

## **Thermal Imaging IP Camera with Video Analyses**

- 17 μm uncooled VOx microbolometer
- 320x240 / 640x480 Resolutions
- 30 fps or 9fps version for global commercial applications
- Flexible input power options: AC, DC, PoE
- 802.3af (PoE) simplified installation over a single network cable
- Integrated video analyses of VCA Technology
- Image Contrast Enhancement (ICE) features
- IP and analog connectivity
- Indoor/Outdoor IP66 Protection Ration





#### Spezifications

CAMERA					
Image Resolution	RTC6500Q: 320x240 RTC6500V: 640x480				
Detection Type	Uncooled Vanadium Oxide Microbolometer				
Sensor Pixel Size	RTC6500Q / RTC6500V: 17 μm				
Spectral Response	8-14 μm				
Sensitivity (NETD)	< 50 mK at f/1.0				
Lens (FOV)	<b>RTC6500Q:</b> 6°, 9°, 16°,24°, 42°, 60° <b>RTC6500V:</b> 12°, 18°, 25°, 37°, 50°				
Image Settings	Configurable brightness, contrast, sharpness, vertical and horizontal rotation, Corridor Mode (-90° / +90° image flip)				
Image Process	Image Contrast Enhancement (ICE™)				
Gain / Level Control	Automatic				
Scanning System	Progressive Scan				
VIDEO					
Video Compression	H.264 Baseline, Main, High profile(MPEG-4 Part 10/ AVC), MJPEG(Motion JPEG)				
Video Streaming	Dual Stream, Respective Configurable H.264: Controllable frame rate, image resolution, bandwidth limitation (CVBR/CBR) MJPEG: Controllable frame rate, image resolution, JPEG quality				
Resolutions	RTC6500Q: 640x480 (VGA, Scaled-up), 320x240 (QVGA), 160x120 (QQVGA) RTC6500V: 640x480 (VGA), 320x240 (QVGA), 160x120 (QQVGA)				
Frame Rate	Configurable up to 30 FPS or 9 FPS depending of selected model*				
<b>Motion Detection</b>	Max. 8 zones with respective setting detection sensitivity and minimum object size				
Video Stabilization	Supported for First/Second Stream and Snapshot				
Text Overlay	Free positioning of display for time/ data/ name (name up to 48 signs)				
Privacy Mask	4 configurable regions				
Analog Output	NTSC / PAL				

Audio					
Audio Streaming	Two-way				
<b>Audio Compression</b>	G.711-uLaw				
Audio Interface	Line Input / output terminal				
NETWORK					
Ethernet Standard/IP	10 / 100 Base-T / IPv4, IPv6				
Protocol	QoS Layer 3 DiffServ, TCP/IP, UDP/IP, HTTP, HTTPS, FTP, RTSP, RTCP, RTP/UDP, RTP/TCP, mDNS, UPnP™, SMTP, DHCP, DNS, DynDNS, NTP, SNMP v2c/v3(MIB-II), IGMP, ICMP, SSLv2/v3, TLS, SRTP, RTMP, IEEE802.1X				
Users connection	Live viewing for up to 10 clients				
Security	HTTPS(SSL), SRTP, IP Filtering, Multi-level access with password protection				
GENERAL					
I/O Terminal	1x Alarm In - max 50mA@5VDC, TTL 2x Alarm Out - max 50mA@24VDC, TTL				
Application Programming Interface	Software Development Kit (SDK) available ONVIF compliant				
Event Metadata Streaming RTSP/RTP	Video Motion Detection (MD), Video Content Analytics( VCA)				
ONVIF	Version: 2.41 (Support Profile S and G)				
Event Sources	Input(DI), Output(DO), Video Motion Detection, Tamper Detection, Video Content Analytics(VCA), Network Loss/Detect, Network Setting Change, Time (Recurrence/Schedule)				
Event Actions	Notification service via TCP/IP, HTTP, multicast or email text messages with snapshot, snapshot upload on external FTP server, output (DO) switching				
Approvals	FCC, CE, KC, IP66, UL, RoHs				
ELETRICAL					
Power Source	DC 12V, AC 24V, PoE (IEEE 802.3af)				
Consumption	Max. 10 W @ DC 12V				
ENVIROMENT					
Temperature	DC12V/AC24V/PoE: -40°C~60°C (-40°F~140°F)				
Humidity	Up to 90% rel. humidity non-condensing				



MECHANICAL						
Material	Polycarbonate, Aluminum Die-Casting					
Color	White					
Dimension	95(w) x 98(H) x 293(D) mm 3.7"x3.9"x11.5"					
Weight (Approx)	1.2kg (2.65lb)					
VIDEO CONTENT	ANALYSIS (Included as Standard)					
High Performance	Advanced tracking algorithm and low false alarm rate					
Easy to Use	Intuitive web browser interface					
Detection Zones and Rules	Up to 40 zones (multi-segment polygons and lines) 60 VCA filter rules in total					
On-screen Display	Real-time display of tracking data and events via activeX plug-in in IE browser					
Burnt in Annotation	Allows the VCA annotation to be burnt into the raw video stream for displaying on third party application					
Tamper Detection	Recognize camera tampering via VCA detection (defocusing, lens covering, camera moving)					
VCA DETECT LIC	ENSE (Included as Standard)					
3D VCA Calibration	Camera Scene Settings will be configured with innovative graphical controls and tools to optimize VCA output					
Object Classification	Design of different Object classes to include in VCA Alarm Rules					
Included VCA Detection Filters	Direction, Speed, Dwell, Stop, Classification					

VIDEO CONTE	ENT ANALYSIS (Option extension License)					
Additional Functions	VCAcountIP, VCAadvancedIP, VCAprofessionalIP					
VCA Detection Filter	Objekt: Enter, Exit, Appear, Disappear, Stop, Direction, Dwell, Speed, Unauthorized Access, Counting Line, Color Filter, Object Classification					
VCA Functions	<ul> <li>Up to 20 Onscreen Counter Displays</li> <li>Counting-Line for accuracy people and vehicle counting with local database and reporting service</li> <li>VCA calibration via 3D tools for right object size detection</li> <li>Several definable object class to include into the detection rules for the VCA alarm</li> <li>10 colors in total to distinguish objects by color</li> <li>People tracking mode to tracks individuals separately among overlapped multiple people</li> <li>Heatmap Report shows relative crowd density of the 24 hour period (criterion: midnight)</li> </ul>					
Logical Rules	Extension of alarm rules using logical operators (AND, OR) for the VCA detection filters of created zones / lines					
ACCESSORIES						
Mounting Adapter	WBOVA2 – Wall Bracket WSFPA – Pole Mount Adapter WCWA – Corner Mount Adapter					

\*9 Hz models are export controlled by the U.S. Department of Commerce under ECCN 6A993.

30 Hz models are export controlled by the U.S. Department of Commerce under ECCN 6A003b.4.b.

The commodities described herein may require the U.S. Government authorization prior to export or re-export.

## Models assorted by Resolution

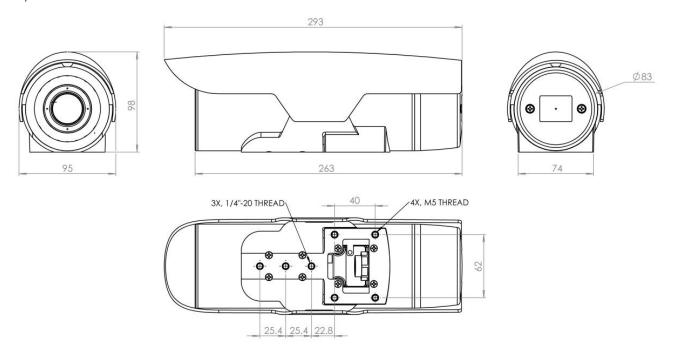
320x240 Resolution						
Model	Standard	FPS	FOV (HxV)	Focal Length		
RTC6500Q-30A06 / RTC6500Q-9A06	QVGA	30 / 9	$6.2^{\circ} \times 4.6^{\circ}$	50mm		
RTC6500Q-30A09 / RTC6500Q-9A09	QVGA	30 / 9	9° X 6.7°	35mm		
RTC6500Q-30A16 / RTC6500Q-9A16	QVGA	30 / 9	16° X 12°	19mm		
RTC6500Q-30A24 / RTC6500Q-9A24	QVGA	30 / 9	24° X18°	13mm		
RTC6500Q-30A42 / RTC6500Q-9A42	QVGA	30 / 9	41.8° X 31.4°	7.5mm		
RTC6500Q-30A60 / RTC6500Q-9A60	QVGA	30 / 9	60° X 45°	5.3mm		

640x480 Resolution						
Model	Standard	FPS	FOV (HxV)	Focal Length		
RTC6500V-30A12 / RTC6500V-9A12	VGA	30 / 9	12.4° X 9.3°	50mm		
RTC6500V-30A18 / RTC6500V-9A18	VGA	30 / 9	17.6° X 13.2°	35mm		
RTC6500V-30A25 / RTC6500V-9A25	VGA	30 / 9	24.8° X 18.6°	25mm		
RTC6500V-30A37 / RTC6500V-9A37	VGA	30 / 9	37.5° X 28°	16.7mm		
RTC6500V-30A50 / RTC6500V-9A50	VGA	30 / 9	49.8° X 37°	12.8mm		



## **Dimensions**

(Unit: mm)



## **Detection Range**

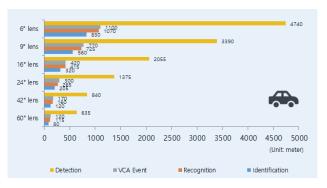
**Please Note**!: Released distance are based on theoretical calculation. In practical application reached distance can diverse depending environment conditions.

Unit: meter	RTC6500Q				
Lens	Object	Detection	VCA Event	Recognition	Identification
00 50	Person	2,105	500	425	330
6°- 50mm	Vehicle	4,740	1100	1,070	830
9° - 35mm	Person	1,450	340	285	220
9 - 3511111	Vehicle	3,390	770	725	560
16° - 19mm	Person	845	190	160	120
	Vehicle	2,055	420	415	320
24° - 13mm	Person	555	130	100	75
	Vehicle	1,375	300	265	205
42° - 7 5mm	Person	330	70	60	45
	Vehicle	840	170	160	120
60° - 5.3mm	Person	250	50	45	30
60 - 5.3mm	Vehicle	635	120	115	80

#### Person

# 6° lens 9° lens 9° lens 16° lens 228 90 1450 24° lens 42° lens 0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 (Unit: meter)

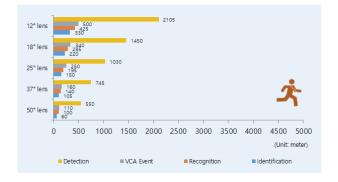
#### Vehicle





Unit: meter	RTC6500V					
Lens	Object	Detection	VCA Event	Recognition	Identification	
12° - 50mm	Person	2,105	500	425	330	
12 - 3011111	Vehicle	4,740	1,100	1,079	830	
18° - 35mm	Person	1,450	340	285	220	
10 - 3311111	Vehicle	3,390	770	725	560	
25° - 25mm	Person	1,030	250	195	150	
	Vehicle	2,475	550	505	395	
37° - 16.7mm	Person	745	160	140	105	
	Vehicle	1,825	360	365	280	
E09 10 0mm	Person	550	110	100	60	
50° - 12.8mm	Vehicle	1,260	270	260	200	

#### **Person**



#### Vehicle



## **Accessories**

(Unit: mm)

