Q-vision HF Series
High Frequency X-Ray Technology

Wide Screen Control with Touch Technology

Quantum Medical Imaging
Division of Carestream
The Q-VISION HF Series™

The Q-VISION Series™ integrates innovative high frequency design along with superb functionality, resulting in revolutionary radiographic generator technology. The Q-VISION Series generators provide power levels up to 80 kW and outputs of up to 150 kVp, meeting the needs of any imaging environment.

Designed for all aspects of general x-ray imaging and operating at a near-constant potential of up to 120 kHz, the Q-VISION provides High Frequency imaging for highly efficient X-ray production. Radiographic imaging is optimized through the Q-VISION’s innovative and simple GUI design, which permits a wide variety of routine, specialized and custom procedures.

Q-VISION TOUCH SCREEN MONITOR
- High Definition Widescreen LCD Monitor with “Finger-Tip Touchscreen Control” and Antiglare coating
- Intuitive Graphically Rich High Contrast User Interface
- Resolution: WXGA (1366 x 768 pixels)
- Brightness: 250cd/m2
- Contrast Ratio: 1000 : 1
- Viewing Angle: 170° Horizontal, 160° Vertical
- Number of Colors: 16.7 million

Q-VISION TECHNOLOGY:
- Integrated design using advanced “Q-Bus” Technology, via Ethernet communication
- Powerful help system guides operator through basic operation and maintenance
- Web-Based Remote Support and Service worldwide, via built-in web browser
- Self-Diagnostics, Anode Heat Unit monitor, Error Messaging, Auto shut-off timer, History reporting log, date/time feature

OPERATING MODES
The Q-VISION Series provides a wide selection of operating modes (3 point, 2 point, 1 point) providing different levels of user flexibility. Technologists may assign their own custom selected techniques or may choose varying levels of automated control (APR) for precise imaging parameters.

In all operating modes, the user always has the capability to override any technique parameter individually, providing uncompromising flexibility and control.

ANATOMICAL PROGRAMMED RADIOGRAPHY (APR)
The APR mode allows the operator to simply select the desired examination by either selecting it from the body model or selecting it from the body list which cover all anatomical regions. APR mode will automatically select and set the typical technique factors including: kVp, mA, time (mAs), focal spot, AEC, SID and imaging receptor, while allowing the operator complete control to modify any parameter prior to exam.

The operator may choose to select patient size in groups (small, medium, large or pediatric,) or utilize the “cm” mode where the technician can input the actual patient thickness (in individual cm’s), thus providing the optimal selection of technique parameters for that exam.
With just the touch of the HELP button on the screen, you can easily access a wide variety of easy-to-use support services and information. From basic Quick Start info, to full documentation of all operators and service manuals right at your fingertips. Powerful tools guide the operator through basic operation. Support phone numbers, text messaging, e-mail contacts are just a touch away.

- Provides a quick overview of operation
- A quick reference to operator and technical manuals
- A quick animated representation of system workflow and features
- Technical guide to patient positioning and exam set up
- Provides full contact information to your regional dealer and service provider
- You can utilize the WEB - Based Remote Support and Service worldwide; via the built-in web browser
- Using a user password, key operators can also access complete History Reporting logs, change to another language and a host of other useful information.

**Positioning Guide**

The positioning guide includes 160 Radiographic Exams with expandable radiographs and positioning pictures for each exam. It also includes detailed instructions on how to position the patient, breathing instructions and what to look for in your resulting image.

**Remote Web Service**

The remote web service package provides quick and easy support using Quantum Viewer. The viewer is a software package which provides remote control, audio, video and file transfer capabilities between computers.
Quantum’s TechVision is truly an innovation for the Technologist. Technologists can use the color touch display to easily view and set up all technique parameters, as well as access set-up functions right at tube-side.

TechVision eliminates going back-and-forth from the generator’s Operator Control Panel to the patient, in order to prepare for patient exams. The operator has complete control to adjust exposure parameters right at the tube-side, just as if they were at the generator’s Operator Control Panel. This synchronized generator solution greatly streamlines the imaging process and decreases overall examination time, while allowing the technologist to remain close to the patient, for increased patient care.

**FEATURES:**
- Multi-Color (16 Bit; 800 x 600 Pixel; 8.4” display) Touch Screen
- Technologist controls generator technique selection at tube-side
- Full APR, AEC and Manual technique control
- Improved patient care, as technologist remains close to the patient during exam set-up procedure
- Improved patient through-put, by reducing steps taken by the technologist

All Quantum X-Ray systems are available for upgrade to TechVision.
**Q-VISION HF SERIES Generator Specifications**

**STORED ENERGY (SE) GENERATORS**

<table>
<thead>
<tr>
<th>Catalog #</th>
<th>QGV-80</th>
<th>QGV-65</th>
<th>QGV-50 (-2, -3)</th>
<th>QGV-40 (2, -3, -4)</th>
<th>QGV-32 (-2, -3, -4)</th>
<th>QGV-50-SE</th>
<th>QGV-40-SE</th>
<th>QGV-32-SE</th>
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</thead>
<tbody>
<tr>
<td>Model #</td>
<td>QG-80</td>
<td>QG-65</td>
<td>QG-50 (-2, -3)</td>
<td>QG-40 (2, -3, -4)</td>
<td>QG-32 (-2, -3, -4)</td>
<td>QGV-50-SE</td>
<td>QGV-40-SE</td>
<td>QGV-32-SE</td>
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<td>Power Rating (kW): DIN</td>
<td>80 kW</td>
<td>65 kW</td>
<td>50kW</td>
<td>40kW</td>
<td>32kW</td>
<td>50kW</td>
<td>50kW</td>
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<td>ULTRA High Frequency</td>
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<td>120 kHz PLUS</td>
<td>120 kHz PLUS</td>
<td>120 kHz PLUS</td>
<td>120 kHz PLUS</td>
<td>120 kHz PLUS</td>
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<tr>
<td>kVp Range (1 kVp steps)</td>
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<td>40-150 kVp</td>
<td>40-150 kVp</td>
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<td>150 kVp output</td>
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<td>option</td>
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<td>n/a</td>
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<tr>
<td>mA Range</td>
<td>25 - 800 mA</td>
<td>25 - 800 mA</td>
<td>.25 - 650 mA</td>
<td>25 - 500 mA</td>
<td>25 - 500 mA</td>
<td>25 - 500 mA</td>
<td>25 - 400 mA</td>
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<tr>
<td>Timer Range (seconds)</td>
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<td>.001-6.3 sec.</td>
<td>.001-6.3 sec.</td>
<td>.001-6.3 sec.</td>
<td>.001-6.3 sec.</td>
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<tr>
<td>mAs Range</td>
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<td>0.025-800 mAs</td>
<td>0.025-600 mAs</td>
<td>0.025-600 mAs</td>
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<tr>
<td>High (Dual) Speed Starter</td>
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<td>standard</td>
<td>option</td>
<td>option</td>
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<tr>
<td>APR Programs (Pre-programmed and Custom)</td>
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<td>(unlimited)</td>
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<td>(unlimited)</td>
<td>(unlimited)</td>
<td>(unlimited)</td>
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<td>Operational Modes</td>
<td>1. kVp/mAs/Time</td>
<td>1. kVp/mAs/Time</td>
<td>1. kVp/mAs/Time</td>
<td>1. kVp/mAs/Time</td>
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<td>2. kVp/mAs</td>
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<td>2. kVp/mAs</td>
<td>3. kVp with AEC (option)</td>
<td>3. kVp with AEC (option)</td>
<td>3. kVp with AEC (option)</td>
<td>3. kVp with AEC (option)</td>
<td>3. kVp with AEC (option)</td>
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<td>3. kVp with AEC (option)</td>
<td>3. kVp with AEC (option)</td>
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<td>3. kVp with AEC (option)</td>
<td>4. APR/Patient Type</td>
<td>4. APR/Patient Type</td>
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<td>4. APR/Patient Type</td>
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<td>n/a</td>
<td>n/a</td>
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<td>n/a</td>
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<td>Option</td>
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<tr>
<td>Three Phase Line: 380-480 VAC</td>
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<td>Three Phase Line: 208 VAC</td>
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<td>Option</td>
<td>Option</td>
<td>Option</td>
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</table>

Output power ranges may be limited by x-ray tube selection/AEC limits/incoming power line.

**Note:** All Q-VISION generators include a mini-control with on/off switch and Remote Exposure Hand Switch (R80-HS)

**GENERATOR OPTIONS:**
- Automatic Exposure Control (AEC) Electronics: (QG-AEC)
- High (Dual) Speed Starter: (Q-HSS); internal design
- TechVision synchronized operator control on hand grip (QG-TVC)
- Wall Mount for Q-VISION: (QGV-WM)

**STORED ENERGY (SE) GENERATORS**

Quantum’s advanced STORED ENERGY (SE) technology permits powerful operation using only a standard “low amperage” wall outlet or alternate power source. The SE’s power cells are virtually maintenance-free and provide years of usage. These units are ideal in facilities where incoming power is unavailable and for mobile imaging applications.

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**Specifications subject to change without prior notice.**

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