



Welch Allyn® PIC 50™ Multiparameter Monitor/Defibrillator

The Welch Allyn PIC 50 system is an innovative, reliable monitor/defibrillator. Intelligently designed for the user, the Welch Allyn PIC 50's controls and menus are easy to use. Welch Allyn's innovative platform makes it possible for upgrades to be performed at any time in the field.

Welch Allyn Portable Intensive Care System

- Lightweight
- Rugged transport unit designed for both out-of-hospital and hospital users
- Simple operation with dedicated controls for monitor, defibrillator, pacing and treatment summary
- Innovative design to allow custom configurations and future upgrades
- Communication options include: cellular transmission, fax and data card transfer

Standard

- 12-lead ECG
- Defibrillator
- SpO₂

Options

- Pacing
- NIBP
- Temperature
- Communication
- 12-lead ECG interpretation
- AED
- Invasive BP (2 channels)
- Mainstream EtCO₂

The PIC 50 is part of Welch Allyn's complete range of diagnostic and therapeutic cardiology products. From defibrillators, to monitors, to ECGs, to Holters, to automated blood pressure monitors and more—you can count on Welch Allyn cardiac products to meet your every need.

WelchAllyn®

Advancing Frontline Care™

DEFIBRILLATOR

Waveform:

Biphasic: Low-current, impedance-compensated, optimized terminating current, truncated exponential biphasic

Energy Select:

External: 2, 5, 7, 10, 20, 30, 50, 70, 100, 150, 200, 300, 360 J

Charge Time:

< 10 seconds @ 360 J (typical)

Charge Indicator:

Audible and graphic

Output:

Adult paddles, internal paddles, pediatrics adapter and multipurpose hands-free adapter available.

Synchronizer:

Delivers energy within 60 msec

Disarm:

Front panel switch

MONITOR/DISPLAY

Input: 12-lead PIC: 12-lead patient cable, paddles or multipurpose hands-free adapter

Size: 6.4", (16.3 cm) diagonal, non-fade

Type: Color active matrix TFT display

Display Resolution: 640 x 480 pixels

Sweep Speed: 25 mm / sec

Lead Selections: Paddles (Pads), I, II, III, AVR, AVL, AVF, V

Frequency Response: (User-selectable)

- 2 to 20 Hz Limited mode
- 0.67 to 40 Hz Monitor mode
- 0.25 to 40 Hz Filtered Diagnostic mode
- 0.05 to 150 Hz Diagnostic mode (automatically sets chart recorder response)

Common Mode Rejection: 90 dB (Complies with AAMI EC13-1992 section 3.2.9.10)

Heart Rate Meter: 20 to 300 BPM

Heart Rate Alarms: User-selectable

Size: 0.125, 0.25, 0.5, 1, 2, 4 cm/mV and auto-sizing

ECG Output: 1 V/mV

RECORDER

Type: High-resolution thermal array

Annotation: Time, date, ECG lead, ECG gain, heart rate, defibrillation and pacing parameters and treatment summary ACLS events

Paper Width: 50 mm

Paper Speed: 25 mm/sec, 50 mm/sec

Delay: 6 seconds

Frequency Response: Automatically set to monitor's frequency response

Treatment Summary: 7 switches to record key ACLS events (IV, INTUB, EPI, LIDO, ATROP, etc.).

Automatically logs into memory the type of event, time and ECG sample

Tx Summary Log: 60 ECG events or 4,000 non-ECG events

Record Modes: Manual and automatic

Voice Memo™ (optional): Quickly and easily records operator's voice into the internal memory

Record Modes: Manual & automatic (user configurable)

BATTERY

High-Capacity Type: NiMH 12 V Welch Allyn SuperPac®

Low-Battery Indicator: Flashing low-battery icon on display

Multiple Paired Contacts: Ensure quick, error-free insertion and backup reliability

Recharge Rate*: 80% in 7.5 hours, 100% in 9.5 hours
* (For high-capacity batteries)

GENERAL

Weight: 13.2 lbs (6.0 kg) (with battery)

Size: Maximum dimensions: 13.2" (L) x 12.6" (W) x 5.4" (H)
33.5 cm (L) x 32 cm (W) x 13.7 cm (H)

Operating: 3.0 hours of continuous ECG monitoring or 110 shocks at 360 joules (typical)

Actual operating times will vary according to the condition of the battery and the number of additional options activated

Temperature*: 0 to 45°C

Humidity* (NC): 15 to 95% RH

Vibration*: MIL-STD 810E

Shock / Drop*: MIL-STD 810E

Altitude: Up to 15,000 feet (4,572 m)

Transport and Storage: Temperature (-30 to 70°C), humidity (15 to 95% noncondensing), atmospheric pressure (860 to 1060 hPa), shock/vibration (ISTA 1A)

Enclosure Protection*:

Solid Foreign Object: IEC 529, IP2X

Water: IEC 529, IPX4

* All tests performed per AAMI DF-2 Defibrillation Standard

Operating Power: SuperPac®, auxiliary AC power supply, 12 V vehicle adapter

12-LEAD

Acquired 12-lead: I, II, III, AVR, AVL, AVF, V1- V6 acquired simultaneously

Transmitting: Optional fax/modem; 10 seconds of ECG (12 leads)

Printing: 3 second samples of 12 leads

12-lead Interpretation (optional): Provides interpretation statements and measurements. Also provides Welch Allyn's exclusive on-screen display and review of interpretation results

PULSE OXIMETER

Measurement Range: 31 to 99%

Heart Rate Range: 30 to 250 BPM ± 5% or 5 BPM (whichever is less)

Accuracy: 81 to 99% = ± 2%, 70 to 80% = 3%, 0 to 69% unspecified

Update Period: Every pulse after 4 valid pulses

Messages: Check Probe, Searching, Signal OK, No Signal, Poor Signal, Alarms Enabled/Disabled (icon), Testing

Alarm Limits: 60 lower limit, 70 upper limit to 99%.

Probe: Reusable finger or multisite probe

PACER (option)

Type: External transcutaneous pacing.

Pacer Rate: 30 to 180 BPM ± 5%

Output Current: 30 to 180 mA ± 10% or 5 mA (whichever is greater)

Modes: Demand and asynchronous

Status Indicators: ECG lead fault, pace lead fault, pace marker on monitor and chart, start/stop LED

Pulse Type: Rectangular, constant current

Pulse Width: 20 ms

Refractory Period: 250 ms

Output Protection: 360 joules

IBP (option)

2 Channels: Systolic, Diastolic, MAP, and waveform displays

Pressure Range: -30 to 300 mmHg

Accuracy: 2%

Transducer: 5µV/V/mmHg

Offset Imbalance: ±125 mmHg, including transducer offset

CO₂ (option)

Mainstream CO₂: CO₂ and EtCO₂ display

Range: 0 to 76 mmHg

Accuracy: + 4 mmHg (< 40 mmHg), + 10% (> 40 mmHg)

Resolution: 1 mmHg

Respiration Range: 3 - 60 BPM

NIBP (option)

Technique: Noninvasive oscillometric method, referenced to auscultatory standard, using the 5th Korotkoff sound as the diastolic reference

Operating Modes: Automatic and manual

Initial Cuff Inflation: Adult and child: 154 mmHg, Infant: 125 mmHg

Automatic Cycle Times: 1, 2, 3, 5, 10, 30 minute intervals

Blood Pressure Range: Systolic: 30 to 245 mmHg, Diastolic: 10 to 210 mmHg

Heart Rate Range: 30 to 200 BPM ± 10% or 5 BPM

Blood Pressure Accuracy: +5 mmHg mean error, +8 mmHg standard deviation

Blood Pressure Validation: Blood pressure measurements determined with this device are equivalent to those obtained by a trained observer using the cuff/stethoscope auscultation method within the limits prescribed by the American National Standards Institute

Alarms: Artifact, check cuff, tighten cuff, cuff leak, motion

Alarm Limits: Systolic: 30 to 250 mmHg

Diastolic: 25 to 250 mmHg

TEMPERATURE (option with NIBP)

Measurement Range: 32° to 122°F (0° to 50°C)

Accuracy: 0.3°F (± 0.2°C)

Resolution: 0.1°F (0.1°C)

Scale: Fahrenheit or Celsius

Probe: YSI Series 400

Alarm Limits: High 99-109 °F (37° to 43°C); low 85-98°F (29° to 36°C) alarm limits

AED (option)

Configurable: Basic & Basic+ modes

Operation: Continuous analysis of ECG advises shock on VFIB, shockable VTACH

Energy Sequence: User configurable
Monophasic: 200/200/360 J or 200/300/360 J
Biphasic: 150/200/300/360 J

Factory Default: Monophasic: 200/300/360 J

Biphasic: 150/200/300 J

Prompts: Audible voice and visual text prompts

Ordering Information*

971083E—PIC 50, 12-lead, SpO₂

971084E—PIC 50, 12-lead, SpO₂, and NIBP

**Other configurations are available. Contact your local Welch Allyn representative.*