

# VUMii Claritii



## OVERVIEW

**Claritii** is the latest outdoor perimeter and border protection solution from Vumii Inc. Leveraging our recently invented, “focused-beam array” LED technology combined with an optimized imager, optics, and pan-tilt platform, Claritii systems provide high zoom magnification, clarity, and versatility, in daylight or zero light **out to 600 meters**. Historically, LED illumination-based products have only been capable of assisting an appropriately sensitive camera system to see at night from 100 meters or less. Now, with Claritii systems’ ability to deliver details in daytime or complete darkness, security personnel can dramatically extend perimeter surveillance and/or reduce the number of cameras necessary to assess and respond to security threats throughout a site.



Claritii 400  
75 meters complete darkness

- 24/7 day/night Video Assessment
- Integrated 5°-12° Illumination
- Up to 600 meter night range with 1 panel
- Continuous Zoom, high magnification optics
- Read Text and Numbers
- Identify Faces
- 360° Continuous Pan-tilt
- Pelco-D compatible
- Absolute Positioning
- Easily integratable to detection technologies



Claritii 400  
200 meters complete darkness



Claritii 600  
250 meters complete darkness



Claritii 600  
430 meters complete darkness

Vumii helps its customers dramatically improve security personnel’s ability to identify and comprehend risks to their environments. Vumii leverages electro-optics and image processing disciplines to develop and market long-range LED and Laser night vision surveillance, perimeter protection, and graphical user control systems which enable users to prevent and rapidly respond to terrorism, theft, vandalism, asset damage and other physical security threats. Vumii’s affordable, easily integrated, visualization hardware and software technologies are deployed within the defense and physical security markets in more than 20 countries.

# SPECIFICATIONS



	Claritii 400		Claritii 600	
<b>Optics Performance</b>	<b>Day</b>	<b>Night</b>	<b>Day</b>	<b>Night</b>
Detection of 1.8 Meter Human (3-5 pixels)	4,800 Meters	600 Meters	8,000 Meters	800 Meters
Detection of 1.8 Meter Human (>10pixels)	2,400 Meters	600 Meters	4,000 Meters	800 Meters
Recognition of 1.8 Meter Human (>30pixels)	1,600 Meters	400 Meters	3,000 Meters	600 Meters
Identification of 1.8 Meter Human (>40pixels)	1,200 Meters	400 Meters	2,250 Meters	600 Meters
Distance at which a 1.8 meter human is 30% of vertical screen	333 Meters	333 Meters	625 Meters	625 Meters
<b>Night Illumination</b>	<b>Day</b>	<b>Night</b>	<b>Day</b>	<b>Night</b>
Source	NA	850nm NIR LED	NA	850nm NIR LED
Angle	NA	5° concentration	NA	5° concentration
Output Power	NA	19-22 watts	NA	19-22 watts
<b>Optics Components</b>	<b>Day</b>	<b>Night</b>	<b>Day</b>	<b>Night</b>
Imager	1/3" CCD	1/3" CCD	1/3" CCD	1/3" CCD
Number of effective pixels	768 x 492 (EIA) 752 x 582 (CCIR)	768 x 492 (EIA) 752 x 582 (CCIR)	768 x 492 (EIA) 752 x 582 (CCIR)	768 x 492 (EIA) 752 x 582 (CCIR)
S/N ratio	48 dB	48 dB	48 dB	48 dB
TV Lines	570 TV lines	570 TV lines	570 TV lines	570 TV lines
Light Sensitivity	0.00004 (F0.8)	0.00004 (F0.8)	0.00004 (F0.8)	0.00004 (F0.8)
Imager Horizontal Angle of view	25° (Wide) to 1.4° (Narrow)	25° (Wide) to 1.4° (Narrow)	18.40° (Wide) to 0.74° (Narrow)	18.40° (Wide) to 0.74° (Narrow)
Continuous optical zoom	11mm - 200mm	11mm - 200mm	15mm - 375mm	15mm - 375mm
Iris Range	F1.9 to F360	F1.9 to F360	F2.3 to F360	F2.3 to F360
Video Output	1.0Vp-p, 75ohm	1.0Vp-p, 75ohm	1.0Vp-p, 75ohm	1.0Vp-p, 75ohm
<b>Pan-Tilt</b>	<b>All Models</b>			
Pan speed	0 to 100 degrees per second			
Pan Acceleration (stop to max)	0.44 seconds			
Time for 180 degree turn	1.56 seconds			
PT precision	0.01 degrees			
Max tilt speed	50 degrees per second			
Pan Limits	360 degrees, continuous			
Tilt Range	+/- 90 degrees (180 degrees range)			
Speed Variability	On-the-fly speed and position changes			
Additional Payload Capacity	Possible with custom configuration options			
<b>Package/Environment</b>	<b>All Models</b>			
Head Unit Size	25" H x 26" W x 20" D (635mm H x 660mm W x 510mm D)			
Electronics Unit Size	13.5" H x 11" W x 5" D (340mm H x 280mm W x 130mm D)			
Head Unit Weight	56 lbs; 25.5 kg			
Electronics Unit Weight	26 lbs; 12 kg			
Environment Rating	IP65; additional environmental packaging available			
System Power	115/230 VAC; normal operation: 50W (Day) 180W (Night); peak operation: 80W (Day) 210W (Night)			
Operating Temp.	-20° C to +40° C			
<b>Communications</b>	<b>All Models</b>			
Video Connection	Analog video native; IP with encoder			
Control Connection	RS422 serial cable			
Control Protocols	Pelco-D			
<b>Additional Options</b>	<b>All Models</b>			
Wash/Wipe	Washer pump and Wiper kit			
Video Stabilization	Hardware/software module available			
Mounting	Various pole and side mounting options available, as well as adapter kits to existing infrastructure			