



FOR  
PHYSICIANS



FOR  
HOSPITALS

CP 50 ELECTROCARDIOGRAPH  
SPECIFICATIONS



## Welch Allyn CP 50™ Electrocardiograph



### Advanced ECG features that fit your facility and your budget

Get the speed and power of a fully-featured ECG in a compact, portable, easy-to-use size with the new Welch Allyn CP 50 electrocardiograph. With simple, one-button operation, the CP 50 makes performing and assessing ECG tests easy for trained caregivers of all skill levels and experience. And with advanced features like a reliable touchscreen display, high-resolution thermal printer, and a full range of connectivity solutions, the CP 50 gives you the performance your facility needs at a price that fits your budget.



#### CP 50™

- Reliable touchscreen display
- Optional MEANS interpretation
- High-resolution thermal printer
- 'Instant-on' button

#### CP 50™ Plus with Connectivity

- Includes all of the features of the CP 50, plus
- Flexible connectivity options: EHR, HIS, email, web, telemedicine
- External printing capability
- Programmable patient entry fields



#### Accessories

AHA, IEC, Reusable/Disposable electrodes

**WelchAllyn**®

Advancing Frontline Care™

For more information, contact your local Welch Allyn representative or visit [www.welchallyn.com/CP50](http://www.welchallyn.com/CP50)

## CP 50 Technical Specifications

Dimensions L x H x W	32.5 cm (12.8 in) x 8 cm (3.1 in) x 18.8 cm (7.4 in)	
Weight	2.0 kg (4.4 lb)	
Keyboard type (power, auto ECG, and rhythm ECG buttons)	Polyester overlay	
Display	Type	TFT, 11 cm (4.3 in) color touchscreen
	Resolution	WQVGA, 480 x 272
Thermal paper	Z-fold	11.4 cm (4.5 in.) x 250 sheets
	Roll	11.4 cm (4.5 in.) x 20 m (65.6 ft)
Thermal printer (internal)	Computer-controlled dot array, 8 dots/mm	
Thermal chart paper speeds	10, 25, 50 mm/s	
Gain settings	Auto ECGs	2.5, 5, 10, 20 mm/mV, AUTO
	Rhythm ECGs	2.5, 5, 10, 20 mm/mV
Lead configurations	Standard, Cabrera	
Report print formats—Internal thermal printer	Auto ECGs	3x4, 3x4 + 1R, 2x6
	Rhythm ECGs	3 leads
	Average cycles	3x4 + 3R @ 25 mm/s, 3x4 + 3R @ 50 mm/s, 2x6 + 1R @ 25 mm/s, 2x6 + 1R @ 50 mm/s
Report print formats—Compatible External Inkjet or Laser	Auto ECGs	3x4, 3x4 + 1R, 2x6, 3x4 + 3R, 6x2, 2x6, 12x1
	Average cycles	3x4 + 3R @ 25 mm/s, 3x4 + 3R @ 50 mm/s, 2x6 + 1R @ 25 mm/s, 2x6 + 1R @ 50 mm/s, 3x4 + 2R @ 25 mm/s, 3x4 + 2R @ 50 mm/s, 6x2 + 2R @ 50 mm/s
Frequency range	0.3 to 150 Hz	
Digital sampling rate	> 1,000 samples/second/channel	
Pacemaker detection	ANSI/AAMI EC11	
Power requirement	Universal AC power supply ~110–240 V, ~50/60 Hz, 1.5 A maximum	
AC fuses	Time-log type, 2.0-amp 250-V rating, Littlefuse 0218002P or equivalent	
Rechargeable battery	10.8 V, 2000 mAh, 3-cells Li-Ion “smart” battery. Recharge time < 3 hours	
Filters	High-performance baseline	0.5 Hz
	Muscle tremor	35 Hz
	AC interference	50 Hz or 60 Hz
Internal ECG Storage	Up to 25 ECGs	
External ECG Storage	Unlimited via USB connection	
Safety, EMC, and regulatory compliance	ANSI/AAMI EC11*	UL60601-1
	CAN/CSA C22.2 No. 601.1	IEC/EN 60601-1
	CAN/CSA C22.2 No. 601.1.1	IEC/EN 60601-1-1
	CAN/CSA C22.2 No. 601.1.2	IEC/EN 60601-1-2
	CAN/CSA C22.2 No. 601.1.4	IEC/EN 60601-1-4
	CAN/CSA C22.2 No. 601.2.25	IEC/EN 60601-1-6 IEC/EN 60601-2-25 IEC/EN 60601-2-51 (2x6 lead arrangement)
Standard connectivity	Mini USB Client and USB Host	
	Ethernet [CP 50 Plus version only]	
Connectivity with electronic medical records (CP 50 Plus only)	Through the Welch Allyn CardioPerfect™ Workstation software	
Electrodes	Rigorously tested for conductivity, adhesion, and hypoallergenic qualities; exceed all AAMI standards	
Power cable	Meets or exceeds Type SJT	
Patient cable and leads	Meets or exceeds ANSI/AAMI EC53, EN/IEC 60601-2-25 and EN/IEC 60601-2-51	
Environmental operating conditions	Temperature	+10° C to +40° C (+50° F to +104° F)
	Relative humidity	15 - 95% noncondensing (30 - 70% for printing)
	Atmospheric air-pressure limits	700 – 1060 hPa
Environmental storage conditions	Temperature	-20° C to +50° C (-4° F to +122° F)
	Relative humidity	15 - 95% noncondensing
	Atmospheric air-pressure limits	700 – 1060 hPa
Protection against electric shock	Class I, internally powered Type BF	
Mode of operation	Continuous	

\* Per AAMI EC11:1991(R)2001 Diagnostic Electrocardiographic Devices, Section 3.1.2.1 Disclosure of cautionary information/performance characteristics paragraph c) Accuracy of input signal reproduction, the manufacturer shall disclose the methods used to establish overall system error and frequency response. Welch Allyn has used methods A & D, as prescribed in section 3.2.7.2 and 4.2.7.2 of this same standard, to verify overall system error and frequency response. Because of the sampling characteristics and the asynchronism between sample rate and signal rate, digital ECG systems such as the CP 50 may produce a noticeable modulating effect from one cycle to the next, particularly in pediatric recordings. This phenomenon is not physiologic. Specifications are subject to change without notice.