



## **Mighty Dome** Color Dome Camera Series



# VITEK

- 480 and 550 TV Line versions
- True Day/Night function available
- Flush or Surface Mount
- UTP interface, IP Integration, and Heater / Blower Options Available
- Dual Voltage 12VDC & 24VAC
- Infinity Ball Mount for Any Viewing Angle
- Indoor and Vandal Proof IP 68 Rated Models Available
- Lens options include: 2.9-10mm & 9-22mm
- Available in off white or black color

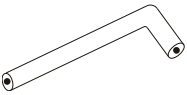
## BOX CONTENTS

1) Dome Camera

2) Mounting Accessories

3) Instruction Manual & Mounting Template

## MOUNTING ACCESSORIES

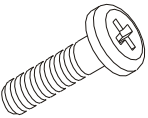


### **Torx Wrench - (Vandal & IR Versions Only)**

Type #: T20

Length: 63mm / Diameter: 4mm

Qty: 1



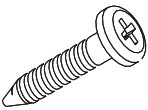
### **Phillips head Screws - (Vandal & IR Versions Only)**

For attaching the dome cover to the flush housing.

Type #: Phillips head M4x10

Length: 10mm / Diameter: 4mm

Qty: 4



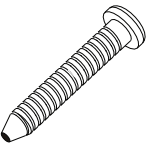
### **Self Tapping Screws**

For attaching the surface mount housing or the the flush mount base to a solid surface.

Type #: Phillips St4x30

Length: 30mm / Diameter: 4mm

Qty: 4



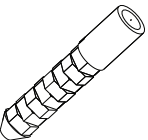
### **Self Tapping Screws - (Indoor Version Only)**

For attaching the dome cover to the flush housing.

Type #: Phillips St4x12

Length: 12mm / Diameter: 4mm

Qty: 4



### **Dowels**

If necessary, use the to help secure the self tapping screws.

Length: 30mm / Diameter: 7mm

Qty: 4

## AVAILABLE MODELS / ACCESSORIES

### ***Indoor Mighty Dome Configurations:***

**VTD-MH2910 / MH922:** Indoor Color Dome Camera w/2.9-10mm or 9-22mm Varifocal Lens & 480TVL

**VTD-MX2910 / MX922:** Indoor Color Dome Camera w/2.9-10mm or 9-22mm Varifocal Lens & 550TVL

### ***IR Mighty Dome Configurations:***

**VTD-MVH2910/L35 / MVH922/L35:** Vandal Proof Color Dome Camera w/2.9-10mm or 9-22mm Varifocal Lens, 480TVL & 35 IR LED's

**VTD-MVX2910/L35 / MVX922/L35:** Vandal Proof Color Dome Camera w/2.9-10mm or 9-22mm Varifocal Lens, 550TVL & 35 IR LED's

### ***Vandal-Proof Mighty Dome Configurations:***

**VTD-MVH2910 / MVH922:** Vandal Proof Color Dome Camera w/2.9-10mm or 9-22mm Varifocal Lens & 480TVL

**VTD-MVH2910DN / MVH922DN:** True Day/Night Vandal Proof Color Dome Camera w/2.9-10mm or 9-22mm Varifocal Lens & 480TVL

**VTD-MVX2910 / MVX922:** Vandal Proof Color Dome Camera w/2.9-10mm or 9-22mm Varifocal Lens & 550TVL

**VTD-MVX2910DN / MVN:** True Day/Night Vandal Proof Color Dome Camera w/2.9-10mm or 9-22mm Varifocal Lens & 550TVL

### ***Optional Mounts & Accessories:***

**VT-MD-2VOC:** Secondary Video Output Cable for Mighty Domes

**Heater/Blower Option:** Heater/Blower Option for Mighty Domes

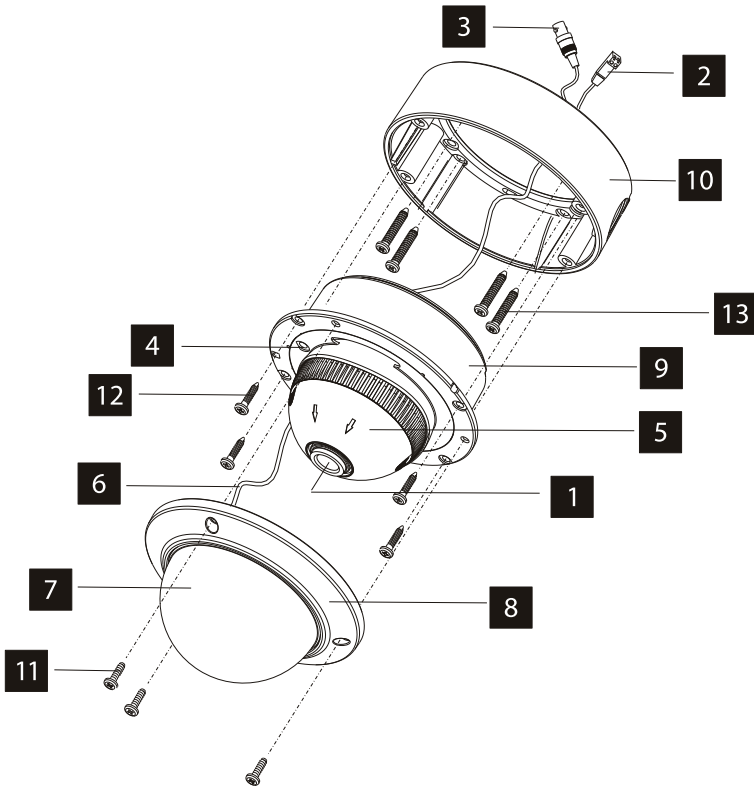
**UTP Option:** UTP Option for Mighty Domes

**IP Module:** IP Option for Mighty Domes

**VT-MD/WMT:** Mighty Dome Wall Mount

**VT-MD/CMT:** Mighty Dome Pedestal Ceiling Mount

## MIGHTY DOME LAYOUT



- 1)** Lens
- 2)** Power Input Connector(12VDC / 24VAC)
- 3)** Video Output Connector - BNC
- 4)** Camera Holder and 2nd Video output
- 5)** Ball with the Camera Assembly
- 6)** Safety Wire
- 7)** Bubble
- 8)** Dome Cover Ring
- 9)** Flush Mount Base
- 10)** Surface Mount Plate
- 11)** Assembly Screws - Torx M4x9 (Vandalproof)
- 12)** Assembly Screws - Phillips ST4x12 (Indoor) / Phillips M4x10 (Vandalproof / IR)
- 13)** Mounting Screws - Phillips ST4x30

# INSTALLATION

## 1) Dome Cover

1.1 *Vandal Proof Domes* - Use the provided Torx wrench to unscrew the vandal proof screws and remove the dome cover.

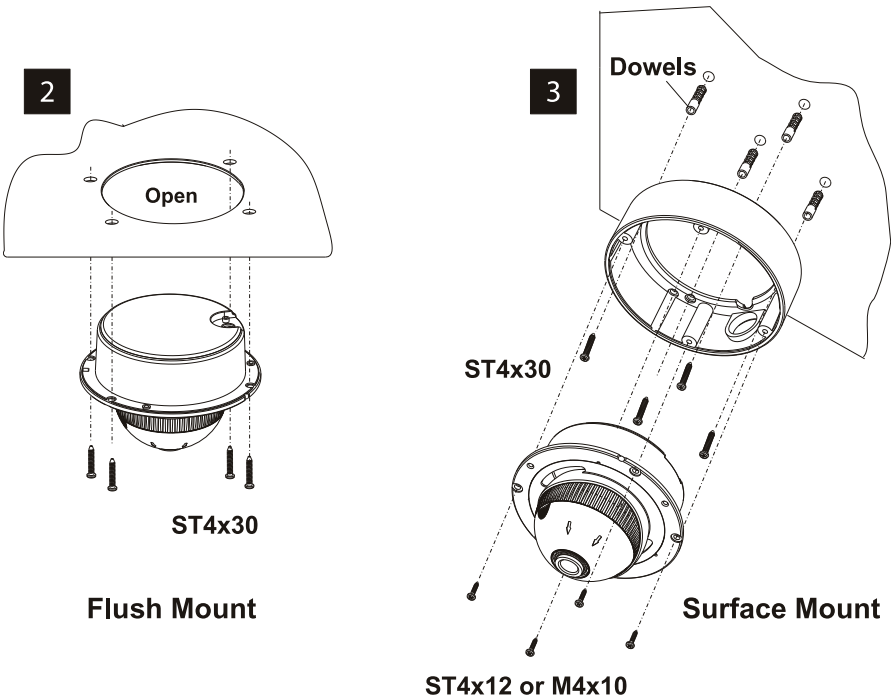
1.2 *Indoor Domes* - Turn the dome cover to the left to remove the dome cover.

## 2) Flush Mount Installation:

Using four St4x30 screws, attach the flush mount base to a sturdy surface.

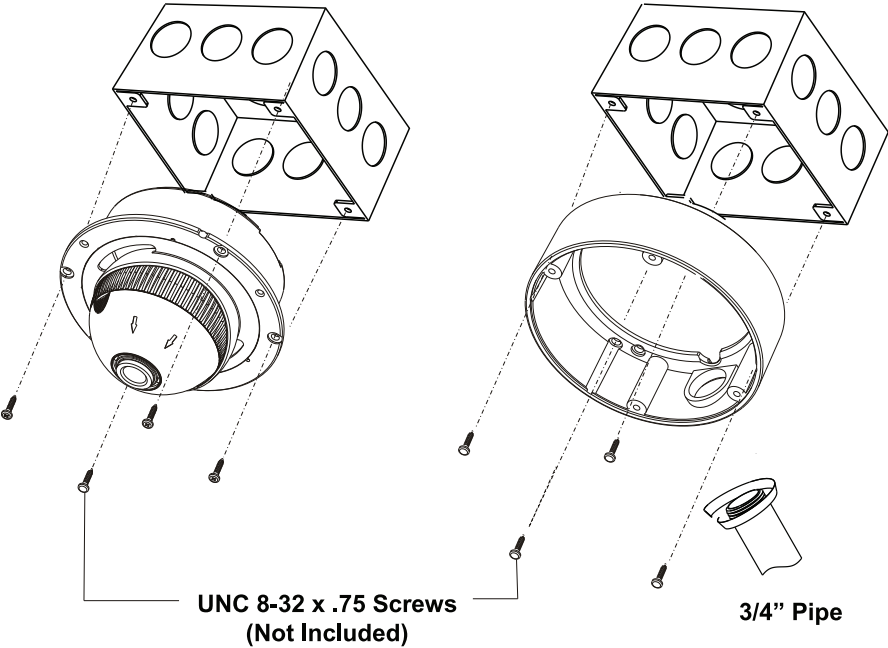
## 3) Surface Mount Installation:

Drill pilot holes at the mounting location using the provided mounting template. Using four St4x30 screws, mount the surface mount housing to a sturdy surface. Using four ST4x12 (Indoor) screws or M4x10 (Vandal-proof) screws, attach the flush mount base to the surface mount housing.



# JUNCTION BOX INSTALLATION

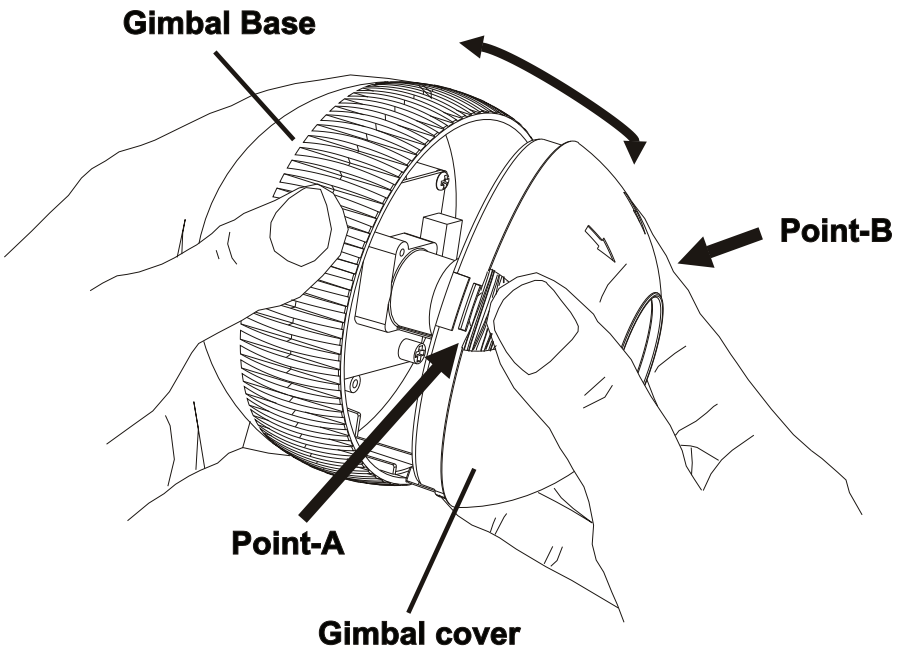
Mighty Domes can easily be flush or surface mounted to an electrical junction box (J-Box) using the pre-drilled mounting holes on either the surface mount housing or the the flush mount base.



## OPEN GIMBAL COVER

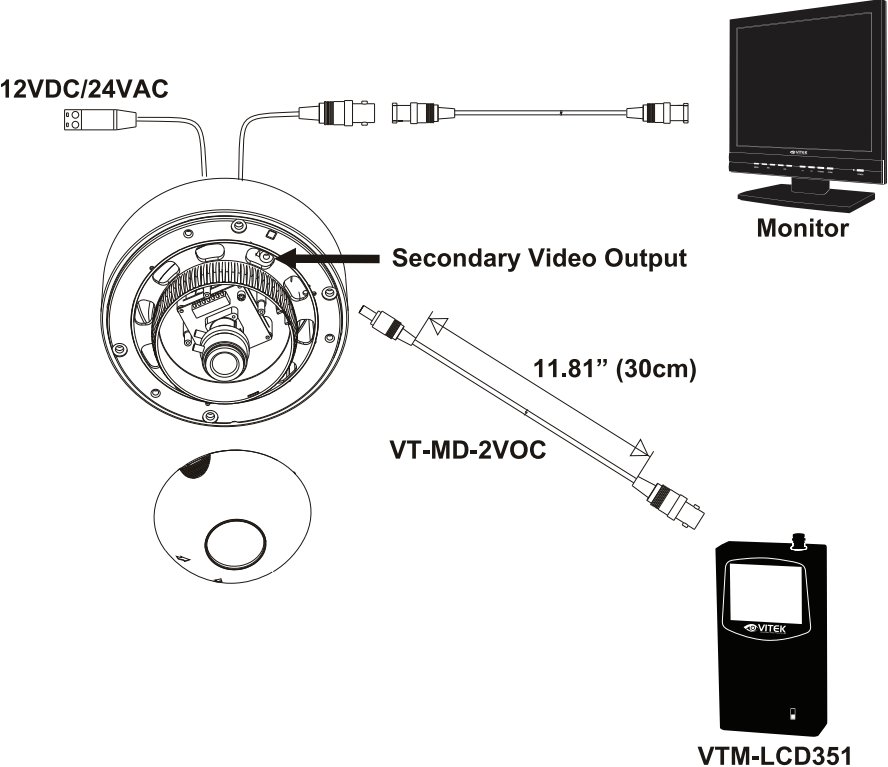
To adjust the zoom and the focus, the gimbal needs to be removed temporarily from its base.

- 1) Remove the ball gimbal from its socket, and hold the base firmly with one hand.
- 2) Gently squeeze Point A and B and pull away from the base until the gimbal is removed from the base.
- 3) Replace the Gimbal cover by aligning the cover to the base and pressing down until it snaps back onto the base.



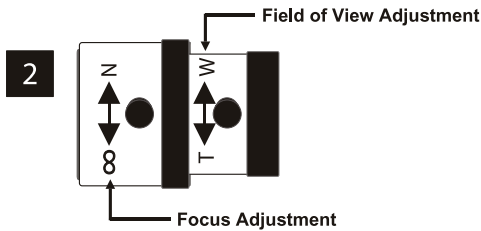
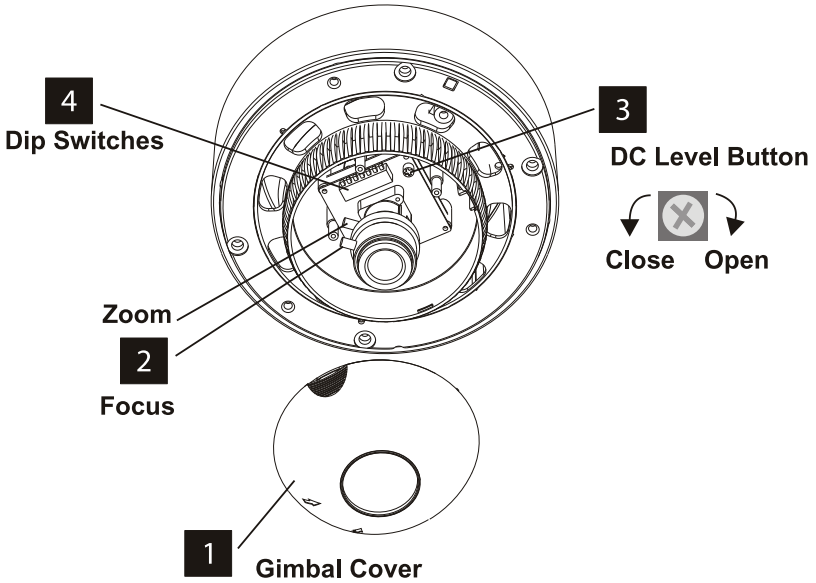
# CONNECTIONS

- Power connection: 12VDC and 24VAC dual input.
- All Mighty Dome cameras come standard with a secondary video output. Please contact your distributor or the VITEK Sales Department for availability of the optional secondary video cable (VT-MD-2VOC).



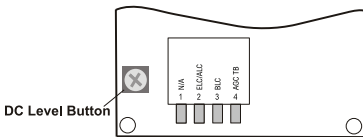
# LENS ADJUSTMENT

- 1) Remove the Gimbal cover from the Gimbal base.
- 2) Loosen Zoom & Focus screws and make necessary adjustments as shown.  
*Field of view: Telephoto(T) to Wide(W)*  
*Focus: Near(N) to infinity( $\infty$ )*
- 3) DC Level: Adjust left or right if the picture is too dark.
- 4) Dip Switches. See Page 9
- 5) Reattach the gimbal cover to the gimbal base.

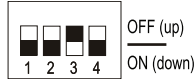


# DIP SWITCH ADJUSTMENTS

## Indoor & Vandal-Proof Mighty Domes (Non-Day/Night):

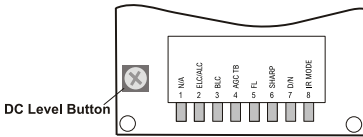


Factory Default:



	Function	OFF	ON
1	N/A		
2	ELC/ALC	<b>ALC</b>	ELC
3	Back Light Control (BLC)	Off	<b>On</b>
4	Auto Gain Control (AGC)	<b>Normal</b>	Turbo

## Day/Night & IR Mighty Domes:



Factory Default:

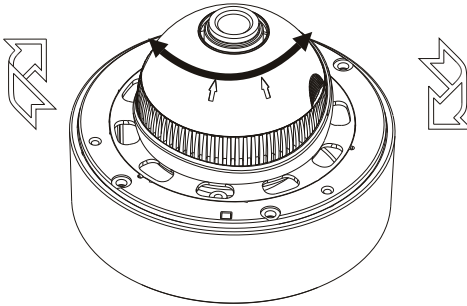


	Function	OFF	ON
1	N/A		
2	ELC/ALC	<b>ALC</b>	ELC
3	Back Light Control (BLC)	<b>Off</b>	On
4	Auto Gain Control (AGC)	<b>Normal</b>	Turbo
5	Flickerless	<b>Off</b>	On
6	Sharpness	Normal	<b>Sharp</b>
7	Day/Night	Day	<b>Auto</b>
8	IR Mode (IR Model Only)	<b>Off</b>	On

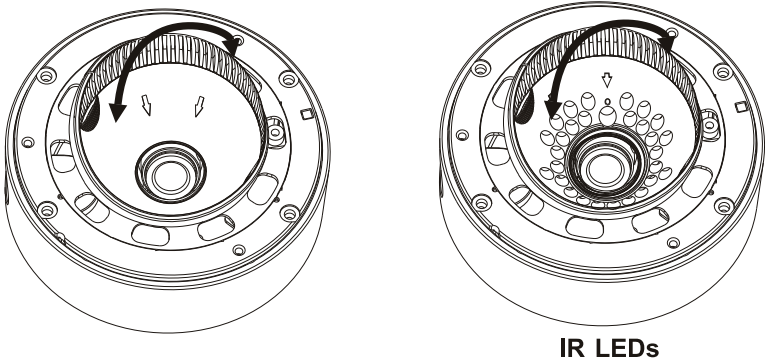
## 3-AXIS GIMBAL ADJUSTMENT

The Gimbal mechanism yields maximum rotation and placement as shown below.

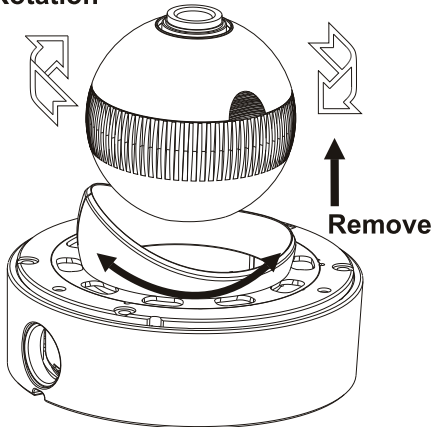
### 1 Pan



### 2 Tilt



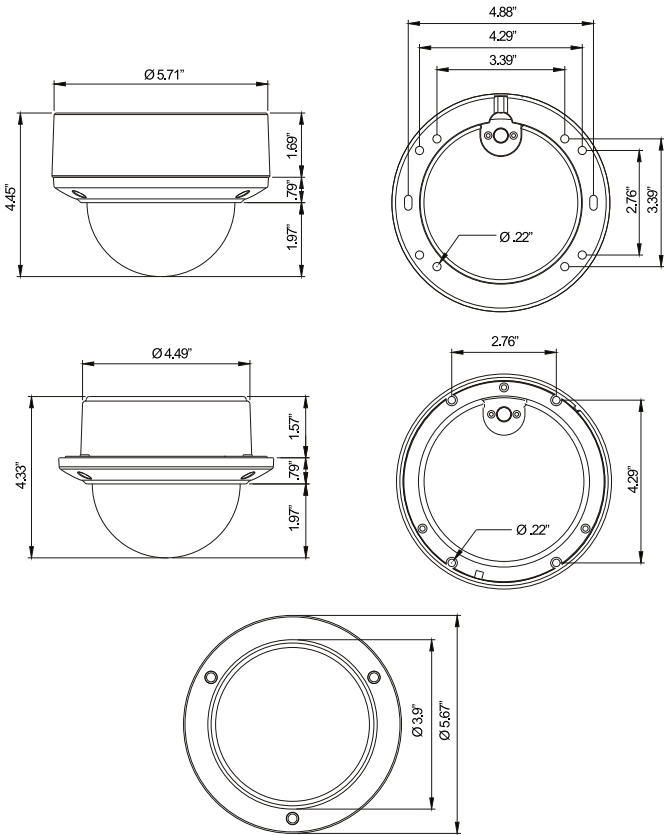
### 3 Horizontal Rotation



# HEATER / BLOWER SPECIFICATIONS

Specifications	
Power Supply	24 VAC
Power Consumption	10W (Heater) / .7W (Blower)
Heater	On: at 41°F / Off at 59°F
Blower	Continuous 24 Hour Operation

# EXTERNAL DIMENSIONS



# INDOOR MIGHTY DOME SPECIFICATIONS

Specifications	VTD-MH	VTD-MX
Image Sensor	1/3" Super HAD CCD	
Sync System	Internal	
Scanning system	2:1 Interlace	
Lens Options	2.9-10mm or 9-22mm	
Horizontal Resolution	480 TV Lines	550 TV Lines
Min. Illumination	0.2Lux (F1.2@40IRE)	
S/N Ratio	More than 52dB AGC OFF at 50IRE	
Video Output	1.0Vp-p composite, 75 Ohms	
Effective Pixels	768(H) x 494(V)	
Electronic Shutter	1/60 ~ 1/100,000	
White Balance	2000~8000 K Automatic Tracking	
Operating Temperature	14F ~ 122F (-10C ~ +50C)	
Operating Humidity	Within 85% RH	
Power Consumption	3 Watts	
Power Requirement	12VDC/24VAC Dual Voltage (500 mA Minimum)	
Dimensions (H x Dia.)	4.45" x 5.71" (113mm x 145mm)	

## VANDAL MIGHTY DOME SPECIFICATIONS

Specifications	VTD-MVH	VTD-MVX	VTD-MVH(DN)	VTD-MVX(DN)
Image Sensor	1/3" Super HAD CCD		1/3" True Day/Night Super HAD CCD	
Sync System	Internal			
Scanning system	2:1 Interlace			
Lens Options	2.9-10mm or 9-22mm			
Horizontal Resolution	480 TV Lines	550 TV Lines	480 TV Lines	550 TV Lines
Min. Illumination	Day/Night: 0.02Lux (F1.2@40IRE) / Standard: 0.2Lux (F1.2@40IRE)			
S/N Ratio	More than 50dB AGC OFF at 50IRE			
Video Output	1.0Vp-p composite, 75 Ohms			
Effective Pixels	768(H) x 494(V)			
Electronic Shutter	1/60 ~ 1/100,000			
White Balance	2000~8000 K Automatic Tracking			
Weatherproof	IP68			
Operating Temperature	14F ~ 122F (-10C ~ +50C)			
Operating Humidity	Within 85% RH			
Power Consumption	3 Watts			
Power Requirement	12VDC/24VAC Dual Voltage (500 mA Minimum)			
Dimensions (H x Dia.)	4.45" x 5.71" (113mm x 145mm)			

## IR MIGHTY DOME SPECIFICATIONS

Specifications	VTD-MVH (L35)	VTD-MVX (L35)
Image Sensor	1/3" Super HAD CCD	
Sync System	Internal	
Scanning system	2:1 Interlace	
Lens Options	2.9-10mm or 9-22mm	
Horizontal Resolution	480 TV Lines	550 TV Lines
Min. Illumination	Day/Night: 0.02Lux (F1.2@40IRE) / Standard: 0.2Lux (F1.2@40IRE)	
S/N Ratio	More than 50dB AGC OFF at 50IRE	
Video Output	1.0Vp-p composite, 75 Ohms	
Effective Pixels	768(H) x 494(V)	
Electronic Shutter	1/60 ~ 1/100,000	
White Balance	2000~8000 K Automatic Tracking	
IR LED's	30 LED's with up to 90' Range	
Weatherproof	IP68	
Operating Temperature	14F ~ 122F (-10C ~ +50C)	
Operating Humidity	Within 85% RH	
Power Consumption	3 Watts (IR LEDs Off) / 6 Watts (IR LEDs On)	
Power Requirement	12VDC/24VAC Dual Voltage (1000 mA Minimum)	
Dimensions (H x Dia.)	4.45" x 5.71" (113mm x 145mm)	

# LIMITED LIABILITY WARRANTY

Your new Camera is guaranteed to be free from defects in materials and workmanship for a period of two years from the date of purchase.

The product must have been used only for its intended purpose, and not been subjected to damage by misuse, willful or accidental damage, caused by excessive voltage or lightning.

The product must not have been tampered with in any way then the guarantee will be considered null and void.

This guarantee does not affect your statutory rights.

Contact VITEK directly for all servicing.



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