

Q-VISION HF SERIES

High Frequency X-Ray Technology



*Wide Screen Control
with Touch-Technology*



Q-VISION HF SERIES

The **Q-VISION Series™** integrates an innovative high frequency design along with superb functionality, resulting in revolutionary radiographic generator technology. These 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 Series™ 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

- HD+ LED-backlit Widescreen Display
- Intel® Core™ i3 Processor for Maximum Performance
- High-Definition Graphics
- Optimum Pixel Resolution
- Infrared Touch-Screen Technology
- Complete with Built-In Webcam and Microphone



Q-VISION TECHNOLOGY:

- Integrated design using advanced “Q-Bus” Technology, via Ethernet
- 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

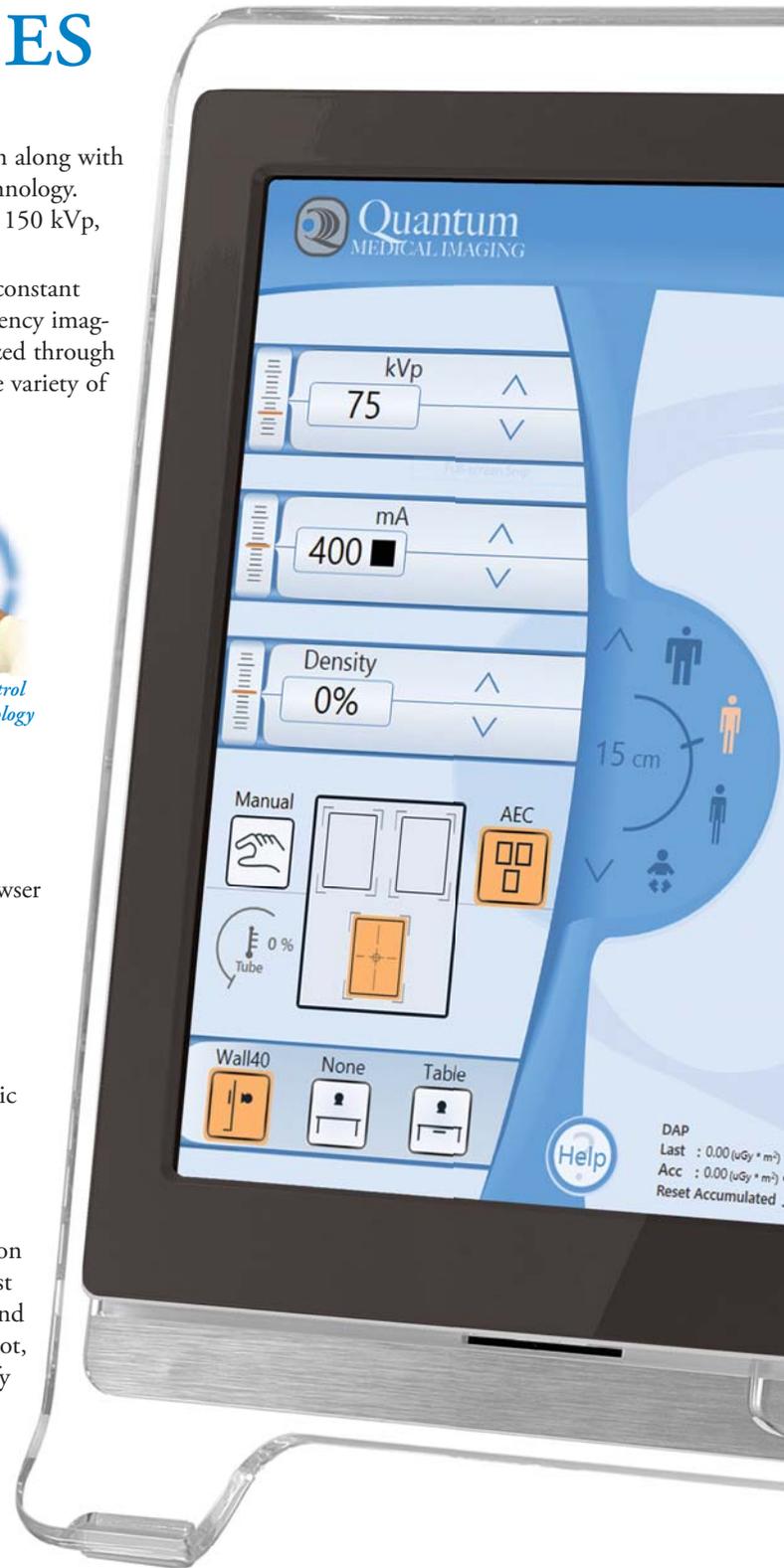
OPERATING MODES

The Q-VISION Series™ provides a wide selection of operating modes providing different levels of user flexibility such as **AEC MODE** (Automatic Exposure Control), **APR MODE** (Anatomical Programmed Regions) & **MANUAL MODE**.

ANATOMICAL PROGRAMMED RADIOGRAPHY (APR)

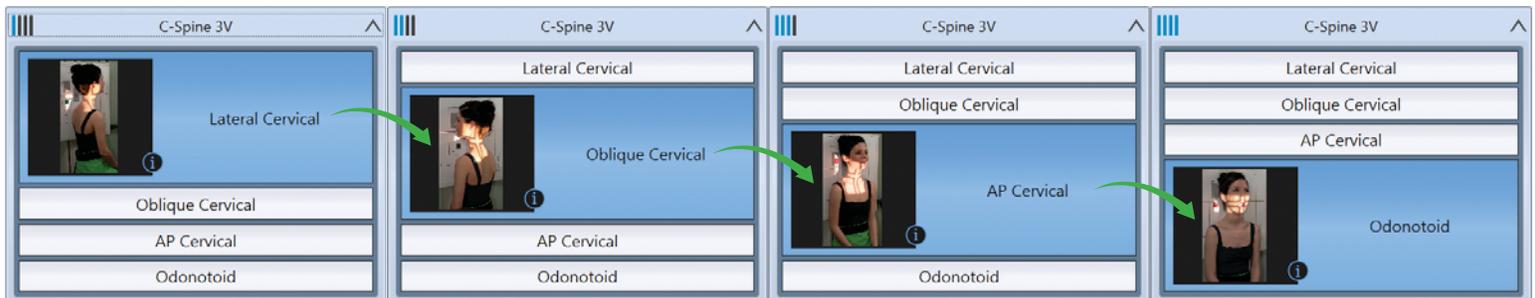
The APR mode allows the operator to simply select the desired examination by either selecting it from the body model or selecting it from the body list which cover all anatomical regions. APR mode will automatically select and set the typical technique factors including: kVp, mA, time (mAs), focal spot,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

The operator can select a patient size that includes: pediatric, small, medium, large 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.

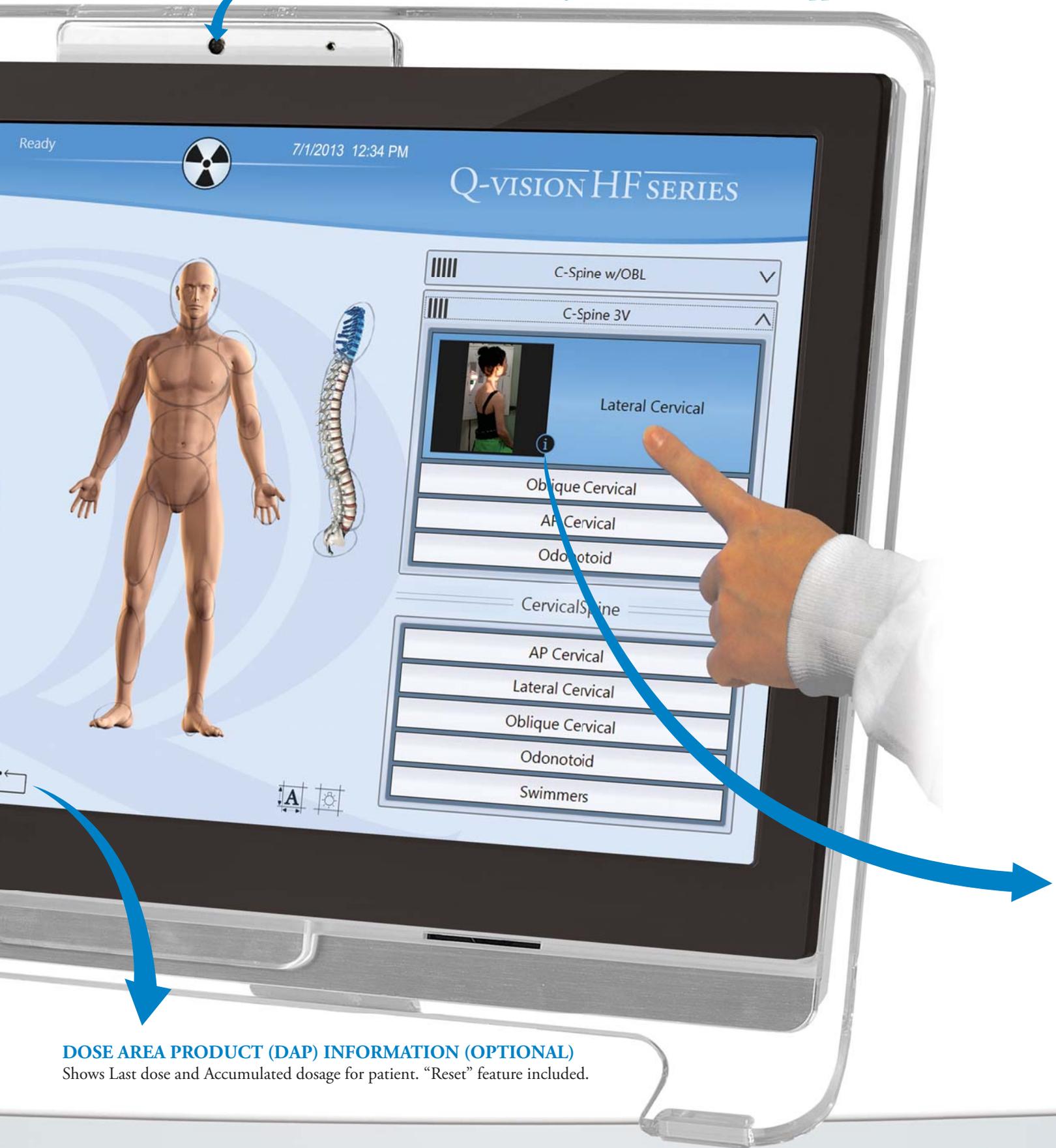


SEQUENCING OF PRE-PACKAGED PROCEDURE - There are four views pre-packaged into the selection C-Spine 3V shown below

*Note: An Automatic Sequence Control with a Positioning Guide Thumbnail will appear for each exposure in the cycle.



Built-in Web-Camera allows for direct contact with Support via internet.



DOSE AREA PRODUCT (DAP) INFORMATION (OPTIONAL)

Shows Last dose and Accumulated dosage for patient. "Reset" feature included.

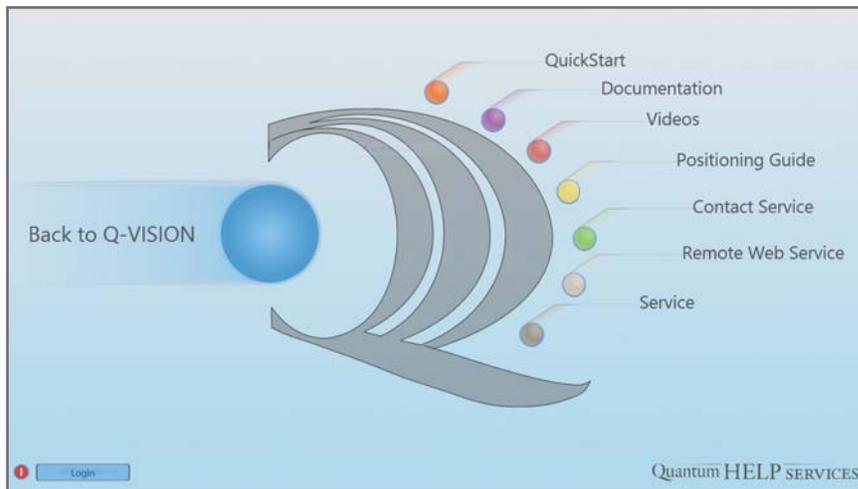
PRE-PACKED PROCEDURES

For the selected Anatomical Region will appear at the top of the Views list. After the exposure cycle has been completed, the exposed View window closes, and the Q-VISION system automatically cues the next View in the "pre-pack".

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

Q-VISION HELP SERVICES

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.



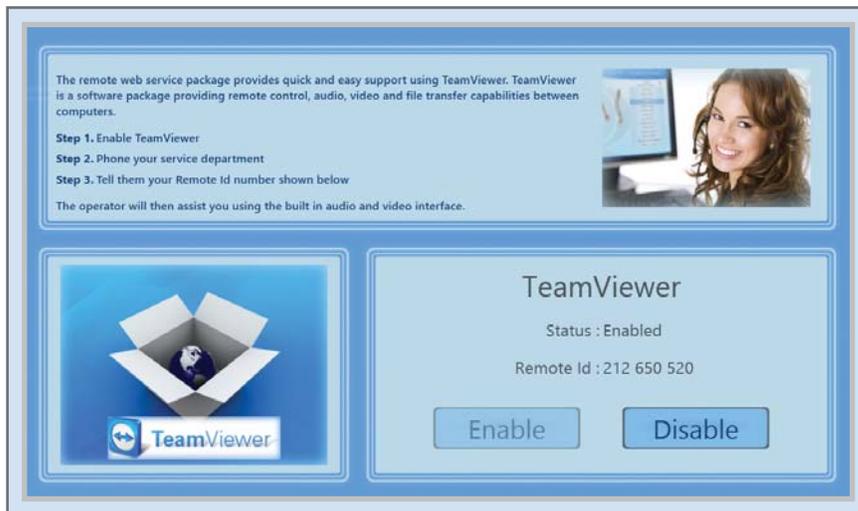
● **QuickStart** - Provides a quick overview of operation

● **Documentation**
A quick reference to operator and technical manuals

● **Videos**
A quick animated representation of system workflow and features

● **Positioning Guide**
Technical guide to patient positioning and exam set up

● **Contact Service**
Provides full contact information to your regional dealer and service provider



● **Remote Web Service**
You can utilize the WEB - Based Remote Support and Service worldwide; via the built-in web browser

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.

● **Service**
Using a user password, key operators can also access complete History Reporting logs, change to another language and a host of other useful information

ENHANCED 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.



LATERAL

Position of Patient:

1. Seated or supine, lateral position arms hanging by sides.
2. Use close collimation and practice ALARA.

Position of Body Part:

1. Midcoronal plane perpendicular to and centered to IR.
2. Shoulder resting against Bucky.
3. Chin slightly extended with shoulders relaxed and depressed as much as possible (using weights if necessary).
4. Cervical spine centered to IR at level of C4; top of IR approximately at top of ear attachment (TEA).

Breathing Instructions:

1. Suspended.

Image Receptor:

1. 8x10 inches (20x25 cm) or 10 x 12 inches (24x30 cm).
2. Use Bucky.

Central Ray Placement and Angle:

1. Perpendicular to IR entering C4 (laryngeal prominence).
2. SID: 40 inches (102 cm).

Image Quality Points(s):

1. C1 through C7 and portion of T1.
2. Left and right zygoapophyseal joints superimposed.
3. Chin extended so no superimposition of mandibular over cervical vertebrae.

Structure(s) Demonstrated:

1. Cervical spine in a lateral profile.

Control Exam Parameters
at Tube Side



Wide Screen Control with Touch-Technology



Tech Vision FEATURES:

- Multi-Color Touch Screen
- Technologist controls generator technique selection at tube-side
- Full APR, AEC and Manual technique control
- The ability to remain close to the patient during exam set-up procedure
- Improved patient through-put, by reducing steps taken by the technologist

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.

Control Exam
Parameters at
Tube Side



Patient Size



Parameters



View

Q-VISION HF SERIES *Generator Specifications*

						STORED ENERGY (SE) GENERATORS		
Model #	QGV-80	QGV-65	QGV-50 QGV-50-2	QGV-40 QGV-40-2 QGV-40-3	QGV-32 QGV-32-2 QGV-32-3	QGV-50-SE	QGV-40-SE	QGV-32-SE
Catalog #	QGV-80	QGV-65	QGV-50 QGV-50-2	QGV-40 QGV-40-2 QGV-40-3	QGV-32 QGV-32-2 QGV-32-3	QGV-50-SE	QGV-40-SE	QGV-32-SE
Power Rating (kW): DIN	80 kW	65 kW	50kW	40kW	32kW	50kW	40kW	32kW
ULTRA High Frequency	120 kHz PLUS	120 kHz PLUS	120 kHz PLUS					
kVp Range (1 kVp steps)	40 - 150 kVp	40 - 150 kVp	40 - 125 kVp	40 - 125 kVp	40 - 125 kVp			
40-150 kVp output	standard	standard	option	option	option	n/a	n/a	n/a
mA Range	25 - 800 mA	25 - 800 mA	25 - 630 mA	25 - 500 mA	25 - 500 mA	25 - 600 mA	25 - 500 mA	25 - 400 mA
Timer Range (seconds)	0.001 - 6.3 sec.	0.001 - 6.3 sec.	0.001 - 6.3 sec.					
mAs Range	0.1 - 800 mAs	0.1 - 800 mAs	0.1 - 800 mAs	0.1 - 600 mAs	0.1 - 600 mAs	0.1 - 500 mAs	0.1 - 500 mAs	0.1 - 400 mAs
APR Programs (Pre-programmed and Custom)	(unlimited)	(unlimited)	(unlimited)	(unlimited)	(unlimited)	(unlimited)	(unlimited)	(unlimited)
Operational Modes	1. kVp/mA/time 2. kVp/mAs 3. kVp with AEC (option) 4. APR/Patient Type	1. kVp/mA/time 2. kVp/mAs 3. kVp with AEC (option) 4. APR/Patient Type	1. kVp/mA/time 2. kVp/mAs 3. kVp with AEC (option) 4. APR/Patient Type	1. kVp/mA/time 2. kVp/mAs 3. kVp with AEC (option) 4. APR/Patient Type	1. kVp/mA/time 2. kVp/mAs 3. kVp with AEC (option) 4. APR/Patient Type	1. kVp/mA/time 2. kVp/mAs 3. kVp with AEC (option) 4. APR/Patient Type	1. kVp/mA/time 2. kVp/mAs 3. kVp with AEC (option) 4. APR/Patient Type	1. kVp/mA/time 2. kVp/mAs 3. kVp with AEC (option) 4. APR/Patient Type
Input Line:	50/60 Hz	50/60 Hz	50/60 Hz					
Single Phase Line: 208-260 VAC; +/- 5%	n/a	n/a	n/a	Standard	Standard	All STORED ENERGY (SE) GENERATORS require a standard power input (50/60 Hz) of either: 105-130 VAC, 10 Amp +/- 10% or 220-240 VAC, 10 Amp +/- 10%		
**Three Phase Line: -3 380-480 VAC; +/-10%	Standard	Standard	Standard	Option	Option			
Three Phase Line: -2 208 VAC; +/- 5%	n/a	n/a	Option	Option	Option			

Output power ranges may be limited by x-ray tube selection/AEC limits/incoming power line.
 **High (Dual) Speed Starter (Only Available with the Three Phase Line: -3 380 - 480 VAC; +/-10%)

*Specifications subject to change without prior notice.

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)
- Dose Area Product (DAP) Information

**Q-VISION SERIES™
GENERATORS**

**INCLUDE A MINI CONTROL
WITH ON/OFF SWITCH AND
REMOTE EXPOSURE HAND
SWITCH (R80-HS)**





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.

