Monitor, Central Station

UMDNS	GMDN
20179 Monitors, Central Station	38470 Patient monitoring system central station monitor

Other common names:
Central station monitors, central monitoring, alarm monitoring center, alarm monitoring station; Monitoring central

Core medical equipment - Information

Health problem addressed

Continuous monitoring is a valuable tool that helps provide additional information to the medical and nursing staff about the physiologic condition of the patient. Using this information, the clinical staff can better evaluate a patient's condition and make appropriate treatment decisions and is used to treat a wide range of patient conditions.

Product description

Depending on their configuration, central monitors include modules to measure varios parameters, including ECG, respiratory rate, NIBP and IBP, body temperature, SpO2, SvO2, cardiac output, ETCO2, intracranial pressure, and airway gas concentrations. They include computing capabilities and additional displays to observe trend information; some also include full-disclosure capabilities. They do not replace bedside monitors.

Principles of operation

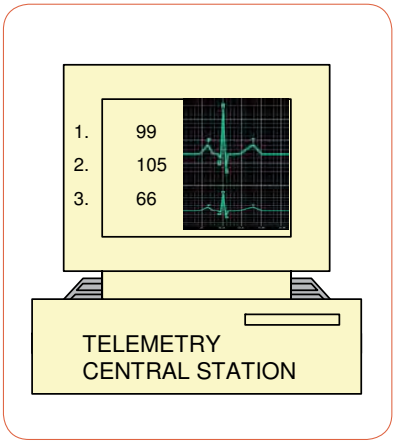
Physiologic monitors can be configured, modular, or both. Configured monitors have all their capabilities already built-in. Modular systems feature individual modules for each monitoring parameter or group of parameters; these modules can be used in any combination with each bedside monitor or be interchanged from monitor to monitor. Some physiologic monitoring systems have the capabilities of both modular and configured systems. With these monitors, frequently used parameters (e.g., ECG) are configured to the monitor, but modules As monitoring data is collected, some central stations are beginning to send the information to the patient's electronic medical record (EMR).

Operating steps

Receivers are connected to a bedside monitor and/or central station monitor. Some central station monitors can be networked so that a patient's waveform can be simultaneously displayed at multiple locations within a hospital. Some telemetry systems allow receivers to be connected to a bedside monitor or to be used on the same central station network as hardwired bedside monitors. This allows the clinician to view a patient's ECG and other monitored information at the bedside and at the central station.

Reported problems

Central monitors may tempt hospital personnel to pay more attention to the equipment than to the patient connected to it. Even monitors that are functioning reliably cannot substitute for frequent direct observation. Frequent false positive alarms can cause alarm fatigue and result in clinical staff missing critical patient events like low oxygen saturation levels.



Use and maintenance

User(s): Physicians, nurses, other medical staff

Maintenance: Biomedical or clinical engineer/ technician, medical staff, manufacturer/ servicer

Training: Initial training by manufacturer, operator's manuals, user's guide

Environment of use

Settings of use: General medical and surgical areas, intermediate care/step down units, cardiac rehab, telemetry units

Requirements: Uninterruptible power source, redundant data backups

Product specifications

Approx. dimensions (mm): Varies by configuration selected

Approx. weight (kg): Varies by configuration selected

Consumables: None

Price range (USD): 4,500 - 40,000

Typical product life time (years): 7-10

Shelf life (consumables): NA

Types and variations

Desk mounted, bedside mounted