

# 장파장 적외선 열화상 카메라

## 보안용 카메라

384X288 해상도  
640x480 해상도  
1024x768 해상도



## 온도측정용 카메라 및 네트워크 카메라

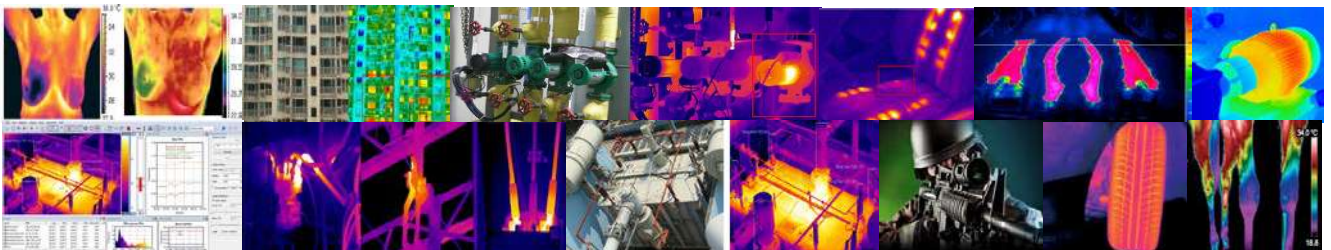
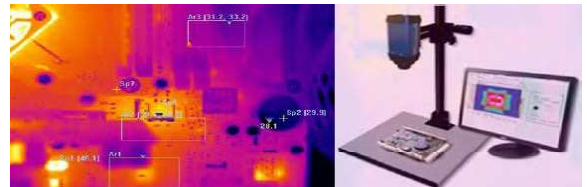
384x288 해상도  
640x480 해상도

## 렌즈 & 게르마늄 보호 필터

4.8mm/5mm/8mm/12mm/20mm/35mm/50mm/75mm 렌즈  
100mm 부터 250mm 까지, 수동 또는 모터구동 초점 렌즈  
Zoom 렌즈  
접사렌즈

## 관련 제품

Housing(보호 필터 장착)



# 열화상 카메라 \_ 보안 감시용

	CG300	CG600
Resolution	384x288	640x480
Pixel Pitch	17μm	
Detector Type	LWIR, Uncooled a-Si Microbolometer	
Thermal Sensitivity of Detector (NETD)	<40mK @f/1.0, 30Hz, 300K	<50mK @f/1.0, 30Hz, 300K
F number of lens	F1.0(To keep total thermal sensitivity of camera at good level, COX cameras are with f1.0 lenses for most of cases)	
Spectral Range	8 - 14 μm	
Color Variation(Palette)	9COLORS (GREY, IRON, RAIN_V1, RAINBOW, HALFGREY, YELLOW, MIDGREY, FIRE, BLUERED)	
Image Setting	AGC, Noise Filter, Noise Strength, Edge Filter, Edge Strenght,	
	NUC, Mirror, Flip, Invert, Image Filter on Screen Menu	
Digital zoom	2x & 4x Digital Zoom	
Focus	Manual, Motorized, Athermalized	
Function	Hot/Cold tracker, center indicator	
Lens	4.8/12/20/35/50/75/100/110/130/150/200/210/250mm lens manual/motorized focus, zoom Athermalized/Macro lens available	
Control of focus/zoom	Include circuit for controlling lens motors for focusing and zooming respectively.	
TV Mode	NTSC/PAL Compatible	
Protocol	COX own proprietary	
Video Output	Standard BNC Connector(Composite), Micro HDMI	
Video frame Rate	BNC connector(composite): NTSC 30Hz, PAL 25Hz HDMI: Selectable(50Hz or 60 Hz)	
OSD menu control	Pelco-D(RS485)	
Start-up	<2 Seconds	
Modular Type	Available	
Dimensions(L.W.H)	92 x 62 x 58 mm	
Input Voltage	110 to 220V AC(DC 12V)	
Operating Temperature	-10°C to 60°C	
Storage Temperature	-40°C to 70°C	
Power Consumption	12 VDC : 5W	
Weight	Approx. 280g(without lens)	Approx. 300g(without lens)
Application	야간 외곽 감시, 침입자 감시등 보안용.	

# 렌즈별 화각 및 측정면적

## 1. MODEL : CG300/CG320/CG320-IP

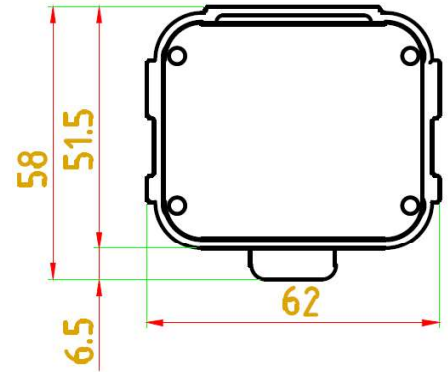
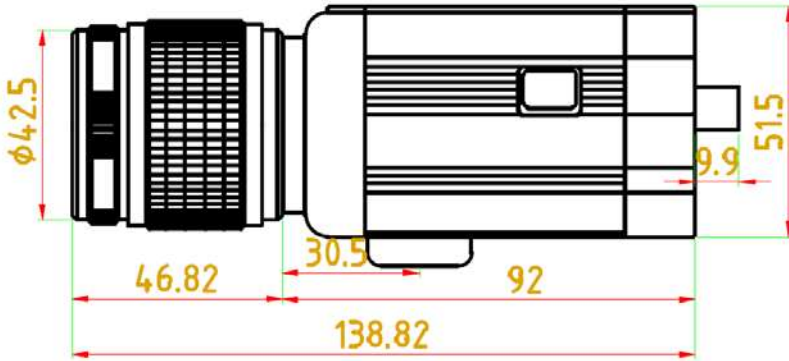
렌즈종류 (mm)	측정거리 (M)	화각 HFOV VFOV	사람인지 6pixel 12pixel	거리별 측정 면적 (가로*세로)								(* 렌즈 f=1.0 기준)			
				1M	2M	5M	10M	50M	100M	500M	1KM	1.5KM	2KM		
4.8	0.5~	68.43	45M	1.36	2.7	6.8	13.6	68.0	136.0						
		54.04	22M	1.02	2.0	5.1	10.2	5.1	102.0						
8	0.5~	44.39	74M	0.82	1.6	4.1	8.2	41.0	82.0						
		34.03	37M	0.61	1.2	3.1	6.1	30.5	61.0						
12	0.25~	30.43	112M	0.54	1.1	2.7	5.4	27.0	54.0						
		23.06	56M	0.41	0.8	2.1	4.1	20.5	41.0						
20	0.3~	18.54	186M	0.33	0.7	1.7	3.3	16.5	33.0	165.0					
		13.96	93M	0.24	0.5	1.2	2.4	12.0	24.0	120.0					
35	0.5~	10.66	325M		0.4	0.9	1.9	9.3	18.5	92.5	185.0				
		8	163M		0.3	0.7	1.4	7.0	14.0	70.0	140.0				
50	1.5~	7.47	465M		0.3	0.7	1.3	6.5	13.0	65.0	130.0				
		5.61	233M		0.2	0.5	1.0	5.0	10.0	50.0	100.0				
75	5~	4.98	698M		0.4	0.9	4.4	8.8	44.0	88.0	132.0				
		3.74	349M		0.3	0.7	3.3	6.6	33.0	66.0	99.0				
100	5~	3.74	930M				0.7	3.3	6.5	32.5	65.0	97.5	130.0		
		2.8	465M				0.5	2.5	4.9	24.5	49.0	73.5	98.0		
110	10~	3.4	1,023M				0.6	3.0	5.9	29.5	59.0	88.5	118.0		
		2.55	512M				0.5	2.3	4.5	22.5	45.0	67.5	90.0		
130	10~	2.88	1,209M				0.5	2.5	5.0	25.0	50.0	75.0	100.0		
		2.16	605M				0.4	1.9	3.8	19.0	38.0	57.0	76.0		
150	15~	2.49	1,395M				0.4	2.2	4.4	22.0	44.0	66.0	88.0		
		1.87	698M				0.3	1.7	3.3	16.5	33.0	49.5	66.0		

## 2. MODEL : CG600/CG640/CG640-IP

렌즈종류 (mm)	측정거리 (M)	화각 HFOV VFOV	사람인지 6pixel 12pixel	거리별 측정 면적 (가로*세로)								(* 렌즈 f=1.0 기준)			
				1M	2M	5M	10M	50M	100M	500M	1KM	1.5KM	2KM		
4.8	0.5~	97.15	45M	2.27	4.5	11.4	22.7	113.5	227.0						
		80.73	22M	1.7	3.4	8.5	17.0	8.5	170.0						
8	0.5~	68.43	74M	1.36	2.7	6.8	13.6	68.0	136.0						
		54.04	37M	1.02	2.0	5.1	10.2	51.0	102.0						
12	0.25~	48.77	112M	0.91	1.8	4.6	9.1	45.5	91.0						
		37.56	56M	0.67	1.3	3.4	6.7	33.5	67.0						
20	0.3~	30.43	186M	0.54	1.1	2.7	5.4	27.0	54.0	270.0					
		23.06	93M	0.41	0.8	2.1	4.1	20.5	41.0	205.0					
35	0.5~	17.67	326M		0.6	1.6	3.1	15.5	31.0	155.0	310.0				
		13.3	163M		0.5	1.2	2.4	11.8	23.5	117.5	235.0				
50	1.5~	12.42	465M		0.4	1.1	2.2	11.0	22.0	110.0	220.0				
		9.33	233M		0.3	0.8	1.7	8.3	16.5	82.5	165.0				
75	5~	8.3	698M			0.7	1.5	7.3	14.6	73.0	146.0	219.0			
		6.23	349M			0.5	1.1	5.4	10.8	54.0	108.0	162.0			
100	5~	6.23	931M				1.1	5.5	10.9	54.5	109.0	163.5	218.0		
		4.67	465M				0.8	4.1	8.2	41.0	82.0	123.0	164.0		
110	10~	5.66	1,023M				1.0	5.0	9.9	49.5	99.0	148.5	198.0		
		4.25	512M				0.7	3.7	7.4	37.0	74.0	111.0	148.0		
130	10~	4.79	1,209M				0.8	4.2	8.4	42.0	84.0	126.0	168.0		
		3.6	605M				0.6	3.2	6.3	31.5	63.0	94.5	126.0		
150	15~	4.15	1,395M				0.7	3.7	7.3	36.5	73.0	109.5	146.0		
		3.12	698M				0.5	2.7	5.4	27.0	54.0	81.0	108.0		

# 열화상 도면

## 1. CG300/CG320/CG600/CG640 (20mm렌즈)



## 2. IP모델 및 Motorized Lens (20mm 모터구동렌즈)

