SECTION 11 72 13

PATIENT EXAMINATION EQUIPMENT

Display hidden notes to specifier. (Don't know how? [Click Here](https://www.arcat.com/sd/display_hidden_notes.shtml))

*Copyright 2017 - 2024 ARCAT, Inc. - All rights reserved*

\*\* NOTE TO SPECIFIER \*\* Hillrom, Welch Allyn Division; patient examination equipment.  
This section is based on examination products of Welch Allyn, a Division of Hillrom, and exam lights and lighting systems of Hillrom; health care industry products and solutions:  
Welch Allyn, a Division of Hillrom  
4341 State Street Road  
Skaneateles Falls, NY 13153  
USA  
Toll Free: 1-800-535-6663  
 [www.welchallyn.com](http://www.welchallyn.com)   
  
[ [Click Here](https://arcat.com/company/hillrom-a-baxter-company-49149) ] for additional information.  
  
Hillrom is a leading worldwide manufacturer and provider of medical technologies and related services for the health care industry, including patient support systems, safe mobility and handling solutions, non-invasive therapeutic products for a variety of acute and chronic medical conditions, medical equipment rentals, surgical products and information technology solutions. Hillrom's comprehensive product and service offerings are used by health care providers across the health care continuum and around the world in hospitals, extended care facilities and home care settings to enhance the safety and quality of patient care.  
Hillrom: Enhancing outcomes for patients and their caregivers.

1. GENERAL
   1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for the project.

* + 1. Scales.
    2. Physical exam equipment sets and systems.
    3. Cardiopulmonary exam equipment.
    4. Medical exam lights and illumination systems.
  1. RELATED SECTIONS
     1. Section 27 52 13 - Patient Monitoring Equipment.
     2. Section 11 73 00 - Patient Care Equipment
     3. Section 11 73 00 - Patient Care Equipment.
     4. Section 11 76 00 - Operating Room Equipment and Management Systems
     5. Section 27 52 00 - Health Care Communications and Monitoring Systems.
  2. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. Association for the Advancement of Medical Instrumentation (AAMI).
    2. American National Standards Institute (ANSI):
       1. ANSI/AAMI EC11 - Diagnostic Electrocardiographic Devices.
       2. ANSI/AAMI EC53 - ECG Trunk Cables and Patient Leadwires.
       3. ANSI/AAMI SP10 - Manual, Electronic, or Automated Sphygmomanometers.
    3. Australian and New Zealand Standard (AS/NZS):
       1. AS/NZS 3200.1.01 - Medical Electrical Equipment - Part 1.0: General Requirements for Safety - Parent Standard.
    4. ASTM International (ASTM):
       1. ASTM D4332 - Standard Practice for Conditioning Containers, Packages, or Packaging Components for Testing.
       2. ASTM E1104 - Standard Specification for Clinical Thermometer Probe Covers and Sheaths.
    5. CSA Group (CSA):
       1. CAN/CSA C22.2 No 125 - Electromedical Equipment.
       2. CAN/CSA C22.2 NO.601.1-M90 - Medical Electrical Equipment Part 1: General Requirements for Safety.
       3. CAN/CSA C22.2 No. 601.1.1 - Medical Electrical Equipment - Part 1: General Requirements for Safety - 1. Collateral Standard Safety Requirements Fort Medical Electrical Systems.
       4. CAN/CSA C22.2 No. 601.1.2 - Medical Electrical Equipment - Part 1: General Requirements for Safety - 2. Collateral Standard: Electromagnetic Compatibility - Requirements and Tests.
       5. CAN/CSA-C22.2 No.60601-1-2 - Medical Electrical Equipment - Part 1-2: General Requirements for Basic Safety and Essential Performance - Collateral Standard: Electromagnetic compatibility - Requirements and Tests (IEC 60601-1-2 with Canadian Deviations).
       6. CAN/CSA Z9919 - Medical Electrical Equipment Particular Requirements for the Basic Safety and Essential Performance of Pulse Oximeter Equipment for Medical Use.
    6. European Commission (EEC).
    7. European Standards (EN):
       1. EN 1041 Information Supplied by the Manufacturer of Medical Devices.
       2. EN 1060-1 - Non-Invasive Sphygmomanometers. General requirements.
       3. EN 1060-3 - Non-Invasive Sphygmomanometers. Supplementary Requirements for Electro-Mechanical Blood Pressure Measuring Systems.
       4. EN/IEC 60601-1 - Medical electrical equipment - Part 1: General requirements for basic safety and essential performance.
       5. EN/IEC 60601-1-2 - Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests.
       6. EN/IEC 60601-1-6 - Medical electrical equipment - Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Usability.
       7. EN/IEC 60601-1-8 - Medical electrical equipment - Part 1-8: General requirements for basic safety and essential performance - Collateral Standard: General requirements, tests and guidance for alarm systems in medical electrical equipment and medical electrical systems.
       8. EN/IEC 60601-2-25 - Medical electrical equipment - Part 2-25: Particular requirements for the basic safety and essential performance of electrocardiographs.
       9. EN/IEC 60601-2-49 - Medical electrical equipment - Part 2-49: Particular requirements for the basic safety and essential performance of multifunction patient monitoring equipment.
       10. EN/IEC 62304 - Medical Device Software - Software Life Cycle Processes.
       11. EN/ISO 9919 - Medical electrical equipment - Particular requirements for the basic safety and essential performance of pulse oximeter equipment for medical use.
       12. EN/ISO 13485 - Medical devices - Quality management systems - Requirements for regulatory purposes.
       13. EN/ISO 14971 - Medical devices - Application of risk management to medical devices.
    8. Federal Communications Commission (FCC):
       1. FCC Part 15 Subpart C: - Intentional Radiators. The FCC definition is "A device that intentionally generates and emits radio frequency energy by radiation or induction."
    9. Innovation, Science and Economic Development Canada (ICES):
       1. CES-003 Information Technology Equipment (Including Digital Apparatus) Limits and Methods of Measurement.
    10. International Electrotechnical Commission (IEC):
        1. IEC 601-1 - Part 1: General Requirements for Safety, Medical Electrical Equipment.
        2. IEC 60601-1 and A1 Medical Electrical Equipment - Part 1: General Requirements for basic safety and essential performance.
        3. IEC 60601-1-11 Medical Electrical Equipment - Part 1-11: General Requirements for Basic Safety and Essential Performance - Collateral Standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment.
        4. IEC/EN 60601-1-2 Medical Electrical Equipment - Part 1-2: General Requirements for Basic Safety and Essential Performance - Collateral standard: Electromagnetic compatibility - Requirements and Tests.
        5. IEC/EN 62304 and AC Medical Device software - Software Life Cycle Processes.
        6. IEC 62366 Medical Devices - Application of Usability Engineering to Medical Devices.
        7. IEC 60601-1-6 Medical Electrical Equipment - Part 1-6: General Requirements for Basic Safety and Essential Performance - Collateral Standard: Usability.
    11. International Organization for Standardization (ISO):
        1. ISO/EN 14971 - Medical Devices. Application of Risk Management to Medical Devices.
        2. ISO/EN 15223-1 Medical Devices. Symbols to be Used with Medical Device Labels, Labeling and Information to be Supplied. General Requirements.
        3. ISO 10993 Biocompatibility Testing.
    12. International safe Transit Association (ISTA):
        1. ISTA 2A - Partial Simulation Performance Tests.
    13. National Fire Protection Association (NFPA):
    14. European Medical Devices Directive (MDD):
    15. Underwriter's Laboratories (UL:
        1. UL 544 - UL Standard for Safety Medical and Dental Equipment.
        2. UL 60601-1 - Medical Electrical Equipment, Part 1: General Requirements for Safety.
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
     2. Product Data: Manufacturer's data sheets on each product to be used, including:
        1. Source quality certificates.
        2. Pre-Installation Manual: Preparation instructions and recommendations.
        3. Installation Manual: Storage and handling requirements and recommendations.
        4. Installation Manual: Installation methods.
        5. Service Manual: Maintenance and operations data.
     3. Shop Drawings: Include system components, utility requirements and connections, relationship with adjacent construction. Include required clearances and access for servicing.
        1. Communications wire labeling schedules.
        2. Communications wiring diagrams.
        3. Plans and elevations of telecommunications room.
        4. Pathways.
        5. Access points.
        6. Grounding.
        7. MEP systems.
  2. QUALITY ASSURANCE
     1. Regulatory Requirements: Comply with requirements of authorities having jurisdiction and applicable codes at the location of the project.
     2. Manufacturer Qualifications: Minimum 5 years' experience manufacturing similar products.
     3. Installer Qualifications: Minimum 2 years' experience installing similar products.
  3. DELIVERY, STORAGE, AND HANDLING
     1. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.
     2. Comply with manufacturer's recommendations. Handle materials to avoid damage.
  4. PROJECT CONDITIONS
     1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
  5. WARRANTY
     1. Provide manufacturer's standard limited warranty.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: Welch Allyn, a Division of Hillrom 4341 State Street Road, Skaneateles Falls, NY 13153. ASD. Toll-Free: 800-535-6663. www.welchallyn.com.

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
    2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. SCALES

\*\* NOTE TO SPECIFIER \*\* Delete paragraph if not required.

* + 1. Basis of Design: Welch Allyn Remote Monitoring Scale RPM-Scale100 as Manufactured by Hillrom.
       1. Provides accurate measurements for telemedicine applications. Design includes a built-in carrying handle, sense-on technology, records, transmits and displays patient's weight via LCD. May be wirelessly connected to gateway using Bluetooth 4.0.
       2. Standards Compliance:
          1. FCC Part 15: Class B digital device.
          2. ICES-003: Class B digital apparatus.
          3. EN-1041.
          4. IEC 60601-1 and A1.
          5. IEC 60601-1-11.
          6. IEC 60601-1-2.
          7. IEC/EN 62304 and AC.
          8. IEC 62366.
          9. IEC 60601-1-6.
          10. ISO/EN 14971.
          11. ISO/EN 15223-1.
          12. ISO 10993.
       3. Physical characteristics:
          1. Dimensions (L x W x H): 14-3/16 x 16-1/16 x 1-9/32 in (360 x 408 x 32.5 mm) with optional carpet extension feet.
          2. Net Weight: 6.06 lbs (2.75 kg).
          3. No-slip surface.
          4. Number of load sensors: 4.
          5. Battery compartment: behind cover.
          6. Unit and Activation Button.
          7. Casing Material: Stainless steel.
       4. Mode of Operation: Continuous.
          1. Turns on when patient steps on scale.
          2. Turns of 15 seconds after patient steps off scale.
          3. Memory storage for 200 readings.
       5. Power Supply: 6 V, four DC AAA alkaline batteries.
       6. Display Mode: Blue LCD with White Backlight: 2.9 x 2.1 in (74 x 53 mm).
       7. Display Features: Weight, battery charge, bluetooth status.
       8. Units of Measure: Pounds and kilograms.
       9. Measurement Range: 11 to 441 lbs (5 to 200 kg).
       10. Scale Resolution:
           1. From 0 to 220 lbs: 0.2lbs (0 to 100 kg: 0.1 kg).
           2. From 220 through 440 lbs: 0.5lbs (100 through 200 kg: 0.2 kg).
       11. Environmental Conditions of Operation:
           1. Temperature: 41 to 104 degrees F (5 to 40 degrees C).
           2. Relative Humidity: Less than 85 percent.
           3. Atmospheric pressure: 12.5 to 15.4 psi (86 to 106 kPa)
       12. Environmental Conditions for Storage and Transport:
           1. Temperature: Minus 4 to 140 degrees F (minus 20 to 60 degrees C)
           2. Relative Humidity: 10 to 95 percent
           3. Atmospheric pressure: 7.25 to 15.4 psi (50 to 106 kPa).
       13. Accessories:
           1. AAA alkaline batteries.
           2. Carpet extension feet.
           3. User manual.

\*\* NOTE TO SPECIFIER \*\* Delete paragraph if not required.

* + 1. Basis of Design: Welch Allyn ScaleTronix Diaper and Organ 4302 Scale as Manufactured by Hillrom.
       1. Stainless steel construction designed for long life and ease of cleaning. Cordless design for easy mobility.
       2. Standards Compliance:
          1. UL544.
          2. CSA C22.2 no. 125.
          3. IEC-601-1.
       3. Physical Characteristics:
          1. Dimensions:

Width: 19 in (482.6 mm).

Height: 31 in (787.4 mm.

Depth: 12 in (304.8 mm.

* + - * 1. Platform: 8.5 x 8.5 in (216 x 216 mm).
        2. Net Weight: 34.2 lbs (14.515 kg).
        3. Number of Load Sensors: 1.
        4. Casing Material: Stainless steel.
      1. Control Panel: Designed for operator convenience.
         1. On / Off / Zero.
         2. Pounds / Kilograms.
         3. Reweigh.
         4. Recall.
         5. Battery Operation / Low Battery.
      2. Power Supply. Six, C-sized alkaline batteries; 10,000 weighings.
      3. Power supply: Medical grade UL listed external power supply. 100-240 VAC 50/60 Hz. Captive but replaceable line cord.
      4. Display Mode: Self-contained, digital LED readout.
      5. Display Features:
         1. On / Off / Zero.
         2. Pounds / Kilograms.
         3. Reweigh.
         4. Recall.
         5. Battery Operation/Low Battery.
      6. Units of Measure: Pounds, ounces, or grams.
      7. Measurement Range: Up to 6.61 lbs (3,000 gm).
      8. Measurement Range: Up to 11.02 lbs (5,000 gm) extended capacity.
      9. Scale Resolution: 0.0001 lbs (0.045 grams).
      10. Environmental Conditions of Operation: Keep dry.

\*\* NOTE TO SPECIFIER \*\* Delete paragraph if not required.

* + 1. Basis of Design: Welch Allyn ScaleTronix Pediatric 4802D Scale as Manufactured by Hillrom.
       1. Stainless steel enclosure construction with integral electronic digital readout and a sturdy transparent acrylic weighing cradle with length gauge. Cordless design for easy mobility.
       2. Standards Compliance:
          1. UL544.
          2. CSA C22.2 no. 125.
          3. IEC-601-1.
       3. Physical Characteristics:
          1. Dimensions: 27-1/2 x 16 x 7 in (698 x 406 x 178 mm).
          2. Overall Platform (W x D x H): 27.5 x 16 x 7 in (698 x 406 x 7 mm) stainless steel weighing platform.

Removable acrylic cradle (W x D): 25 x 14 in (635 x 356 mm).

Length measure in centimeters and inches.

* + - * 1. Net Weight: 25 lbs (11.34 kg).
        2. Number of Load Sensors: 1.
        3. Computer Interface: RS-232 output.
      1. Control Panel: Designed for operator convenience. Width: 66.04 CM.
      2. Power Supply. Six, C-sized alkaline batteries - 10,000 weighings.
      3. Power supply: Medical grade UL listed external power supply. 100-240 VAC 50 to 60 Hz. Captive but replaceable line cord.
      4. Display Mode: Self-contained, digital LED readout.
      5. Display Features:
         1. 0.43 in (11 mm) high light-emitting diode display.
         2. Automatically returns to zero, ready for next patient.
         3. Recalls last weight.
         4. Recomputes patient's weight while patient is on scale.
      6. Units of Measure: Pounds and kilograms or kilograms only.
      7. Measurement Range: To 44 lbs (20 kg).
      8. Scale Resolution: 0.01 lbs (5 gm).
      9. Scale Resolution: Diaper - preemie weighing (optional): .0001 lbs (0.045 grams).
      10. Environmental Conditions of Operation: Keep dry.
      11. Accessories:
          1. External printer.
          2. Mobile cart with dispenser for scale liners and storage shelves.
          3. Table-top dispenser for scale liners.
          4. Scale liners; 500 per carton.
          5. Battery pack.

\*\* NOTE TO SPECIFIER \*\* Delete paragraph if not required.

* + 1. Basis of Design: Welch Allyn ScaleTronix Integrated Scale as Manufactured by Hillrom.
       1. Stand-on and in-floor integrated scales with scale platforms level with floor for easy-access, multi-purpose weighing. The scales display weight on a stainless steel, wall-mounted easy to read, digital readout.

\*\* NOTE TO SPECIFIER \*\* Delete models not required.

* + - 1. Model: 5102 Physician's Stand-On Scale.
         1. Standards Compliance:
         2. UL544.
         3. CSA C22.2 no. 125.
         4. IEC-601-1.
         5. Physical Characteristics:

Dimensions:

Width: 16 in (406.4 mm).

Height: 26 in (660.4 mm).

Depth: 8 in (203.2 mm).

Platform: 18 x 14 in (457 x 356 mm) anodized aluminum.

Net Weight: 19 lbs (8.618 kg).

Load Sensors: 4.

Casing Material: Stainless steel.

Computer Interface: RS-232 output.

* + - * 1. Control Panel: Designed for operator convenience.
        2. Power Supply: Six C-size disposable alkaline batteries.
        3. Power Supply: Power adaptor.
        4. Display Mode: Digital LED display in pounds and kilograms, or kilograms only.
        5. Display Features:

Wall mounted.

Automatically returns to zero, ready for next patient.

Recalls last weight.

Recomputes patient's weight while patient is on scale.

* + - * 1. Units of Measure: Pounds and kilograms.
        2. Measurement Range: To 660 lbs (300 kg).
        3. Scale Resolution: .1 lbs (45 gm).
        4. Environmental Conditions of Operation: Keep dry.
        5. Accessory: Wall-mounted height gauge.
      1. Model: 6102 Flush Mounted In-Floor Scale:
         1. Standards Compliance:

UL 544.

CSA C22.2 no. 125.

IEC-601-1.

* + - * 1. Physical Characteristics:

Dimensions:

Width: 34 in (863.6 mm).

Height: 37 in (939.8 mm).

Depth: 19 in (482.6 mm).

Platform: 32 x 36 in (813 x 914 mm) anodized aluminum.

Net Weight: 89 lbs (40.37 kg).

Load Sensors: 4.

Casing Material: Stainless steel.

Computer Interface: RS-232 output.

* + - * 1. Control Panel: Designed for operator convenience.
        2. Power Supply. 110 VAC with rechargeable battery backup.
        3. Display Mode: Digital LED display in pounds and kilograms, or kilograms only.
        4. Display Features:

Wall mounted.

Flush mounted.

Automatically returns to zero, ready for next patient.

Recalls last weight.

Recomputes patient's weight while patient is on scale.

* + - * 1. Units of Measure: Pounds and kilograms.
        2. Measurement Range: Up to 825 lbs (375 kg).
        3. Scale Resolution: .1 lbs (45 gm).
        4. Environmental Conditions of Operation: Keep dry.
        5. Rough-in frame kit.
        6. Accessories:

Printer.

Thermal printer paper.

Handrail.

Battery pack 7.2 V.

Wall-mount stainless steel height gauge; inches and centimeters.

* + - 1. Model: 6154 Flush Mounted In-Floor Scale:
         1. Standards Compliance:

UL544.

CSA C22.2 no. 125.

IEC-601-1.

* + - * 1. Physical Characteristics:

Dimensions:

Width: 37 in (939.8 mm).

Height: 56 in (1422.4 mm).

Depth: 20 in (508 mm).

Platform: 35 x 54 in (889 x 1372 mm) anodized aluminum.

Net Weight: 124 lbs (56.246 kg).

Load Sensors: 4.

Casing Material: Stainless steel.

Computer Interface: RS-232 output.

* + - * 1. Control Panel: Designed for operator convenience.
        2. Power Supply. 110 VAC with rechargeable battery backup.
        3. Display Mode: Digital LED display in pounds and kilograms, or kilograms only.
        4. Display Features:

Wall mounted.

Flush mounted.

Automatically returns to zero, ready for next patient.

Recalls last weight.

Recomputes patient's weight while patient is on scale.

* + - * 1. Units of Measure: Pounds and kilograms.
        2. Measurement Range: Up to 825 lbs (375 kg).
        3. Scale Resolution: .1 lbs (45 gm).
        4. Environmental Conditions of Operation: Keep dry.
        5. Rough-in frame kit.
        6. Accessories:

Printer.

Thermal printer paper.

Handrail.

Battery pack 7.2 V.

Wall-mount stainless steel height gauge; inches and centimeters.

\*\* NOTE TO SPECIFIER \*\* Delete paragraph if not required.

* + 1. Basis of Design: Welch Allyn ScaleTronix Portable Scale as Manufactured by Hillrom.

\*\* NOTE TO SPECIFIER \*\* Delete models not required.

* + - 1. Model 5002 Mobile Stand-On Scales:
         1. Standards Compliance:

UL 544.

CSA C22.2 no. 125.

IEC-601-1.

* + - * 1. Physical Characteristics:

Dimensions:

Width: 22 in (558.8 mm).

Height: 28 in (711.2 mm).

Depth: 60 in (1524 mm).

Platform (W x D): 18 x 19.5. in (457 x 495 mm) low profile.

Net Weight: 64 lbs (29.029 kg).

Load Sensors: 4.

Casing Material: Stainless steel.

Computer Interface: RS-232 output.

* + - * 1. Control Panel: Designed for operator convenience.
        2. Power Supply. Six D-size disposable alkaline batteries.
        3. Power Supply: Medical grade UL listed external power supply. 100 to 240 VAC 50 to 60 Hz. Captive but replaceable line cord.
        4. Display Mode: Digital LED display in pounds and kilograms, or kilograms only.
        5. Display Features:

Automatically returns to zero, ready for next patient.

Recalls last weight.

Recomputes patient's weight while patient is on scale.

* + - * 1. Units of Measure: Pounds and kilograms.
        2. Measurement Range: Up to 800 lbs (400 kg).
        3. Scale Resolution: .1 lbs (45 gm).
        4. Wheels: Heavy-duty rubber wheels.
        5. Environmental Conditions of Operation: Keep dry.
        6. Accessories:

Integrated height gauge.

Wall-mount height gauge.

Printer.

Thermal printer paper.

Line cord power supply with battery backup.

* + - 1. Model 5702 Mobile Bariatric Stand-On Scales:
         1. Standards Compliance:

UL 544.

CSA C22.2 no. 125.

IEC-601-1.

* + - * 1. Physical Characteristics:

Dimensions:

Width: 26 in (660.4 mm).

Height: 53 in (1346.2 mm).

Depth: 29 in (736.6 mm).

Platform (W x D x H): 24 x 26 x 2 in (610 x 660 x 51 mm) low profile.

Load Sensors: 4.

Casing Material: Stainless steel.

Computer Interface: RS-232 output.

* + - * 1. Control Panel: Designed for operator convenience.
        2. Power Supply. 6 D-size disposable alkaline batteries.
        3. Power Supply: Medical grade UL listed external power supply. 100-240 VAC 50/60 Hz. Captive but replaceable line cord.
        4. Display Mode: Digital LED display in pounds and kilograms, or kilograms only.
        5. Display Features:

Automatically returns to zero, ready for next patient.

Recalls last weight.

Recomputes patient's weight while patient is on scale.

* + - * 1. Units of Measure: Pounds and kilograms.
        2. Measurement Range: Up to 1,000 lbs (454 kg).
        3. Scale Resolution: .1 lbs (45 gm).
        4. Wheels: Heavy-duty rubber wheels.
        5. Environmental Conditions of Operation: Keep dry.
        6. Accessories:

Integrated height gauge.

Wall-mount height gauge.

Printer.

Thermal printer paper.

Line cord power supply with battery backup.

\*\* NOTE TO SPECIFIER \*\* Delete models not required.

* + - 1. Model 6002 Mobile Wheelchair Scales:
         1. Standards Compliance:

UL544.

CSA C22.2 no. 125.

IEC-601-1.

* + - * 1. Physical Characteristics:

Platform (W x D): 24 x 26 in (610 x 660 mm).

Load Sensors: 2.

Computer Interface: RS-232 output.

* + - * 1. Control Panel: Designed for operator convenience.
        2. Power Supply. 6 D-size disposable alkaline batteries.
        3. Power Supply: Medical grade UL listed external power supply. 100 to 240 VAC 50 to 60 Hz. Captive but replaceable line cord.
        4. Display Mode: Digital LED display in pounds and kilograms, or kilograms only.
        5. Display Features:

Automatically returns to zero, ready for next patient.

Recalls last weight.

Recomputes patient's weight while patient is on scale.

* + - * 1. Units of Measure: Pounds and kilograms.
        2. Measurement Range: Up to 1,000 lbs (454 kg).
        3. Scale Resolution: .1 lbs (45 gm).
        4. Wheels: Heavy-duty rubber wheels.
        5. Environmental Conditions of Operation: Keep dry.
        6. Accessories:

Handrail.

Integrated height gauge.

Wall-mount height gauge.

Printer.

Thermal printer paper.

Line cord power supply with battery backup.

* + - 1. Model 6702 Mobile Wheelchair Scales:
         1. Standards Compliance:

UL544.

CSA C22.2 no. 125.

IEC-601-1.

* + - * 1. Physical Characteristics:

Platform (W x D): 28 x 60 in (711 x 1524 mm).

Load Sensors: 2.

Computer Interface: RS-232 output.

* + - * 1. Control Panel: Designed for operator convenience.
        2. Power Supply. 6 D-size disposable alkaline batteries.
        3. Power Supply: Medical grade UL listed external power supply. 100 to 240 VAC 50 to 60 Hz. Captive but replaceable line cord.
        4. Display Mode: Digital LED display in pounds and kilograms, or kilograms only.
        5. Display Features:

Automatically returns to zero, ready for next patient.

Recalls last weight.

Recomputes patient's weight while patient is on scale.

* + - * 1. Units of Measure: Pounds and kilograms.
        2. Measurement Range: Up to 1,000 lbs (454 kg).
        3. Scale Resolution: .1 lbs (45 gm).
        4. Wheels: Heavy-duty rubber wheels.
        5. Environmental Conditions of Operation: Keep dry.
        6. Accessories:

Handrail.

Integrated height gauge.

Wall-mount height gauge.

Printer.

Thermal printer paper.

Line cord power supply with battery backup

* + - 1. Model 6702W Mobile Wheelchair Scales:
         1. Standards Compliance:

UL544.

CSA C22.2 no. 125.

IEC-601-1.

* + - * 1. Physical Characteristics:

Platform, Model (W x D): 28 x 32 in (711 x 813 mm).

Load Sensors: 2.

Computer Interface: RS-232 output.

* + - * 1. Control Panel: Designed for operator convenience.
        2. Power Supply. 6 D-size disposable alkaline batteries.
        3. Power Supply: Medical grade UL listed external power supply. 100 to 240 VAC 50 to 60 Hz. Captive but replaceable line cord.
        4. Display Mode: Digital LED display in pounds and kilograms, or kilograms only.
        5. Display Features:

Automatically returns to zero, ready for next patient.

Recalls last weight.

Recomputes patient's weight while patient is on scale.

* + - * 1. Units of Measure: Pounds and kilograms.
        2. Measurement Range: Up to 1,000 lbs (454 kg).
        3. Scale Resolution: .1 lbs (45 gm).
        4. Wheels: Heavy-duty rubber wheels.
        5. Environmental Conditions of Operation: Keep dry.
        6. Accessories:

Handrail.

Integrated height gauge.

Wall-mount height gauge.

Printer.

Thermal printer paper.

Line cord power supply with battery backup.

* + - 1. Model 6702SP Mobile Wheelchair Scales:
         1. Standards Compliance:

UL544.

CSA C22.2 no. 125.

IEC-601-1.

* + - * 1. Physical Characteristics:

Platform (W x D): 35 x 30 in (889 x 762 mm).

Load Sensors: 2.

Computer Interface: RS-232 output.

* + - * 1. Control Panel: Designed for operator convenience.
        2. Power Supply. 6 D-size disposable alkaline batteries.
        3. Power Supply: Medical grade UL listed external power supply. 100 to 240 VAC 50 to 60 Hz. Captive but replaceable line cord.
        4. Display Mode: Digital LED display in pounds and kilograms, or kilograms only.
        5. Display Features:

Automatically returns to zero, ready for next patient.

Recalls last weight.

Recomputes patient's weight while patient is on scale.

* + - * 1. Units of Measure: Pounds and kilograms.
        2. Measurement Range: Up to 1,000 lbs (454 kg).
        3. Scale Resolution: .1 lbs (45 gm).
        4. Wheels: Heavy-duty rubber wheels.
        5. Environmental Conditions of Operation: Keep dry.
        6. Accessories:

Handrail.

Integrated height gauge.

Wall-mount height gauge.

Printer.

Thermal printer paper.

Line cord power supply with battery backup.

\*\* NOTE TO SPECIFIER \*\* Delete paragraph if not required.

* + 1. Basis of Design: Welch Allyn ScaleTronix Stow-A-Weigh Scales as Manufactured by Hillrom.

\*\* NOTE TO SPECIFIER \*\* Delete models not required.

* + - 1. Model 5202 Stand-On Scales: Fold down weighing platform.
         1. Standards Compliance:

UL544.

CSA C22.2 no. 125.

IEC-601-1.

* + - * 1. Physical Characteristics:

Dimensions, Overall (W x D x H): 27 x 4 x 27 in (686 x 102 x 686 mm).

Platform (W x D x H): 18 x 18 x 1.5 in (457 x 457 x 38 mm) low profile.

Net Weight: 46 lbs (20.865 kg).

Load Sensors: 4.

Casing Material: Stainless Steel.

* + - * 1. Control Panel: Designed for operator convenience.
        2. Power Supply. Six D-size disposable alkaline batteries.
        3. Power Supply: Medical grade UL listed external power supply. 100 to 240 VAC 50 to 60 Hz. Captive but replaceable line cord.
        4. Display Mode: Digital LED display in pounds and kilograms, or kilograms only.
        5. Display Features:

Automatically returns to zero, ready for next patient.

Recalls last weight.

Recomputes patient's weight while patient is on scale.

* + - * 1. Units of Measure: Pounds and kilograms.
        2. Measurement Range: Up to 660 lbs (300 kg).
        3. Scale Resolution: .1 lbs (45 gm).
        4. Wheels: Heavy-duty rubber wheels.
        5. Environmental Conditions of Operation: Keep dry.
        6. Accessories: Wall-mount height gauge.
      1. Model 6202 Wheelchair Scales:
         1. Standards Compliance:

UL544.

CSA C22.2 no. 125.

IEC-601-1.

* + - * 1. Physical Characteristics:

Dimensions, Overall (W x D x H): 40 x 4 x 40 in (1016 x 102 x 1016 mm).

Platform (W x D x H): 24 x 30 x 1.5 in (610 x 762 x 38 mm) low profile.

Net Weight: 89 lbs (40.37 kg).

Load Sensors: 4.

Computer Interface: RS-232 output.

* + - * 1. Control Panel: Designed for operator convenience.
        2. Power Supply. 6 D-size disposable alkaline batteries.
        3. Power Supply: Medical grade UL listed external power supply. 100 to 240 VAC 50 to 60 Hz. Captive but replaceable line cord.
        4. Display Mode: Digital LED display in pounds and kilograms, or kilograms only.
        5. Display Features:

Automatically returns to zero, ready for next patient.

Recalls last weight.

Recomputes patient's weight while patient is on scale.

* + - * 1. Units of Measure: Pounds and kilograms.
        2. Measurement Range: Up to 660 lbs (300 kg).
        3. Scale Resolution: .1 lbs (45 gm).
        4. Wheels: Heavy-duty rubber wheels.
        5. Environmental Conditions of Operation: Keep dry.
        6. Accessories:

Wall-mount height gauge.

Printer.

Thermal printer paper.

* + - 1. Model 6202D Scales: For stretchers, wheelchairs, chairs, scooters and ambulatory patients.
         1. Standards Compliance:

UL544.

CSA C22.2 no. 125.

IEC-601-1.

* + - * 1. Physical Characteristics:

Platform A (W x D x H): 24 x 30 x 1.5 in (610 x 762 x 38 mm) low profile.

Dimensions, Overall (W x d x H): 40 x 4 x 40 in (1016 x 102 x 1016 mm).

Platform B (W x D x H): 12 x 30 x 1.5 in (305 x 762 x 38 mm) low profile.

Dimensions, Overall (W x d x H): 27 x 4 x 40 in (686 x 102 x 1016).

Net Weight: 143 lbs (64.864 kg).

Load Sensors: 4.

Computer Interface: RS-232 output.

* + - * 1. Control Panel: Designed for operator convenience.
        2. Power Supply. 6 D-size disposable alkaline batteries.
        3. Power Supply: Medical grade UL listed external power supply. 100 to 240 VAC 50 to 60 Hz. Captive but replaceable line cord.
        4. Display Mode: Digital LED display in pounds and kilograms, or kilograms only.
        5. Display Features:

Automatically returns to zero, ready for next patient.

Recalls last weight.

Recomputes patient's weight while patient is on scale.

* + - * 1. Units of Measure: Pounds and kilograms.
        2. Measurement Range: Up to 880 lbs (400 kg).
        3. Scale Resolution: .5 lbs (200 gm).
        4. Wheels: Heavy-duty rubber wheels.
        5. Environmental Conditions of Operation: Keep dry.
        6. Accessories:

Wall-mount height gauge.

Printer.

Thermal printer paper.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. PHYSICAL EXAM EQUIPMENT SETS AND SYSTEMS

\*\* NOTE TO SPECIFIER \*\* Delete paragraph if not required.

* + 1. Integrated Wall Systems:

\*\* NOTE TO SPECIFIER \*\* Delete Basis of Design paragraphs not required.

* + - 1. Basis of Design: Welch Allyn, Connex Integrated Wall System as manufactured by Hillrom.
         1. Standards Compliance:

ANSI/AAMI SP10.

AS/NZS 3200.1.01.

ASTM D 4332, E 1104.

CAN/CSA C22.2 NO.601.11.

CAN/CSA-C22.2 NO.60601-1-2.

CSA Z9919.

EN 1060-1.

EN 1060-3.

1060-42.

EN/IEC 60601-1.

EN/IEC 60601-1-2.

EN/IEC 60601-1-4.

EN/IEC 60601-1-6.

EN/IEC 60601-1-8.

EN/IEC 60601-2-30.

EN/IEC 60601-2-49.

EN/IEC 62304.

EN/ISO 9919.

EN/ISO 13485.

EN/ISO 14971.

ISTA 2A.

UL 60601-11.

* + - * 1. Features:

Blood Pressure:

SureBP: 15-second blood pressure and pulse rate.

Modes: Adult, pediatric and neonatal.

Spot check, monitoring and triage modes included.

Temperature:

\*\* NOTE TO SPECIFIER \*\* Delete one of the following subparagraphs or keep both.

SureTemp Plus.

Braun ThermoScan PRO 4000 ear thermometry.

Pulse:

\*\* NOTE TO SPECIFIER \*\* Delete one of the following subparagraphs.

Masimo pulse oximetry.

Nellcor pulse oximetry.

Alarms: Programmable visual and audible alarms for BP, SpO2, temperature, and pulse.

PartnerConnect: Service software-ready for software-driven repairs and upgrades.

USB accessory ports: 4.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

Masimo noninvasive continuous monitoring of total hemoglobin.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

Barcode scanning.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

Interface to select digital weight scales.

Manual Measurements Entry: Weight, height, respiration rate, pain and documentation of modifiers, like body position and O2 therapy.

Color touchscreen display.

Descriptive error messages for easy troubleshooting.

Fully customizable USB configuration cloning.

Integrated 3.5 V handles for physical assessment instruments.

Integrated ear speculum dispenser.

* + - * 1. Physical Characteristics:

Height: 10.56 in. (268.26 mm).

\*\* NOTE TO SPECIFIER \*\* Delete appropriate width subparagraph below.

Width 37.80 in. (960 mm).

Width: 39.92 (1014 mm) with Braun thermometer.

\*\* NOTE TO SPECIFIER \*\* Delete appropriate width subparagraph below.

Depth: 4.92 in. (124.97 mm).

Depth: 7.51 in (190.8 mm) with Braun thermometer.

Weight (Including battery): 14.1 lb. (6.4 kg).

Power Cord Length: 96 in (2438 mm).

Graphical Display Area Dimensions (H x V): 8 x 4 in. (203 x 102 mm).

Speaker Volume: 57 dB at 1.0 meter.

Battery: Composition Lithium-ion.

Nurse Call Connection: Nurse call 25 VAC or 60 VDC maximum at 1 A maximum.

Environmental:

Operating Temperature: 50 to 104 degrees F (10 to 40 degrees C).

Operating Humidity: 15 to 95 percent noncondensing.

Operating Altitude: Minus 557 to 10,000 ft. (minus 170 to 3,048 m).

Storage Temperature: Minus 4 to 122 degrees F (minus 20 to 50 degrees C).

Storage Humidity: 15 to 95 percent noncondensing.

Handle: Handle output 3.00 to 3.90 V, .70 to 1.50 A.

Cord Length: 144 in (3658 mm).

Electrical Rating: 100 to 240 VAC, 50 to 60 Hz, 1.50 to .08 A.

* + - * 1. Non-Invasive Blood Pressure Measurement (NIBP):

Systolic range:

Adult: 30 to 260 mm Hg.

Pediatric: 30 to 260 mm Hg.

Neonate: 20 to 120 mm Hg.

Diastolic range:

Adult: 20 to 220 mm Hg.

Pediatric: 20 to 220 mm Hg.

Neonate: 10 to 110 mm Hg.

Determination Time: 15 seconds typical; 150 seconds maximum.

Tubing Length: 96 in (2438 mm).

Accuracy:

\*\* NOTE TO SPECIFIER \*\* Delete one of the two subparagraphs below.

Meets or exceeds ANSI.AAMI SP10:2002 standards for noninvasive blood pressure.

Meets or exceeds ANSI.AAMI SP10:2002 standards for noninvasive accuracy; plus or minus 5 mm Hg mean error, 8 mm Hg standard deviation.

* + - * 1. Temperature:

SureTemp Temperature Range: 80 to 110 degrees F (26.7 to 43.3 degrees C). Probe cord length: 108 in (2743 mm).

Braun Temperature Range: 68 to 108 degrees F (20.0 to 42.2 degrees C).

* + - * 1. SpO2 Performance Measurement Range: 1 to 100 percent.

Cable Length: 120 in (3048 mm).

* + - 1. Basis of Design: Welch Allyn 777 Green Series Integrated Wall Systems as manufactured by Hillrom.
         1. Features.

Wall board:

Height: 12 in (305 mm).

Width 34 in (864 mm).

Transformer: Green Series 777 Wall Transformer.

Ophthalmoscopes:

Coaxial.

Panoptic.

Otoscopes:

Diagnostic Macroview.

\*\* NOTE TO SPECIFIER \*\* Not available with digital blood pressure device.

Pneumatic.

Kleenspec Dispensers:

\*\* NOTE TO SPECIFIER \*\* Not required with the Spot Vital Signs Devices or the Spot Monitor Devices. Delete if not required.

Non-Invasive Blood Pressure Analysis:

Aneroid system.

Digital System: Connex ProBP.

\*\* NOTE TO SPECIFIER \*\* Not required with the Spot Vital Signs Devices or the Spot Monitor Devices. Delete if not required.

Thermometer:

Electronic: Surtemp Plus.

\*\* NOTE TO SPECIFIER \*\* Delete one or both of the following subparagraphs.

Spot Vital Signs Device:

Blood Pressure.

Pulse rate.

MAP.

Temperature.

Spot Monitor:

Blood Pressure.

Pulse rate.

MAP.

Temperature.

SpO2.

\*\* NOTE TO SPECIFIER \*\* Delete paragraph if not required.

* + 1. Wall Transformers:
       1. Basis of Design: Welch Allyn Green Series 777 Wall Transformer as manufactured by Hillrom.
          1. This product is intended to supply power to Welch Allyn 3.5 V instruments.
          2. Standards Compliance:

AS/NZS3200.

CAN/CSA C22.2 No 601.1.

IEC 60601-1.

IEC 60601-1-2.

UL 60601-1.

* + - * 1. Features:

Physical Assessment Instruments, Handles and Handle Cradles: Handles will accept any 3.5 V Welch Allyn instrument head. The handle cradles support using one handle at a time. A handle turns on automatically when you remove it from a cradle and turns off when you return it.

Rheostat Located on Each Handle: Turn clockwise to increase light output; turn counterclockwise to decrease light output.

LED Indicator: Indicates power is present.

USB Power Cable: Twin USB power cable.

5W Power Supply with LED Indicator: Indicates power is present.

5W Adapter Plug: Region-specific 5W adapter plug.

Host USB Mini, Power Input: 5 V USB, type "mini." provides power to the GS 777 Wall Transformer.

Host USB, Power Output: 5 V USB, type "A". Provides power to other supported Welch Allyn devices.Safety Class: II, Intermittent Operation.

Electrical Power Supply:

AC Input: 100 to 240 VAC, 50 to 60 Hz, 0.18 A maximum.

Transformer: 5 VDC, 1 A.

DC Input: 5 VDC, 1 A.

Transformer: 5 VDC. 9.5 A.

Ophthalmoscopes:

Coaxial.

Panoptic.

Otoscopes: Diagnostic macroview.

Kleenspec dispenser.

Non-Invasive Blood Pressure Analysis: Aneroid wall system.

* + - * 1. Physical Characteristics:

Height: 9.2 in (234 mm).

Width: 7.9 in (202 mm).

Depth: 7.8 in (121 mm).

* + - * 1. Environmental Limitations.

Operating temperature: 59 to 104 degrees F (15 to 40 degrees C).

Operating Humidity: 15 to 95 percent noncondensing.

Operating Atmospheric Pressure Limitation: 10.15 to 15.37 psi (70 to 106 kPa).

Storage temperature: minus 4 to 122 degrees F (minus 20 to 50 degrees C).

Transport and Storage Humidity: 15 to 95 percent noncondensing.

Transport and Storage Atmospheric Limitation: 10.15 to 15.37 psi (70 to 106 kPa).

\*\* NOTE TO SPECIFIER \*\* Delete paragraph if not required.

* + 1. Digital Blood Pressure Devices:
       1. Basis of Design: Welch Allyn, Connex ProBP 3400 Digital Blood Pressure Device as manufactured by Hillrom.
       2. Standards Compliance:
          1. EN/IEC 60601-1.
          2. EN/IEC 60601-1-2.
          3. EN/IEC 80601-2-30.
          4. EN 1060-1:1996 Specification for non-invasive sphygmomanometers - Part 1: General requirements.
          5. EN 1060-3:1997 Specification for non-invasive sphygmomanometers - Part 3: Supplementary requirements for electro-mechanical blood pressure measuring systems.
          6. FCC Subpart 15C.
       3. Physical specifications:
          1. Accuracy: Meets or exceeds ANSI.AAMI SP10 standards for noninvasive blood pressure accuracy; plus or minus 5 mm Hg mean error, 8 mm Hg standard deviation). Blood pressure accuracy is validated for pressure measurement using the upper arm only.
          2. Cuff Pressure Range: 0 to 300 mm Hg.
          3. Systolic Range: 60 to 250 mm Hg.
          4. Diastolic Range: 30 to 160 mm Hg.
          5. Mean Arterial Pressure (MAP) Range: 40 to 190 mm Hg. MAP is a calculated reading that yields an approximate value.
          6. Pulse Rate Range: 35 to 199 bpm.
          7. Pulse Rate Accuracy: plus or minus 5.0 percent.
          8. Overpressure Cutoff: 300 mm Hg.
          9. Operating Temperature: 50 to 104 degrees F (10 to 40 degrees C).
          10. Operating Altitude: Minus 557 to 16,000 ft (minus 170 to 4877 m).
          11. Storage Temperature: Minus 4 to 122 degrees F (minus 20 to 50 degrees C).
          12. Storage Humidity: 15 to 95 percent noncondensing.
       4. Mechanical specifications:
          1. Height: 5.91 in (150 mm).
          2. Width: 3.15 in (80 mm.
          3. Depth: 2.20 in (56 mm).
          4. Weight: 0.99 lbs (450 g).
          5. Mounting:

Mobile stand.

Wall mount.

Desk mount.

* + - * 1. Portability: May be used as a handheld device.
      1. Electrical specifications:
         1. Power Requirements:

Input: 100-240 VAC, 0.18A, 50-60 Hz.

Output: 5 VDC, 0.5 A.

* + - * 1. Degree of Protection: Type BF applied part.
        2. Safety Classification: Class II.
        3. Internally Powered: Battery, lithium-ion type, 3.7 V, 2100 mA, 7.8 W.
        4. Protection against the ingress of water: IPX0.
        5. Mode of operation: Continuous operation.
        6. Power transformer and wall plug.
        7. Battery Charger: USB-B connector.
      1. Liquid Crystal Display:
         1. Systolic and diastolic pressure.
         2. MAP.
         3. Pulse rate.
         4. Bluetooth radio status.
         5. USB connection.
         6. Date.
         7. Clock.
         8. Reading Number (memory hold up to 50 readings.
         9. Settings Menu.
         10. Review Menu.

\*\* NOTE TO SPECIFIER \*\* Delete cuff not required.

* + - 1. Cuffs, Small Child (Size 8): 4.7 to 6.3 in (120 to 160 mm).
      2. Cuffs, Child (Size 9): 5.9 to 8.3 in (150 to 210 mm).
      3. Cuffs, Small Adult (Size 10): 7.9 to 10.2 in (200 to 260 mm).
      4. Cuffs, Adult (Size 11): 9.8 to 13.4 in (250 to 340 mm).
      5. Cuffs, Adult Long (Size 11L): 9.8 to 13.4 in (250 to 340 mm).
      6. Cuffs, Large Adult (Size 12): 12.6 to 16.9 in (320 to 430 mm).
      7. Cuffs, Large Adult Long (Size 12L): 12.6 to 16.9 in (320 to 430 mm).
      8. Cuffs, Thigh (Size 13): 15.7 to 21.7 in (400 to 550 mm).

\*\* NOTE TO SPECIFIER \*\* Delete paragraph if not required.

* + 1. Sphygmomanometers.
       1. Basis of Design: Welch Allyn 767-Series Wall / Mobile Sphygmomanometers as manufactured by Hillrom.

\*\* NOTE TO SPECIFIER \*\* Delete subparagraphs not required

* + - * 1. Mobile Aneroid Sphygmomanometer with Five-Leg Mobile Stand; Size-11 Adult, FlexiPort Reusable, 2-Tube Cuff; Premium Inflation Bulb and Valve, Coiled Tube, 48 in (1219 mm).

Certified accuracy to plus or minus 3 mm Hg.

Latex- and Mercury-free.

* + - * 1. Mobile Aneroid Sphygmomanometer with Five-Leg Mobile Stand; Coiled Tube, 48 in (1219 mm). Cuff and Inflation System Not Included.

Certified accuracy to plus or minus 3 mm Hg.

Latex- and Mercury-free.

* + - * 1. Mobile Aneroid Sphygmomanometer with Five-Leg Mobile Stand; Size-11 Adult, Reusable (Two Piece), 2-Tube Cuff; Premium Inflation Bulb and Valve, Coiled Tube, 48 in (1219 mm).

Certified accuracy to plus or minus 3 mm Hg.

Latex- and Mercury-free.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. CARDIOPULMONARY EXAM EQUIPMENT
     1. Electrocardiograph:

\*\* NOTE TO SPECIFIER \*\* Delete Basis of Design paragraphs not required.

* + - 1. Basis of Design: Welch Allyn CP 50 Resting Electrocardiograph as manufactured by Hillrom.
         1. Standards Compliance:

ANSI/AAMI EC11.

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.

IEC/EN 60601-1-1.

IEC/EN 60601-1-2.

IEC/EN 60601-1-4.

IEC/EN 60601-1-6.

IEC/EN 60601-2-25.

IEC/EN 60601-2-51.

UL60601-1.

* + - * 1. Features:

Color touchscreen display.

Programmable report formats.

Optional MEANS interpretation.

Optional mobile stand.

Optional carrying case.

High-resolution thermal printer.

Internal storage of ECGs results.

Battery operation for device transport.

On-screen instructions guide.

* + - * 1. Dimensions (L x H x W): 12.8 x 3.1 x 7.4 in (325 x 79 x 188 mm).
        2. Weight: 4.4 lbs (2.0 kg).
        3. Keyboard Type: Power, auto ECG, and rhythm ECG buttons. Polyester overlay.
        4. Display Type: TFT, 4.3 in (109 mm) color touch screen.
        5. Display Resolution: WQVGA, 480 x 272.
        6. Thermal Paper: Z-fold 4.5 in (114 mm) x 250 sheets.
        7. Thermal Paper: Roll 4.5 in (114 mm) x 65.6 ft (20 m).
        8. Thermal Printer: Internal computer-controlled dot array, 203 dots per in (8 dots per mm).
        9. Thermal Chart Paper Speeds: 0.4, 1, 2 in per sec (10, 25, 50 mm per sec).
        10. Gain Settings for Auto ECGs: 0.1, 0.2, 0.39, .79 in (2.5, 5, 10, 20 mm) per mV.
        11. Gain Settings for Rhythm ECGs: 0.1, 0.2, 0.39, .79 in (2.5, 5, 10, 20 mm) per mV.
        12. Lead Configurations: Cabrera.
        13. Report Print Formats: Internal thermal printer (PCL 3 or 5 only).

Auto ECGs: 3 x 4, 3 x 4 plus 1 R, 2 x 6.

Rhythm ECGs: 3 leads.

Average Cycles: 3 x 4 plus 3 R at 25 mm per sec, 3 x 4 plus 3 R at 50 mm per sec, 2 x 6 plus 1 R at 25 mm per sec, 2 x 6 plus 1 R at 50 mm per sec.

* + - * 1. Report Print Formats: Compatible external inkjet or laser.

Auto ECGs: 3 x 4, 3 x 4 plus 1 R, 2 x 6, 3 x 4 plus 3 R, 6 x 2, 2 x 6, 12 x 1.

Average cycles: 3 x 4 plus 3 R at 25 mm per sec, 3 x 4 plus 3 R at 50 mm per sec, 2 x 6 plus 1 R at 25 mm per sec, 2 x 6 plus 1 R at 50 mm per sec, 3 x 4 plus 2 R at 25 mm per sec, 3 x 4 plus 2 R at 50 mm per sec, 6 x 2 plus 2 R at 50 mm per sec.

* + - * 1. Frequency Range: 0.3 to 150 Hz.
        2. Digital Sampling Rate: Greater than 1,000 samples per second per channel.
        3. Pacemaker Detection: ANSI/AAMI EC11.
        4. Power Requirement: Universal AC power supply 110 to 240 VAC, 50 to 60 Hz, 1.5 A maximum.
        5. AC Fuses: Time-log type, 2.0 A, 250 V rating.
        6. Rechargeable Battery: 10.8 V, 2000 mA, 3-cells lithium ion "smart" battery.
        7. Recharge Time: Less than 3 hours.
        8. Filters:

High Performance Baseline: 0.5 Hz.

Muscle Tremor: 35 Hz.

AC Interference: 50 Hz or 60 Hz.

* + - * 1. Internal ECG Storage: Up to 50 ECGs.
        2. External ECG Storage: Unlimited via USB connection.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + - * 1. Standard connectivity: Mini USB Client and USB host.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + - * 1. Standard Connectivity: Ethernet.
        2. Electrodes: Rigorously tested for conductivity, adhesion, and hypoallergenic qualities; exceeds all AAMI standards.
        3. Power Cable: Meets or exceeds Type SJT.
        4. Patient Cable and Leads: Meets or exceeds ANSI/AAMI EC53, EN/IEC 60601-2-25 and EN/IEC 60601-2-51.
        5. Environmental Operating Conditions:

Temperature: 50 to 104 degrees F (10 to 40 degrees C).

Relative Humidity: 15 to 95 percent noncondensing, 30 to 70 percent for printing.

Atmospheric Air-Pressure: 10.15 to 15.37 psi (70 - 106 kPa).

* + - * 1. Environmental storage conditions:

Temperature: Minus 4 to 122 degrees F (minus 20 to 50 degrees C).

Relative Humidity: 15 - 95 percent noncondensing.

Atmospheric Air-Pressure: 10.15 to 15.37 psi (70 - 106 kPa).

* + - * 1. Protection Against Electric Shock: Class I, internally powered Type BF.
        2. Mode of Operation: Continuous.
      1. Basis of Design: Welch Allyn CP 150 Resting Electrocardiograph with optional Spirometry as manufactured by Hillrom.
         1. Standards Compliance:

CAN/CSA C22.2 No. 601.1.

CAN/CSA C22.2 No. 601.1.1.

CAN/CSA C22.2 No. 601.1.2.

CAN/CSA C22.2 No. 601.1.4.

CAN/CSA C22.2 No. 601.2.25.

IEC/EN 60601-1.

IEC/EN 60601-1-1.

IEC/EN 60601-1-2.

IEC/EN 60601-1-4.

IEC/EN 60601-1-6.

IEC/EN 60601-2-25.

IEC/EN 60601-2-51 (3 x 4 report format).

UL60601-1.

* + - * 1. Features:

Seven-inch color, touch-screen display.

Preview ECG reports prior to printing.

Three-, six-, or full 12-lead ECG preview options.

Optional adult and pediatric MEANS ECG interpretation software.

Battery operation for transport of device to patient.

Simplified EMR connectivity.

Instant-on powers the device up quickly.

Stores up to 100 test results on the device or transfer to USB memory stick.

Optional spirometry to perform two tests with one device.

* + - * 1. Dimensions, including rubber feet (L x H x W): 15 x 14.1 x 136.2 in (381 x 358 x 136 mm).
        2. Weight, Including Battery:11.5 lbs (5.2 kg).
        3. Keyboard Type: Power button with polyester overlay.
        4. Display Type: TFT, 7 in (178 mm) color touch screen.
        5. Display Resolution: WVGA, 800 x 480.
        6. Thermal paper: Z-fold, 8.25 in (210 mm) x 11 in (279 mm) x 200 sheets.
        7. Thermal Printer: Internal computer-controlled dot array, 203 dots per in (8 dots per mm).
        8. Thermal Chart Paper Speeds: 0.4, 1, 2 in per sec (10, 25, 50 mm per sec).
        9. Gain Settings for Auto ECGs: 0.1, 0.2, 0.39, .79 in (2.5, 5, 10, 20 mm) per mV.
        10. Gain Settings for Rhythm ECGs: 0.1, 0.2, 0.39, .79 in (2.5, 5, 10, 20 mm) per mV.
        11. Lead Configurations: Cabrera.
        12. Report formats, Internal printer:

Auto: 3 x 4 to 2.5 s at 25 mm, 3 x 4 to 2.5 s at 50 mm, 3x4 plus 1 R to 2.5s at 25 mm, 3 x 4 plus 3 R to 2.5s at 25 mm, 3 x 4 to 5.0s at 25 mm, 3 x 4 to 5.0s at 50 mm, 6 x 2 top 5.0s at 25 mm, 6 x 2-5.0 s at 50 mm,12 x 1 to 10.0s at 25 mm.

Average cycles: 3 x 4 plus 3 R at 25 mm, 3 x 4 plus 3 R at 50 mm, 6 x 2 plus 1 R at 25 mm, 6 x 2 plus 1 R at 50 mm, no print.

* + - * 1. ECG Storage (in test directory): At least 100 ECG tests.
        2. Frequency Range: 0.3 to 150 Hz.
        3. Digital sampling rate: Greater than 1,000 samples per second per channel.
        4. Pacemaker detection: ANSI/AAMI EC11.
        5. Power requirement: Universal AC power supply 110 to 240 V, 50 to 60 Hz, 1.5 A maximum.
        6. AC Fuses: Time-lag type, 2.0-amp 250-V rating.
        7. Rechargeable Battery: 10.8 V, 6.75 A (73 W), 9 cells Lithium-Ion.
        8. Recharge Time: 6 hours.
        9. Full Charge Capacity: 25 ECG tests at 20 minutes per test. 8 hours of continuous operation or 250 continuous ECGs.
        10. Filters:

High-performance baseline: 0.5 Hz.

Muscle tremor: 35 Hz.

AC interference: 50 Hz or 60 Hz.

* + - * 1. Standard connectivity: 1 USB Client, 4 USB Hosts and Ethernet.
        2. Connectivity with electronic medical records.
        3. Electrodes: Rigorously tested for conductivity, adhesion, and hypoallergenic qualities; exceeds all AAMI standards.
        4. Power cable: Meets or exceeds Type SJT.
        5. Patient cable and leads: Meets or exceeds ANSI/AAMI EC53, EN/IEC 60601-2-25 and EN/IEC 60601-2-51.
        6. Environmental Operating Conditions:

Temperature: 50 to 104 degrees F (10 degrees to 40 degrees C).

Relative Humidity: 15 to 95 percent noncondensing, 30 to 70 percent for printing.

Atmospheric Air-Pressure: 10.15 to 15.37 psi (70 - 106 kPa).

* + - * 1. Environmental storage conditions:

Temperature: Minus 4 to 122 degrees F (minus 20 to 50 degrees C).

Relative Humidity: 15 - 95 percent noncondensing.

Atmospheric Air-Pressure: 10.15 to 15.37 psi (70 - 106 kPa).

* + - * 1. Protection Against Electric Shock: Class I, internally powered Type CF.
        2. Mode of operation: Continuous.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. MEDICAL EXAM LIGHTS AND ILLUMINATION SYSTEMS

\*\* NOTE TO SPECIFIER \*\* Delete paragraph if not required.

* + 1. Exam Lighting:
       1. Basis-of-Design: Green Series 300 General Exam Light as manufactured by Hillrom.

\*\* NOTE TO SPECIFIER \*\* Delete models not required.

* + - 1. Model 44400 GS 300 General Exam Light with Mobile Stand.
      2. Model 44410 GS 300 General Exam Light with Table/Wall Mount.
      3. Model 44215 12" Wall Mount Extension.
      4. Model 48960 Heavy Duty/Tall Mobile Stand.
      5. Characteristics, All Models:
         1. LEDs: 1 White LED.
         2. Color Temperature: 5,500 degrees K.
         3. Light Intensity at Typical Working Distance: 1858 footcandles (20,000 lux).
         4. LED Life: 50,000 hours.
         5. Working Distance: 12 to 20 in (305 to 508 mm).
         6. Spot Size at Working Distance: 5 to 6 in (127 to 152 mm).
         7. Electrical Input: 100 to 240 VAC, 50 to 60 Hz, 0.35 A max.
         8. Power Cord: No. 18 AWG, 3-wire grounded cord set, 96 in (2438 mm) long.
         9. Physical Dimensions:

Weight:

Total Table or Wall Mount: 5.65 lbs (2.56 kg).

Total Mobile Stand: 12.75 lbs (5.78 kg).

* + - * 1. Control Box:

Height: 10.83 in (275 mm).

Width: 3.94 in (100 mm).

Depth: 3.15 in (80 mm).

* + - * 1. Luminaire:

Height: 7.48 in (190 mm).

Width: 3.54 in (90 mm).

Depth: 3.15 in (80 mm).

* + - * 1. Mobile Stand:

Height: 24.02 in (610 mm).

Diameter: 20.87 in (530 mm).

* + - * 1. Total Wall Mount: 33.27 in (845 mm).

12 in (305 mm) wall mount extension.

* + - * 1. Total Mobile Stand: 58.66 in (1490 mm).
        2. Table or Wall and Mobile Stand to Luminaire Center: 31.1 in (790 mm).
        3. Mounting Types as Applicable to Configuration: Table mount, wall mount, mobile stand.
        4. Control Box: Touchless on/off control.

\*\* NOTE TO SPECIFIER \*\* Delete paragraph if not required.

* + 1. Exam Lighting:
       1. Basis-of-Design: Green Series Exam Light IV as manufactured by Hillrom.

\*\* NOTE TO SPECIFIER \*\* Delete models not required.

* + - 1. Model 48810: GS Exam Light IV with Table/Wall Mount.
      2. Model 48950: Mobile Stand for GS Exam Light IV.
      3. Model 52640: Disposable Sheath for GS Exam Light IV (25 per box, 5 boxes per case).
      4. Characteristics, All Models:
         1. LEDs: 1 White LED.
         2. Color Temperature: 5,500 degrees K.
         3. Light Intensity @ Typical Working Distance: 20,000 lux (1,858 footcandles)
         4. LED: 50,000 hours.
         5. Working Distance: 16 in (406 mm).
         6. Spot Size at Working Distance: 4 to 10 in (102 to 254 mm).
         7. Electrical: Input: 100 to 240 VAC 50 to 60 Hz, 0.30 A max.
         8. Power Cord: No. 18 AWG, 3-wire grounded cord set, 96 in (2438 mm).
         9. Weight:

Total Table/Wall Mount: 5.30 lbs (2.40 kg).

Total Mobile Stand: 12.40 lbs (5.63 kg).

* + - * 1. Control Box:

Height: 10.83 in (275 mm).

Width: 3.94 in (100mm).

Depth: 3.15 in (80 mm).

* + - * 1. Focusing Sleeve:

Length: 5.16 in (131 mm).

Diameter: 1.58 in (40 mm).

* + - * 1. Mobile Stand:

Height: 24.02 in (610 mm).

Diameter: 20.87 in (530 mm).

* + - * 1. Total Wall Mount: 47.24 in (1200 mm).
        2. Total Mobile Stand: 60.24 in (1530 mm).
        3. Table/Wall and Mobile Stand to Luminaire Center: 49.61 in (1260 mm).
        4. Mounting Types as Applicable to Configuration: Table/wall mount, mobile stand.
        5. Control Box: Touchless On/Off Control.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + - * 1. Accessory Options: Disposable Sheath.

\*\* NOTE TO SPECIFIER \*\* Delete paragraph if not required.

* + 1. Procedure Lighting:
       1. Basis-of-Design: Green Series 600 Minor Procedure Light as manufactured by Hillrom.

\*\* NOTE TO SPECIFIER \*\* Delete models not required.

* + - 1. Model:44600 GS 600 Minor Procedure Light with Mobile Stand.
      2. Model 44610 GS 600 Minor Procedure Light with Table/Wall Mount.
      3. Model 52630 Disposable Sheath for GS 600/GS 900 (50/box, 5 boxes/case).
      4. Model 44215 Wall Mount Extension.
      5. Model 48960 Heavy Duty/Tall Mobile Stand.
      6. Characteristics, All Models:
         1. Number of LEDs: 3 White LEDs.
         2. Color Temperature: 5,500 degrees K.
         3. Light Intensity at Typical Working Distance: 4,645 footcandles (50,000 lux).
         4. LED Life: 50,000 hours.
         5. Working Distance: 12 to 20 in (305 to 508 mm).
         6. Spot Size at Working Distance: 6 to 7 in (152 to 178 mm).
         7. Electrical: Input: 100 to 240 VAC, 50 to 60 Hz, 0.65 A max.
         8. Power Cord: No. 18 AWG, 3-wire grounded cord set, 96 in (2438 mm).
         9. Weight:

Total Table/Wall Mount: 6.45 lbs (2.93 kg).

Total Mobile Stand: 17.35 lbs (7.87 kg).

* + - * 1. Control Box:

Height: 10.83 in (275 mm).

Width: 3.94 in (100 mm).

Depth: 3.15 in (80 mm).

* + - * 1. Luminaire:

Height: 13.58 in (345 mm).

Width: 7.56 in (192 mm).

Depth: 3.39 in (86 mm).

* + - * 1. Mobile Stand:

Height: 24.02 in (610 mm).

Diameter: 20.87 in (530 mm).

* + - * 1. Total Wall Mount: 3 3.27 in (845 mm).
        2. Total Mobile Stand: 58.66 in (1490 mm).
        3. Table or Wall and Mobile Stand to Luminaire Center: 31.1 in (790 mm).
        4. Mounting Types as Applicable to Configuration: Table/wall mount, mobile stand.
        5. Control Box: Touchless On/Off Control with Dimming.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + - 1. Accessory Options: Disposable Sheath.
    1. Procedure Lighting:
       1. Basis-of-Design: Green Series 900 Procedure Light as manufactured by Hillrom.

\*\* NOTE TO SPECIFIER \*\* Delete models not required.

* + - 1. Model 44900 GS 900 Procedure Light with Mobile Stand.
      2. Model 44900-C GS 900 Procedure Light with Ceiling Mount.
      3. Model 44900-W GS 900 Procedure Light with Wall Mount.
      4. Model 52630 Disposable Sheath for GS 600/GS 900 (50 per box, 5 boxes per case).
      5. Characteristics, All Models:
         1. Number of LEDs: 6 White LEDs.
         2. Color Temperature: 5,50 degrees K.
         3. Light Intensity at Typical Working Distance: 7,432 footcandles (80,000 lux).
         4. LED Life: 50,000 hours.
         5. Working Distance: 24 in (610 mm) to 40 in (1016 mm).
         6. Spot Size at Working Distance: 9 to 11 in (229 to 279 mm).
         7. Electrical Input: 100 to 240 VAC, 50 to 60 Hz, 1.00 A max.
         8. Power Cord: No. 18 AWG, 3-wire grounded cord set, 96 in (2438 mm).
         9. Weight:

Total Wall Mount: 17.90 lbs (8.12 kg).

Total Mobile Stand: 44.85 lbs (20.34 kg).

Total Ceiling Mount: 24.50 lbs (11.11 kg).

* + - * 1. Luminaire:

Height: 13.74 in (349 mm).

Width: 18.03 in (458 mm).

Depth: 4.02 in (102 mm).

* + - * 1. Wall to Luminaire Center: 68.9 in (1750 mm).
        2. Wall Mount Max. Up/Down: 37.4 in (950 mm).
        3. Mobile Stand:

Height: 68.9 in (1750 mm).

* + - * 1. Mobile Stand Base:

Length: 21.97 in (558 mm).

Width: 22.24 in (565 mm).

Height: 6.5 in (165 mm).

* + - * 1. Mobile Stand Max. Up/Down: 37.4 in (950 mm).
        2. Mobile Stand to Luminaire Center: 37.4 in (950 mm).
        3. Ceiling to Luminaire Center: 68.9 in (1750 mm).
        4. Ceiling Mount Max. Up/Down: 37.4 in (950 mm).
        5. Mounting Types as Applicable to Configuration: Wall mount, mobile stand, ceiling mount.
        6. Control Box: Touchless On/Off Control with Dimming.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + - * 1. Accessory Options: Disposable Sheath.

1. EXECUTION
   1. EXAMINATION
      1. Verification of Conditions: Examine areas and conditions under which Work is to be performed and identify conditions that may be detrimental to proper or timely completion.
      2. Do not proceed until unsatisfactory conditions have been corrected.
   2. INSTALLATION
      1. General: Install per manufacturer's written instructions and in proper relationship with adjacent construction.
      2. Testing: Test per manufacturer's written instructions. Adjust until satisfactory results are obtained. If satisfactory results cannot be obtained, replace unit at no additional cost to the Owner.
   3. CLEANING AND PROTECTION
      1. Protect from damage during construction operations. Promptly repair any damaged surfaces. Remove and replace work which cannot be satisfactorily repaired.
      2. Clean products, prior to Substantial Completion, using materials recommended by the manufacturer.

END OF SECTION