

IT Requirements: L5 Real-Time Telemicroscopy System

General Requirements

Bandwidth	Minimum: 1.5Mbps Network Speed Recommended: 6-10Mbps Network Speed
Network Requirements	
Separate Networks	Port 443 (default) is required
Same Network	Three consecutive ports (6783, 6784, 6785 as defaults) required

Remote Access: Client Requirements

	Windows Client (Minimum)	Windows Client (Recommended)	Mac Client (Minimum)	Mac Client (Recommended)
CPU	Intel Atom family CPU	Intel i7	1.6 Ghz dual-core	Intel i7
Memory	1GB	4GB	1GB	4GB
Graphics	GMA	NVIDIA GeForce	--	--
Resolution	1024x600	1024x600 or above	--	--
Operating System	Windows Vista or XP	Windows 7, 8 or 10	Mac OS X 10.6	Mac OS X 10.8 or above

Remote Access: Server Requirements

On premise installation of management and relay gateway requires a server or VM with the following specifications:

	Minimum Requirements	Recommended Specification
CPU	Intel i5 2.0Ghz or above	Intel i7, Xeon E31220 or other high-end CPU
RAM	4GB or more	8 GB or more
Disk Space	20GB	50 GB
Operating Systems	Windows7 Professional Windows7 Enterprise Windows7 Ultimate Windows 8 Windows 10	Windows Server 2012 Windows Server 2008 R2 Standard Windows Server 2008 R2 Enterprise Windows Server 2008 R2 Data Center Windows Server 2008 R2 Web Edition
.NET Framework	Microsoft .NET 3.5 SP1 or later	Microsoft .NET 3.5 SP1 or later
Others	Java 7 (Installer bundles by default) Run with Windows Admin privilege	Java 7 (Installer bundles by default) Run with Windows Admin privilege

Network	<p><i>One IP address and domain name:</i></p> <p>Cross-firewall remote sessions- public IP address or within firewall set port to forwarding to the public IP to private IP in your firewall.</p> <p><i>One port:</i> On-premise Gateway and Relay port: Ensure port 443 is not blocked by a firewall.</p>
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Data Security

Encryption	Secure Socket Layers (SSL) AES 256
Transmission Security Protocol	IETF-Standard Transport Layered Security (TLS)
Cipher Suite Restrictions	2048 bit ECDH-RSA with 256-bit AES-CBC and SHA1
Integration with Active Directory	With onsite deployment only