

Superior Color Sensitivity to  $<0.037 \text{ Lux}$   
better than Starvis in the dark

- 2.4 MP Sony 1/2" Image Sensor
- 1080p / 720p  
60/ 50/ 30/ 25fps
- Auto Focus Zoom
- 30x Optical Zoom, 32x Digital Zoom
- Real Time True WDR @ 100dB
- Digital Noise Reduction
- Extended SDI
  - Transmissions to 500m (1650 ft)
  - Full HD digital format using standard cabling - coax, cat5/6
  - Latency  $<1 \text{ fps}$ .
  - Power & control over same cable
- HD-SDI, HDMI & CVBS



## Technical Specifications

<b>Electrical</b>	24Z2.1WS-30X-EXSDI	
Image Sensor	2.4 MP Sony 1/2" format sensor	
Total Pixels	1952 (H) x 1241 (V)	
Active Pixels	1937 (H) x 1097 (V)	
Scan Mode	Progressive	
Sync. System	Internal	
Resolution	Digital	1080p, 720p (60/ 50/ 30/ 25 fps)
	Analog*	$>700 \text{ TVL}$ (NTSC/ PAL)
Min. Illumination	1/30s	Color: 0.15 lux, B&W: 0.01 lux
	DSS 1/7.5s	Color: 0.0375 lux, B&W: 0.002 lux
Wide Dynamic Range	100dB	
Video Output	EX-SDI/ CVBS analog*/ HD-SDI/ HDMI/ LVDS opt. model	
Communication	Visca / Pelco-D / Pelco-P	
Power Supply	9VDC to 15VDC	
Current Consumption	500mA	

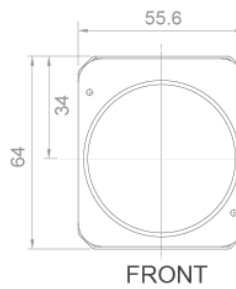
## Parameter Controls

Focus	Auto/ Trigger/ Manual	
Zoom	Distance Presets	0.1m/ 1.0m/ 3.0m/ 6.0m/ 10.0m
	Optical	30x
Exposure	Digital	Off/ up to 32x
	Auto/ Manual	
Gain Control (AGC)	Off/ On	
Shutter Speed	Auto 1/30 (NTSC), 1/25 (PAL)-1/30,000 sec.	
Iris	0 ~ 20 steps	
Digital Slow Shutter	Off / x2 / x4 ( x8: 60 or 50 fps mode only )	
Brightness	0 ~ 20 steps	
WDR / BLC	Off/ WDR/ BLC	
Day & Night (Passive)	Auto/Day (color)/ Night (B/W)/ External Input	
White Balance	Auto/ Push to Set/ Manual/ Indoor/ Outdoor	
HLC	Off/ On/ Night Only	
DNR	Auto/ Off/ Low/ Middle/ High	
Mirror/Flip	Off/ H (mirror)/ V (flip)/ H&V	
Edge Enhancement	0 ~ 10 steps	
Adaptive Contrast Enhancer	Off/ Low/ Middle/ High	
Defog	Off/ On (Auto/ Manual)	
Privacy Mask	Off/ 24 Positions	
Motion Detection	Off/ 3 Positions	
Pixel Detection	Off/ On	

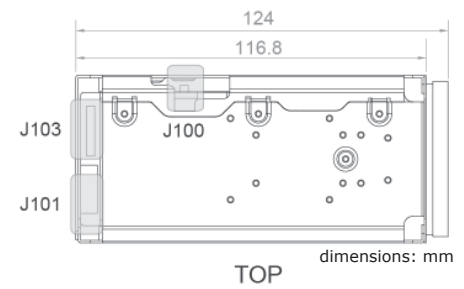
## Environmental

Operating Temperature	-10°C ~ 50°C (14°F ~ 122°F)
Storage Temperature	-20°C ~ 60°C (04°F ~ 140°F)

\*Operates concurrently if WDR mode is off.



FRONT



TOP

dimensions: mm

### J100 MMCX

HD-SDI default  
EX-SDI via OSD control

### J101 FPC ZIF 1MM-9POS

01 RxD	
02 TxD	
03 GND	
04 DC+12V	
05 GND	
06 CVBS-OUT	
07 GND	
08 Reserved	
09 GND	

### J103

#### USL00-30L-C (KEL) 0.4MM-30POS

01 Reserved	16 +5V-OUT
02 GND	17 GND
03 CVBS-OUT	18 GND
04 GND	19 DC+12V
05 TX_HPD	20 DC+12V
06 TX_SDA	21 DC+12V
07 TX_SCL	22 GND
08 TXC-	23 GPIO2
09 TXC+	24 GPIO1
10 TX0-	HDMI 25 ADKEY (OSD Control)
11 TX0+	26 D/N-IN
12 TX1-	27 IR-ON
13 TX1+	28 Motion Detection OUT
14 TX2-	29 RS-485 (-)
15 TX2+	30 RS-485 (+)

## Mechanical

Dimensions WxHxD	55.6mm x 64mm x 124mm (2.2" x 2.5" x 4.9")
Weight	400g (14oz)

## Lens

Lens	Lens Type	30X Day/Night (passive) Zoom Lens		
	Zoom Ratio	Optical 30x, Digital 32x		
	Focal Length	f = 6mm ~ 180mm		
	Aperture Ratio	F1.5 (Wide) ~ F4.3 (Tele)		
	Field of View (DxHxV)	Wide	68.6°	61.2°
		Tele	2.65°	2.3°

## Accessories

Control Board		60MC0002
Transmitter/ Receiver Packages	Coax	60TR0001
	UTP	60TR0002
	UTC	60TR0003
Repeater	Coax only	60RP0001

See application note for more details.