

## Valerus Application/Web Servers and Client Viewing Stations



Rack-mount Server - 1U



Desktop Server



VLR-CLIENT-4-A-RK

### Application/Web Server

- ▶ Acts as the main system server
- ▶ Windows® service that runs Vicon certified hardware
- ▶ i7 processor and 16 GB RAM
- ▶ Can run on any VMS computer or on dedicated hardware
- ▶ Provides a secure service that manages the VMS main database and provides the tools to centrally manage the system and run the system's web server

### Client Viewing Station

- ▶ Vicon certified hardware optimized to run Valerus in a web browser
- ▶ i7 processor and 16 GB RAM
- ▶ Provides easy access to the user interface
- ▶ Models available to support either 2 or 4 monitor outputs
- ▶ Supports 4K resolution

The Valerus VMS software is COTS (commercial-off-the-shelf) compatible. However, Vicon offers factory certified, pre-installed Servers, which saves valuable installation time and reduces the overall system cost, as well as providing one source for technical support.

Valerus can be deployed in different configuration depending on system size and logistical deployment; configurations include standalone system on a single PC (all-in-one), a centralized site running multiple servers or a central site running multiple remote recording servers (NVRs) and cameras.

This datasheet focuses on the Valerus Application/Web Server datasheets.

The components of a complete Valerus VMS are:

**Application/Web Server:** This is the brains of the system, where the database is active and all system programming is stored. On systems with under 150 cameras, the Application Server can run on one of the recording servers. For systems of 150 or more cameras, it is recommended to have a dedicated Application Server. Each system requires only one Application Server.

**Recording Servers:** All Recording Servers (NVRs) record and provide playback; each is capable of recording a specific number of cameras based on its specification. Note that if Valerus SmartAnalytics is running on the NVR, this may impact on the number of cameras that can record. A version is available with internal RAID storage. Refer to datasheets dedicated specifically to NVRs and Shadow NVRs.

**Client Viewing Station:** With this thin-client topology, client viewing stations can be on any PC Microsoft® Internet Explorer 11 minimum.

## Ordering Information

Model	Mounting Type	Model Number
Application Server* PC preloaded with Valerus application server software; includes Web Server	Desk-top Rack-mount	VLR-APPSRV-A VLR-APPSRV-A-RK
Viewing Station for viewing and operating Valerus VMS; 2 monitor outputs	Desk-top Rack-mount	VLR-CLIENT-A VLR-CLIENT-A-RK
Viewing Station for viewing and operating Valerus VMS; 4 monitor outputs	Desk-top Rack-mount	VLR-CLIENT-4-A VLR-CLIENT-4-A-RK

\*The Application Server can run on one of the Recording Servers in a system with up to 150 cameras. Over 150 cameras, Vicon recommends a dedicated Application Server.

**Specifications** (VICON-CERTIFIED HARDWARE)

Model	Rack-Mount Servers: VLR-APPSRV-A-RK/VLR-CLIENT-A	Desktop Servers: VLR-APPSRV-A/VLR-CLIENT-A	CLIENT-4-A/VLR-CLIENT-4-A-RK
<b>PC Requirements</b>			
Operating System:	Microsoft® Windows® 10 IoT LTSC*, 64 bit; Windows Server 2012, 2016 and 2019		
CPU:	Intel® i7 7700 3.6 GHz min. processor		
Memory:	16 GB (DDR4 RAM)		
Graphics:	256 MB RAM onboard (VLR-CLIENT-A/VLR-CLIENT-A-RK); supports 4K resolution)	Nvidia VCQP620V2-PB display card; supports 4K resolution.	
Monitor Outputs:	Two HDMI outputs; see graphic below	Mini display ports (HDMI adapter cable included); see graphic below	
Network Interface:	1000 Mbps	1 Gbps onboard	
Browser**:	Must have Internet Explorer®11 min. or Firefox® (up to version 51.x supporting Active X)		
<b>Electrical</b>			
Input Voltage:	105-240 ±10% VAC, 50/60 Hz	90-230 ±10% VAC, 50/60 Hz	
Current:	0.66 A @ 115 VAC; 0.33 A @ 240 VAC	1.4 A @ 115 VAC; 0.7 A @ 230 VAC	
Power Consumption:	76 W nominal	161 W nominal	
Heat Output:	266 btu/hour	563.5 btu/hour	
Power Connector:	Standard 3-conductor female socket		
<b>Mechanical</b>			
Application:	Indoor		
Mounting:	19 in. (483 mm) rack-mount, 1 RU height	Standard mini ITX chassis desktop	Standard 19 in. (483 mm) rack mount and stackable, 3 RU height or desk-top PC tower
Dimensions:	1.75" (44.45 mm) H x 19" (483 mm) W x 16" (406 mm) D, with connectors	9.5 in. (241.3 mm) H x 3.75 in. (95.25 mm) W x 10.5 in. (266.7mm) D	Rack: 5.3 in. (135 mm) H x 17.1 in. (435 mm) W x 20.5 in. (520 mm) D, including connectors Tower: 15.9 in. (405 mm) H x 7.1 in. (180 mm) W x 18.5 in. (470 mm) D
Weight:	18.2 lb (8.3 kg)	8.1 lb (3.7 kg)	30.0 lb (13.6 kg)
Construction:	Steel and plastic		
<b>Environmental</b>			
Operating Temperature:	32° to 104°F (0° to 40°C)		
Humidity:	Up to 95% relative, non-condensing		
Warranty:	3 years part and labor		

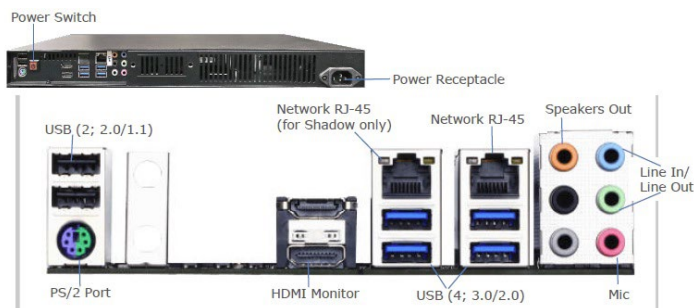
Note that custom configurations of hardware and software are available upon request.

\*The LTSB (Long Term Servicing Channel) version is provided. If a full Windows 10 CB O.S. is required, contact you Vicon Sales Representative.

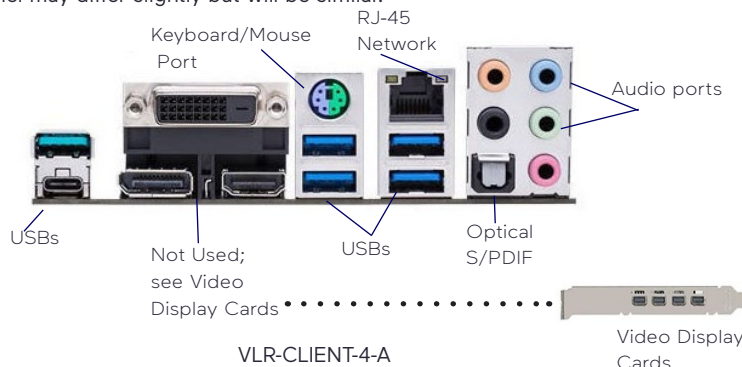
\*\*Additional browsers will be supported in future releases.

**Controls and Connectors**

Note that mother boards are subject to change and the current rear panel may differ slightly but will be similar.



VLR-APPSRV-A Application Server and VLR-CLIENT-A Viewing Station



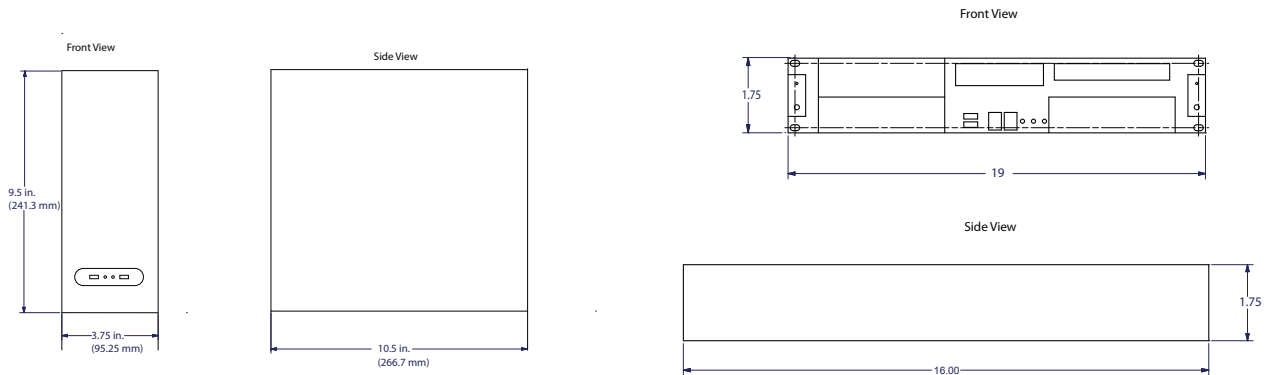
VLR-CLIENT-4-A

### Valerus Server Display Performance Guidelines

Resolution	Maximum Cameras Across All Video Monitors					
	H.264 - 30fps	H.265 - 30fps	H.264 - 15fps	H.265 - 15fps	H.264 - 7fps	H.265 - 7fps
1 CIF	45	25	50	25	55	55
D1	38	15	45	23	55	40
800×600	18	9	28	20	45	35
1280×720 (1MP)	22	7	25	19	42	25
1280×1024 (1.3MP)	21	7	24	18	40	23
1920×1080 (2MP)	12	6	21	12	24	12
1600×1200 (2MP)	12	6	21	12	24	12
2048×1536 (3MP)	11	5	18	7	22	10
2592×1520 (4MP)	5	4	9	5	15	6
2600×1950 (5MP)	2	2	5	3	12	5
3072×2048 (6MP)	4	2	6	3	11	4
3840×2160 (8MP/4K)	2	1	3	1	9	2
4000×3000 (12MP)	N.A.	N.A.	2	1	6	1

Note on Using 4K Monitors: The numbers shared in the table above are for full HD (1080P) monitors. When using 4K monitors, it is important to understand these additional guidelines: 1. In Client PCs with up to two 4K monitors, the performance numbers above can also be expected. 2. When adding additional 4K monitors (more than 2), the performance may significantly reduce. 3. In multi-monitor environments, it is highly recommended to keep to full HD resolution for all monitors to avoid the extra display load.

### Dimensional Drawings



Desktop Servers

Rack-Mount Servers



Tower



Rack-Mount

Client Viewing Station (VLR-CLIENT-4-A)

Data Sheet Number: V281-40-05  
 Vicon Data Sheet Number: 8009-7281-40-05

Specifications subject to change without notice.  
 Vicon and their logos are registered trademarks of Vicon Industries Inc.  
 Copyright © 2021 Vicon Industries Inc. All rights reserved.

Intel and Core are trademarks or registered trademarks of Intel Corporation. Windows and Explorer are registered trademark of Microsoft Corporation. Chrome is a registered trademark of Google LLC.

