

NDP-5523-Z20C-P PTZ 4MP HDR 20x clear in-ceiling

AUTODOME IP starlight 5100i



- ▶ 20X, 4MP high detail at fast speeds (60 fps)
- ▶ Starlight technology with 1/1.8 inch ultra HD sensor for excellent low-light performance
- ▶ HDR X -- High Dynamic Range to see every detail in both bright and dark areas of the scene without motion-related artifacts
- ▶ Intelligent streaming, IDNR and H.265 for a decreased bit rate of up to 80%
- ▶ Built-in Essential Video Analytics to trigger relevant alerts and quickly retrieve data

Parts included

Quantity	Component
1	AUTODOME IP starlight 5100i in-ceiling camera
1	Mounting template
1	Screwdriver, T10 Torx
4	MAC address labels
1	Quick Installation Guide
1	Safety instructions

Technical specifications

Imager	1/1.8 inch CMOS
Effective picture elements	2688 x 1520 (4 MP)
Lens	20x motorized zoom 6.5 mm - 130 mm (F1.55 - F3.95)
Optical zoom Field of view (FOV)	3.5° to 61.1°
Focus	Automatic with manual override
Iris	Automatic with iris priority feature

Digital zoom	16x
Sensitivity	3100K, reflectivity 89%, 1/30, F1.55, 30 IRE
Color	0.0107 lux
Monochrome	0.0016 lux
High dynamic range	133 dB (HDR X)
Gain control	AGC, Variable 6 dB to 78 dB
Electronic Shutter Speed (AES)	0.64 sec to 1/66666 sec
Signal-to-Noise Ratio (SNR)	>55 dB
Day/Night switch	Automatic IR cut filter
Backlight compensation (BLC)	On, Off, Intelligent Auto Exposure (IAE)
White balance	Basic auto, Standard auto, Sodium lamp auto, Dominant color auto, Manual
Day/Night (mode)	Monochrome, Color, Auto
Defog mode feature	Improves visibility when viewing foggy or other low-contrast scenes.

Sector/Titling	16 independent sectors with 20 characters per title
Privacy Masks	32 individually configurable privacy masks
Privacy Masks pattern	Black, White, Gray, Auto (average background color)
Supported Languages	English, German, Spanish, French, Italian, Dutch, Polish, Portuguese, Russian, Japanese, Chinese (simplified)

Video Content Analysis

Analysis type	Essential Video Analytics
Configurations	Silent VCA / Profile 1/2 / Scheduled / Event triggered
Alarm rules (combinable)	Any object Object in field Line crossing Enter / leave field Loitering Follow route Idle / removed object Counting Occupancy Crowd density estimation Condition change Similarity search
Object filters	Duration Size Aspect ratio Speed Direction Color Object classes (4)
Calibration / Geolocation	Accelerometer data and camera height
Tamper detection	Maskable
Detection	Audio

Mechanical

Pan/Tilt modes	Normal: 0.1°/s - 120°/s Turbo: Pan: 0.1°/s - 300°/s; Tilt: 0.1°/s - 200°/s
Pre-position speed	Pan: 300°/s Tilt: 200°/s

Pan Range	360° continuous
Tilt Angle	-90° to 0° (Auto-flip 180°)
Pre-position Accuracy	± 0.1° typ.
Pre-positions	256
Tours	Recorded tours: two (2), maximum total duration 15 minutes (depending on the amount of commands sent during recording) Pre-position tour: one (1), consisting of up to 256 scenes consecutively, and one (1), customized up to 64 scenes

Electrical

Power source	24 VAC PoE+ (IEEE 802.3at, class 4 standard)
Power consumption (in-ceiling)	14.4 W / 25.2VAC
Power consumption (pendant) (standard operation, with heater OFF)	14.4 W / 25.2VAC
Power consumption (pendant) (maximum, with heater ON)	20.1 W / 31.2VAC

Network

Ethernet	10/100BASE-T
Encryption	TLS 1.2, SSL, DES, 3DES, AES
Protocols	IPv4, IPv6, UDP, TCP, HTTP, HTTPS, RTP/RTCP, IGMP V2/V3, ICMP, ICMPv6, RTSP, FTP, ARP, DHCP, APIPA (Auto-IP, link local address), NTP (SNTP), SNMP (V1, V3, MIB-II), 802.1x, DNS, DNSv6, DDNS (DynDNS.org, selfHOST.de, no-ip.com), SMTP, iSCSI, UPnP (SSDP), DiffServ (QoS), LLDP, SOAP, Dropbox™, CHAP, digest authentication
Interoperability	ONVIF Profile S, ONVIF Profile G, ONVIF Profile T, GB/T 28181
Video compression	H.265 H.264 M-JPEG
Streaming	Four (4) streams: Two (2) configurable streams in H.264 or H.265 One (1) I-frame-only stream based on first stream One (1) M-JPEG Stream

Maximum frame rate	60fps at all resolutions
IP delay (typical)	60 fps: 200 ms
Resolution	
1440p	2560 x 1440
1080p HD	1920 x 1080
720p HD	1280 x 720
1.3 MP 5:4 (cropped)	1280 x 1024
D1 4:3 (cropped)	704 x 576
640 x 480	640 x 489
432p SD	768 x 432
288p SD	512 x 288
144p SD	256 x 144

Bitrate 2560 x 1440

FPS	H.264	H.265
60	8980	6720
30	5480	4120
25	4820	3620
15	3380	2520
8	2180	1640
4	1340	1000
2	840	620
1	520	380

Actual bitrate may vary depending on the pictures settings of the scene and on encoding configurations.

Local Storage

Memory card slot	Support a memory card with a maximum of 32 GB (microSDHC) / 2 TB (microSDXC) (user-supplied). (An SD card of Class 6 or higher is recommended for HD recording.)
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User Connections

Power	RJ45 10/100 Base-T PoE+ (IEEE 802.3at, class 4 standard) 21-30 VAC, 50/60 Hz
Alarm Inputs	2

Alarm Outputs	1 relay output 5 VDC, 150 mA maximum
Audio	1x mono line in, 1x mono line out
Signal line in	94 kOhm typical, 1 Vrms maximum
Signal line out	1 kOhm typical, 1 Vrms maximum

Audio

Compression	G.711, 8kHz sampling rate L16, 16kHz sampling rate AAC, 16kHz sampling rate
Interface	1/1 Channel In/Out

Environmental

Operating temperature	-10 °C to +60 °C (+14 °F to +140 °F)
Humidity	Up to 90% RH, non-condensing
Storage temperature	-40 °C to +60 °C (-40 °F to +140 °F)

Ingress Protection Rating/ Standard	IP51
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Construction

Dimensions (DIA x H)	198 mm x 176.6 mm (7.8 in x 6.95 in)
Weight	2.1 kg (4.63 lb)
Construction material	Housing: SPCC Trim ring: PC/ABS Bubble: Polycarbonate
Standard color	White (RAL 9003)

Dimensions (D x H)	207 mm x 303.6 mm (8.15 in x 11.95 in)
Weight	3.25 kg (7.17 lb)

Construction Material	Housing: Aluminum Sunshield: Outdoor Grade Plastic Bubble: Polycarbonate, anti-reflective, anti-static, anti-scratch, hydrophobic, UV protective
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Standard Color	White (RAL 9003)
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Ordering information

NDP-5523-Z20C-P PTZ 4MP HDR 20x clear in-ceiling
PTZ dome camera, 4MP HDR, 20x optical zoom, clear,
indoor in-ceiling
NDAA compliant
Order number **NDP-5523-Z20C-P | F.01U.385.089**

Services

EWE-AD5HD-IW 12mths wrty ext AUTODOME IP 5000 HD
12 months warranty extension without moving parts,
wear parts are excluded
Order number **EWE-AD5HD-IW | F.01U.346.303**

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