128 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+
Web Browser:	Plug-in required live view: IE10/IE11 Non Plug-in live view: Chrome 57+, Mozilla Firefox 52+, EDGE 89+ Local Service: Chrome 57+, Firefox 52+, EDGE 89+
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.

I/O Interface

Audio Input/Output:	Built-in microphone & built-in speaker
Alarm Input/Output:	Built-in red & blue flashing lights
Network Interface:	1x 10, 100 Base T, TX PoE (RJ-45)

Intelligent Functions

Face Detection:	Face recognition in real time and instantly match them against a watchlist
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
Intrusion Detection:	Enter and loiter in a pre-defined virtual region
License Plate Recognition:	Detects and recognizes car number plates. (Data- import- export function, actions can be triggered via the allowed, blocked and other list, only supported with insert SD-Card).
Line Crossing:	Cross a pre-defined virtual line with target classification Pedestrian and or Motor vehicle 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
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
Region Entrance:	Enter a pre-defined virtual region from the outside place

Intelligent Functions

Region Entrance:	Enter a pre-defined virtual region from the outside place
Region Exiting:	Exit from a pre-defined virtual region
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:	A variety of internal or external events can trigger actions such as alarm contacts, motion detection, video analytics parameters etc.
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, Blue & Red flashlight, voice prompt, siren

Approvals

Protection Rating:	IP67 (IEC 60529-2013), NEMA 4X (NEMA 250-2018)
Regulation:	CE, FCC, RoHS Compliant
Standard:	ONVIF (Profile S, Profile G, Profile T, Profile M), SDK/API
MTBF at 25° C:	>60.000 hours

Environmental

Operating Temperature:	-30 °C ~ 60 °C (-22 °F ~ 140 °F)
Humidity:	Less than 90%, non condensing

Electrical

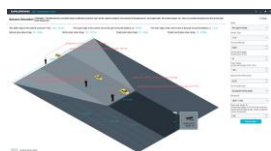
Supply Voltage:	12 VDC, PoE (IEEE 802.3af)
Power Consumption:	Max. 13.5 W

Mechanical

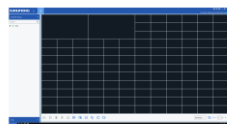
Mount:	Four flexible lens in one track, slide range -60° to 60°, tilt: 0° to 90°, rotate 0° to 355°
Dimensions:	Ø 135 x 112 mm (Ø5.3 x 4.4 inch)
Weight:	750 g (1.65 lb)

Packaging

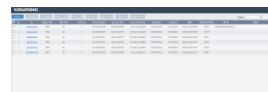
Package Dimensions:	180 x 180 x 150 mm (7.1 x 7.1 x 5.9 inch)
Package Weight:	1100 g (2.4 lbs)
Packaging Unit:	8
Bulk Package Dimensions:	375 x 375 x 320 mm (14.8 x 14.8 x 12.6 inch)
Bulk Package Weight:	9800 g (21.6 lbs)

Accessories

GU-SW-INST-TOOL



GU-SW-VMS



GU-SW-IP-FINDER



GU-SW-PLAYER



GD-HW-SD-128GB



GD-HW-SD-256GB



GU-BR-AJX03



GU-BR-AJX04

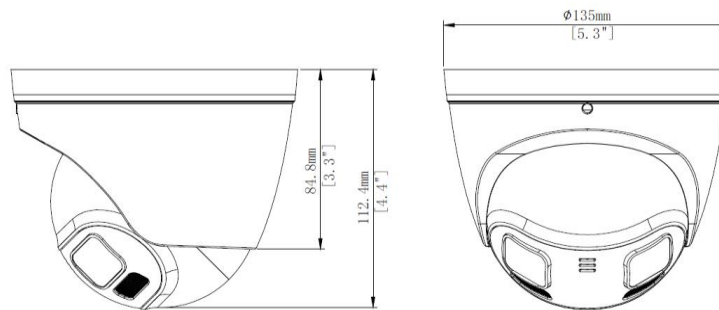


GU-BR-AJX08



GU-BR-AMW05

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.

NEMA 4X – Protection Standard for Demanding Environments

NEMA 4X is a protection standard defined by the American National Electrical Manufacturers Association, specifying requirements for enclosures housing electrical equipment. Compared to NEMA 4, NEMA 4X additionally provides corrosion resistance – a critical advantage in tunnels, car parks, coastal locations, industrial facilities with chemical exposure, and anywhere subject to regular high-pressure cleaning.

The standard covers protection against rain, snow, dust, corrosion, and inadvertent contact with live electrical components. Combined with IP66/IP67, NEMA 4X-rated cameras offer the highest level of protection for permanent outdoor deployment in the most demanding conditions.