**Specification Details on Qmed PACS and Teleradiology Solution**

**1. Introduction**

This document provides the detailed technical specifications for Qmed PACS and Teleradiology Solution. It highlights the system's robust capabilities in enhancing diagnostic efficiency, streamlining radiology workflows, and ensuring secure and scalable image management solutions.

**2. Hardware Specifications**

**2.1 Servers**

1. **Server**
   * **Processor:** Dual Processor - Intel Xeon Silver 4310 2.1GHz or equivalent
   * **Operating System:** Windows Server 2022/2019 Datacenter Edition
   * **Memory:** 384GB
   * **Storage:**
     + 600GB 15K RPM SAS 12Gbps 2.5in Hot-plug Hard Drive (x3 units)
   * **Network:** Dual Network Cards
   * **Warranty:**
     + 3 years Next Business Day (NBD) warranty
     + 24x7 remote support

**2.2 Storage**

1. **NAS Storage**
   * **Brand/Model:** NAS Synology
   * **Storage Array Components:**
     + Drive Bays : 4(upgradable to 64 TB)
     + IronWolf 16TB storage capacity(1 bay)
   * **Memory:** 4 GB DDR4 ECC
   * **Warranty:**
     + 3 years NBD warranty
     + 24x7 support with fault detection and repair

**2.3 Workstations**

1. **RIS Workstation**
   * **Processor:** Intel Core i5
   * **Memory:** 16GB
   * **Storage:** 512GB SSD
   * **Monitor:** 24-inch display
2. **PACS Workstations**
   * **Processor:** Intel Core i5
   * **Memory:** 32GB
   * **Storage:** 512GB SSD
   * **Graphics:** GPU Memory 2GB GDDR5
   * **Monitor:** 24-inch display

**2.4 Network**

* + S3700-24T4F, 24-Port Gigabit Ethernet L2+ Switch, 24 x Gigabit RJ45, with 4 x 1Gb SFP, Fanless

**3. Software Specifications**

**3.1 Radiology Information System (RIS)**

* **System Type:** Radiology Information System software
* **Features:**
  + Patient registration and scheduling
  + Workflow management for imaging procedures
  + Advanced reporting features with configurable templates
  + Audit trail and user access controls
  + Comprehensive management and quality reports

**3.2 Picture Archiving and Communication System (PACS)**

* **System Type:** PACS software
* **Features:**
  + DICOM compliance for image management
  + Web-based image access
  + Integration with RIS
  + Scalable architecture with disaster recovery capabilities

**4. Implementation and documentation**

* **Documentation:**
  + Installation guides
  + User manuals
  + Functional descriptions and flow diagrams

**5. Maintenance and Support**

* **Support Scope:**
  + Hardware and software updates
  + Fault detection and preemptive repairs
  + SLA document will be provided
* **Maintenance Terms:**
  + Regular updates for software versions, including operating systems and applications

**7. Compliance and Security**

* **Standards:**
  + HL7, DICOM, and HIPAA compliance
  + Role-based access control to ensure authorized use
  + Regular security audits and vulnerability assessments to maintain system integrity