Cardiac Gating Monitor

Nuclear Medicine/Molecular Imaging

Model 7600

Key Features

- Precision ECG R-wave peak detection
- Synchronized ECG trigger outputs
- 4 lead ECG configuration with auto lead selection
- Built-in ECG Simulator
- On-screen color coded trigger pulse indication
- Compact design
- Multi-language user interface
- Patient isolation/protection
- Optional strip chart recorder
- Universal power supply/voltage
- FDA 510(k) & CE Mark

Product Description

The Ivy Biomedical Systems' Model 7600 is our fifth generation of cardiac gating monitors. It is ideal for use in applications requiring precision ECG R-wave synchronization such as with gamma cameras, nuclear medicine, and molecular imaging systems for cardiac studies.

Value added features such as automatic ECG lead selection ensures that the best trigger vector will be used, while a built-in ECG simulator allows for pre-scan testing of the entire system. An optional strip chart recorder is also available for hardcopy documentation of ECG rhythms.

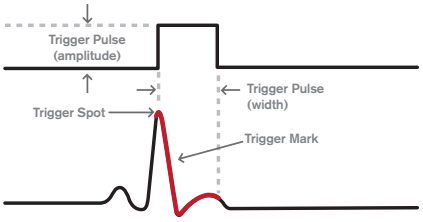
Ivy Biomedical System's renowned high quality and reliability ensure consistent uptime and long operational life.

Technical Specifications

Model 7600

Synchronized ECG Trigger Output*

Trigger Delay	< 2ms
R-to-R Accuracy	±75µs dither (typ.) @ 1mV input
Pulse Width**	1, 50, 100 or 150 ms
Pulse Amplitude**	0V to +5V or -10V to +10V
Pulse Polarity**	Positive or Negative
Output Impedance	< 100 Ω



* Input signal test conditions: ½ sine wave, 60ms width, 1mV amplitude, 1 pulse/sec;
** Pre-configured at the factory only

ECG

Configuration	4-Lead system
Trigger Lead Selection	I, II, III, or AUTO
Second Lead Display	I, II, III
ECG Simulator	Integrated
Patient Isolation	>4 kV rms, 5.5 kV peak
Frequency Response	0.67 - 100Hz unfiltered 1.5-40Hz Filtered
Notch Filter	50/60 Hz (auto)
CMRR	≥ 90dB
Tall T-wave Rejection	≤ 1.2 * R-wave
Pacer Rejection (user on/off)	0.1 to 2ms pulse width @ ±2 to ±700 mV
Defibrillator Protection	360 J discharge; < 5 sec recovery time (Type CF)

Cardiotach

Adult	10-300 bpm
Pediatric/Neonate	10-350 bpm
Accuracy	±1% ±1 bpm
Resolution	1 bpm
Sensitivity	300 µV peak
HR Averaging	Exponential @ 1Hz; 2 or 8 sec max response time

Alarms

High HR Limit	15-250 bpm (5 bpm inc.)
Low HR Limit	10-245 bpm (5 bpm inc.)
Asystole	R-to-R interval > 6 sec
ECG Lead Off	Each detached lead
Check ECG Lead	Lead imbalance > 0.5V

(Specifications subject to change without notice)

Display

Waveform	Dual trace; Freeze
Type	Active Matrix TFT Color Touch Screen LCD
Resolution	640x480 pixels
Size	6.5" (16.5 cm) diagonal

Input/Output Interface

Synch Output	BNC; Provides trigger pulse output synch to ECG R-wave peak
ECG Output	¼" stereo jack; Provides trigger pulse output synchronized to ECG R-wave peak as well as analog ECG waveform output
RS-232 Comm	Micro DB-9 device interface

Mechanical

Size (HxWxD)	19.0x20.2x13.2 cm (7.5x7.9x5.2 inches)
Weight	1.8 kg (3.9 lbs.)
Case Material	Lexan®

Electrical

Input Voltage	100-120Vac; 200-230Vac
Frequency	50/60 Hz
Power Consumption	45 VA (max.)
Power Recovery	Auto if power restored within 30 seconds

Environmental

Water Resistance	IPX1
Operating	
Temperature Range	5°C to 40°C
Relative Humidity	0% to 90% non-condensing
Altitude	-100m to +3,600m
Storage	
Temperature Range	-40°C to +70°C
Relative Humidity	5% to 95% non-condensing
Altitude	-100m to +14,000m

Options

Integrated Recorder	2 trace, direct thermal
Mounting Plate	3" adaptor for rollstand
Roll Stand	with 3" receiver plate

For additional specifications, refer to Operator Manual

CE 0413

Accessories

Electrodes	Low impedance; 10% KCl wet gel sponge type
ECG Leads	4-lead metallic with pinch clips; AHA or IEC color code; 24", 30" or 36" lengths available
Patient Cable	10' cable with 6-pin AAMI connector

Globalization

User Interface	12 selectable languages
Operator's Manual	33 languages on CD
Registrations	Multiple countries

Compliance & Certifications

ANSI/AAMI ES60601-1:2005
CAN/CSA C22.2 No 601.1-M90:2005
CAN/CSA C22.2 No 60601-1:2008
CDN MDR (CMDCAS)
CE 0413
EAC
IEC 60601-1 2nd edition
IEC 60601-1 3rd edition
IEC 60601-2-27
ISO 13485:2003
FDA
MDD 93/42/EEC
RoHS 2011/65/EU
UL 60601-1 1st edition
WEEE 2012/19/EC

Notified Body

Intertek Semko AB
Identification Number 0413
MDD Classification IIb

Authorized Representative

Emergo Europe

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P/N: 3284-00-16 Rev 08 EN
November 13, 2016