



SAIRAN 
MEDICAL
COMPANY

MEDICAL
PRODUCTS
CATALOGUE



SAIRAN MEDICAL COMPANY

SAIRAN Med Company as a subsidiary of Isfahan Optics Industries was found in Isfahan in 1986 with the mission of delivering high quality, competitively priced medical devices to Iran market in order to improve healthcare system and make it more accessible and affordable. Our company goal is developing its international market in the near future too.

More than twenty years of experience in production of different medical devices and being the first performer of Smart Hospitals in the country, make us the leading company in Iran Medical Market. Due to years of research and over 180 experts who work in R&D department, we have been able to manufacture high-tech medical systems and various medical products such as patient Monitors, Surgical Suctions, Telemedicine Device, Defibrillator/Monitor, Surgical Light, ElectroEncephaloGram (EEG) and Surgical Implants.

We are honored to acknowledge implementation of quality systems as well as achievement of CE , a dramatic quality promotion . Taking advantages of EFQM excellence model we are driving towards being more competitive implementing ISO 9001 quality system and ISO 13485 were to most important promotion factors in response to customers needs in recent years. We believe that satisfaction of customers needs requires drawing line beyond the standard necessities.





CONTENT



Section 1

Cardiovascular

1.1 Patient Monitor	8
● ARAD P 10+	9
● SmartView	10
● ARAD P10	12
● FX7	13
● LX110	14
● SINA5	15
1.2 Patient Monitor Accessories	16
● IOA Vision	17
● Mi-Cap C1	18
● Capnography & Multigas Accessories	19
● Monitor Accessories	20
● Trolley & Stand	22
1.3 Central Station	24
● Live W110	25
1.4 Telemedicine Solutions	26
● Health Care SADRA A15	27
● SAMA	28
● Web Based	29
● T220	30
● T110	31
1.5 Defibrillator/Monitor	32
● RELIVE DM5	33
1-6 OEM Modules	34
● OEM Modules	35



Section 2

Neurology

2.1 ElectroEncephaloGram	38
● E24	39
● E110	40
2.2 Conciousness Monitoring	42
● BIS Monitoring IOA Vision	43
2.3 EEG Accessories	44
● Wire & CAP & Electrodes	45



Section 3

Operating Room Equipment

3.1 Smart OR	48
● Modular Operating Room Walls	49
● Operating Room Management Systems (ORMS)	50
3.2 Surgical light	52
● Luminous LED5	53
● Luminous LED3	54
3-3 Medical Suction	56
● C55F	57
● C25	58
● MC10	59
● Suction Accessories	60
● Suction Trolley	60



Section 4
Spinal Implants

4-1 Lumbar Stabilization 64

- Lumbar & Thoracic Screw–Rod Stabilization System ... 65
- Lumbar Intervertebral Fusion Cages 66
- Universal Pedicle Screw 67
- Iliac Screw 68
- Dynamic Rod 68
- Interspinous Spacer 69
- Lumbar Vertebral Body Replacement (L-VBR) 69

4-2 Cervical Stabilization 70

- Cervical Screw–Rod Stabilization System 71
- Cervical Intervertebral Fusion Cages 72
- Cervical Vertebral Body Replacement (C-VBR) 73
- Occipital plate 73



Section 5
Smart Hospital Solutions

5-1 Automation 76

- BMS 77

5-2 Communication 78

- LAN/WAN/WLAN/FTTX 79
- VOIP 79
- Paging 80

5-3 Infotainment 82

- IPTV 83
- Digital Signage 83

5-4 RFID 84

- RFID and RTLS 85

5-5 Safety & Security 86

- CCTV 87
- Access Control 87
- Intruder Alarm 88
- Fire Alarm & Fire Fighting 88

5-6 Smart OR 90

- Modular Operating Room Walls 91
- Operating Room Management Systems (ORMS) 92



Section 6
Services 94



Section 7
History 96



Section 8
Certificates 100



Section 9
Awards 102



Section 1

Cardiovascular





OEM Modules

- OEM Modules



1.5

Defibrillator/Monitor

- RELIVE DM5



1.6



1.4

Telemedicine Solutions

- Health Care SADRA A15
- SAMA
- Web Based
- T220
- T110



1.1



1.3

Central Station

- Live W110

Patient Monitor

- ARAD P10+
- SmartView
- ARAD P10
- FX7
- LX110
- SINA5



1.2

Patient Monitor Accessories

- IOA Vision
- Mi-Cap C1
- Capnography & Multigas Accessories
- Monitor Accessories
- Trolley & Stand



1.1

Section 1
Cardiovascular

Patient Monitor

- ARAD P10+
- SmartView
- ARAD P10
- FX7
- LX110
- SINA5





Cardioset ARAD P10+

Parameters

- Waveforms: ECG (3, 7, 12 leads), RESP, Pleth, EEG (One line), IBP Waveform
- Numeric Parameters: HR, RR, SpO₂%, PR, NIBP, Temp, IBP (2 channels)

Options

- Arrhythmia Analyzer
- ST Segment Detection
- EMG & BIS
- CO₂ (SideStream)
- Multigas Analyzer (N₂O, O₂, AA1, AA2)
- ECG Out
- 2.0" Thermal Recorder
- Remote Patient Monitoring

Key Features

- Intuitive 19" Wide Multi Touch Display
- Wi-Fi / Bluetooth Communication Support
- New Graphical User Interface
- Full HD External Display Support
- Full Customizable Screen Views
- Dynamic Auto Size Waves
- Dual Bed Monitoring



- *Reliable PACS & HIS Support*



Smartview Vital Signs Monitors

Parameters

- Waveforms: ECG (3 ,7 ,12 leads), RESP, Pleth, EEG (One line), IBP Waveform
- Numeric Parameters: HR, RR, SpO₂%, PR, NIBP, Temp, IBP (2 channels)

Options

- Arrhythmia Analyzer
- ST Segment Detection
- EMG & BIS
- Impedance Cardiography (ICG)
- CO₂ (SideStream)
- Multigas Analyzer (N₂O, O₂, AA1, AA2)
- ECG Out
- 2.0" Thermal Recorder
- Remote Patient Monitoring
- Two Additional IBP Channel



■ SmartView MP22



■ Smartview MP19



Key Features

- Equipment Class: Class I, Internally Powered, IPX1, Continuous Operation
- PACS & HIS Support
- Wi-Fi / Bluetooth Communication Support
- Intelligent Integrated Software with Comprehensive Vital Signs Monitoring
- Humanized Operation Interface
- High Resolution Display Option Improves Viewing
- Replaceable Wide Displays (12, 15 ,19, 22 Inch)
- Capability of Using Both Multi-Touch Screen Display & Keypad
- Fully Customizable Modules
- Dynamic Auto Size Waves
- Mother & Baby Patient Monitor
- Comprehensive Care with Vitals and Viewing
- Dual Bed Monitoring
- Wired and Wireless Networking with Continues Data Transfer
- External USB/Wi-Fi Printer Support

- *Multi Touch Screen, Stylish New Design*



■ **SmartView MP15**



■ **SmartView MP12**



Cardioset ARAD P10

Parameters

- Waveforms: ECG (3, 7, 12 leads), RESP, Pleth, EEG (One line), IBP Waveform
- Numeric Parameters: HR, RR, SpO₂%, PR, NIBP, Temp, IBP (2 channels)

Options

- Arrhythmia Analyzer
- ST Segment Detection
- EMG & BIS
- CO₂ (SideStream)
- Multigas Analyzer (N₂O, O₂, AA1, AA2)
- ECG Out
- 2.0" Thermal Recorder
- Remote Patient Monitoring

Key Features

- 19" Wide Screen Display
- User Friendly Software
- Convenient Rotary Knob & Shortcut Keys
- ECG Recording, NIBP Report and Trend for All Parameters
- Printable Disclosure
- Lightweight (< 5 Kg Including Battery)



- *All You Expect from a Vital Signs Monitor*



Cardioset FX7

Parameters

- Waveforms: ECG (3,7 leads), RESP, Pleth, IBP (2 channels)
- Numeric Parameters: HR, RR, SpO₂%, PR, NIBP, Temp, IBP (2 channels)

Options

- Arrhythmia Analyzer
- ST Segment Detection
- CO₂ (Sidestream)
- 2.0" Thermal Recorder

Key Features

- 15" color TFT Display
- Simple and User Friendly Operation
- ECG Recording, NIBP Report and Trend for All Parameters
- Lightweight (< 5 Kg Including Battery)



- *Fast boot in about 5 seconds*



Cardioset LX110

Parameters

- Waveforms: ECG (3,7 leads), RESP, Pleth, IBP (2 channels)
- Numeric Parameters: HR, RR, SpO₂%, PR, NIBP, Temp, IBP (2 channels)

Options

- Arrhythmia Analyzer
- ST Segment Detection
- CO₂ (Sidestream)
- 2.0" Thermal Recorder

Key Features

- 12.1" color TFT Display
- ECG Recording, NIBP Report and Trend for All Parameters
- Lightweight (< 5 Kg Including Battery)



- *Compact & Impressive Design*



Cardioset SINA 5

Parameters

- Waveforms: ECG (3 ,7 leads), Pleth, RESP, IBP (2 channels)
- Numeric Parameters: HR, RR, SpO₂%, PR, NIBP, Temp, IBP (2 channels)

Options

- Arrhythmia Analyzer
- ST Segment Detection
- CO₂ (Sidestream)
- GPS / GPRS
- 2.0" Thermal Recorder

Key Features

- 5" color TFT Display
- ECG Recording, NIBP Report and Trend for All Parameters
- Extra Lightweight (< 2 Kg Including Battery)



- *Minimum Size, Maximum Portability*



1.2

Section 1
Cardiovascular

Patient Monitor Accessories

- IOA Vision
- Mi- Cap C1
- Capnography & Multigas Accessories
- MonitorAccessories
- Trolley & Stand





BIS Monitoring IOA Vision

Measurement

- Index of Consciousness
- SQI, ESR, EMG and BIS Measurement

Technical Highlights

- Compliance with Europe Standards
- Offered Accessories And Peripherals by SAIRAN Medical Equipment Industries
- Easy Installation and Utilization
- Bluetooth Interaction with SAIRAN Patient Monitors
- Waveform Display on Patient Monitor and Saving as Trend
- Graphical Low Consumption LCD
- Minimum 6 Hours Operation Time Using External Rechargeable Battery



- *What Does Complete the Operating Room ?*



Capnograph Mi-Cap C1

Measurement

- Mainstream Sensor Type
- Non-Dispersive Infrared Gas Analysis Technique
- Compact Multi-Channel Infrared Detector

Technical Highlights

- CO₂ Measurement Range: 0-19.7% , 150 mmHg, 0 - 20 kPa
- CO₂ Resolution: 0.1 mmHg
- CO₂ Measurement Accuracy:
 - 0 - 40 mmHg: ± 2 mmHg
 - 41 - 70 mmHg: $\pm 5\%$ of Reading
 - 71 - 100 mmHg: $\pm 8\%$ of Reading
 - 101 - 150 mmHg: $\pm 10\%$ of Reading
- Respiration Rate: 3 -150 Brpm
- Respiration Rate Accuracy: 1% \pm 1Brpm
- Circumstance Pressure: 86 to 106 kPa
- Power Demand: 5 V \pm %5 (max ripple 200 mVp-p)
- Power Consumption: <150 mA
- Storage Condition: 40°C to 70°C , < 90 % RH, Non-Condensing
- Operating Condition: 5°C to 50°C , < 10 to 90 % RH, Non-Condensing



- *Analyze Each Cycle of Respiration System*



Capnography & Multigas Analyzer Accessories

- Respironics CO₂ Probe
- Extension Cable
- Adapter & Nomoline



- IRMA CO₂ Probe
- Extension Cable
- Adapter & Nomoline



- ISA CO₂ Probe
- Extension Cable
- Adapter & Nomoline





Monitor Accessories

Nellcor / Nonin SpO₂

- Adult, Pediatric and Neonate
- Adhesive, Reusable and Multisite Sensors



NIBP CUFFs

- Cuff for Adult, Pediatric and Neonate
- Single Use Cuffs



IBP

- Periodical Reusable Transducers
- Dome, Clamp and Bracket
- Extension Cable



**Temp**

- Temperature Probe-Skin (Adult, Pediatric and Neonate), YSI Compatible
- Temperature Probe-Rectal (Pediatric), YSI Compatible

**ECG**

- ECG Patient Cable 3,5,10 Wires
- Extension Cable (3m, 5m)

**Battery**

- Li-ion 12 v / 2.3 Ah
- Sealed Acid 12 v / 2.3 Ah





Trolley & Stand

Monitor Trolley

- Left and Right Rotation
- Bracket Horizontal/Vertical



Monitor Stand

- Easy to Use
- Excellent Quality Material & Design



A close-up photograph of a person in a white lab coat holding a bright red heart. The person's hands are cupped together, and the heart is the central focus. A stethoscope is visible around the person's neck in the background.

SAIRAN
medical
company



1.3

Section 1
Cardiovascular

Central Station

- Live W110
Wide Screen
Central Station





Live W110

Parameters

- Vital Signs of 16 Telemetry Systems or Bedside Patient Monitors through Wireless Network/LAN
- Up to 5 Graphs Simultaneously for Each Patient Including ECG (I, II, III, aVL, aVR, aVF, V), SpO₂%, Pleth, RESP, IBP1 and IBP2
- Patient Information, Continuous Records History and Nurse Calls

Key Features

- Wide 20" Touch Screen Display
- Two-Way Communication with Patient Monitors
- Arrhythmia Analyzer
- Portable Thermal Recorder & LaserJet Printer Support
- User Friendly & Elegant Interface

- *Intensive Care of All Patients Simultaneously*





1.4

Section 1
Cardiovascular

Telemedicine Solutions

- SADRA A15
- SAMA
- Web Based
- T220
- T110





HealthCare SADRA A15

Parameters

- ECG (3, 7, 12 leads), RESP, Pelth, IBP, SpO₂%, NIBP, Temp, CO₂
- Glucose, Lipid and PCG Measurement

Key Features

- Touch Screen 10.1" Color TFT Display
- Real Time Patient Monitoring
- GSM (2G, 3G, 4G), LAN and Wi-Fi Data Interface
- Support all UVC Standard Otoscopes
- One Channel Audio-In for Connecting Stethoscope
- Video Telephony and Consultation
- Real-Time Transmit Information to Central Viewer Station

- *Transfer Information Instead of Moving Patient*

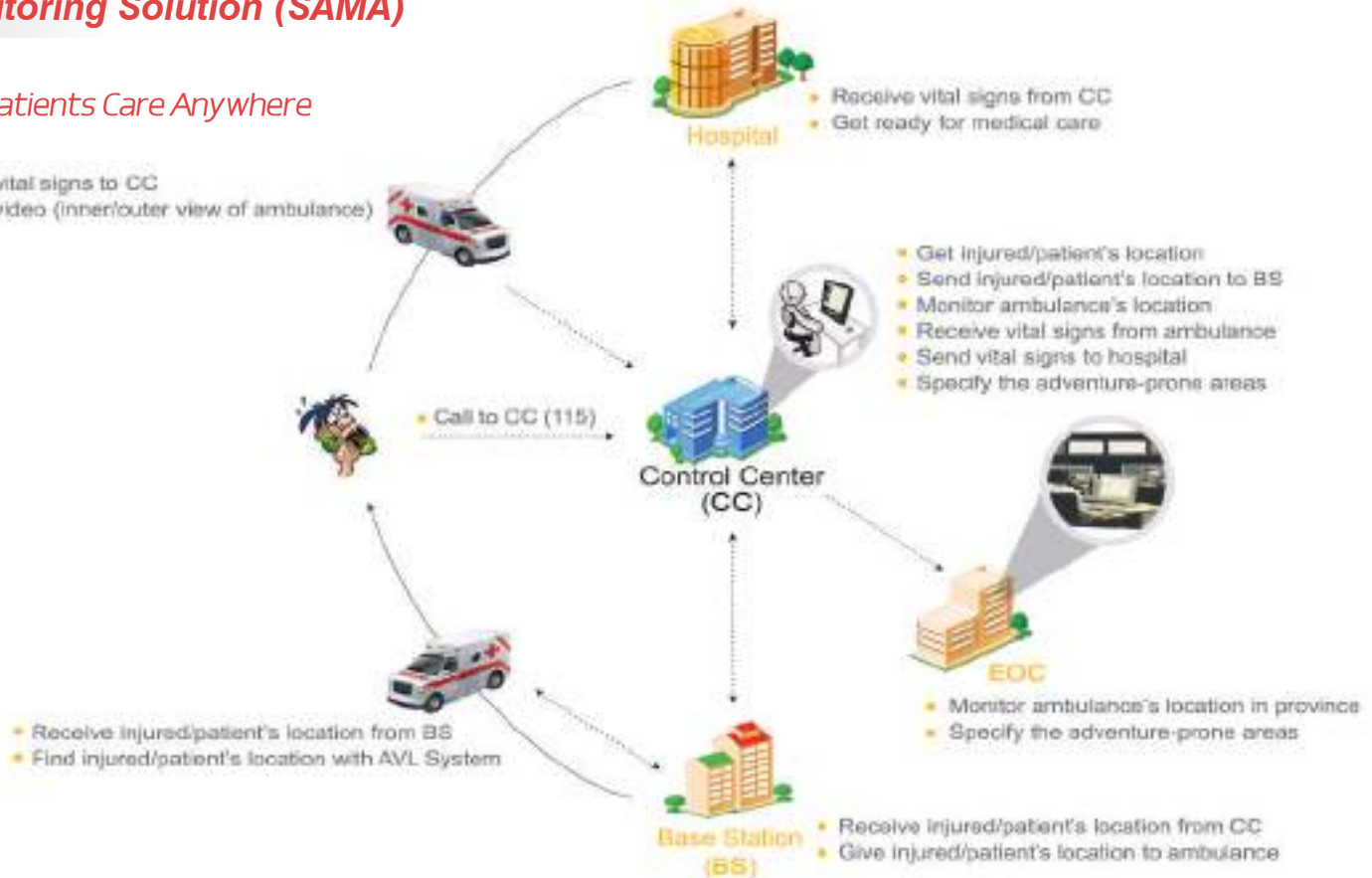




TeleMonitoring Solution (SAMA)

● Extend Patients Care Anywhere

- Send vital signs to CC
- Save video (inner/outer view of ambulance)





Web Based Patient Monitoring

Technical Highlights

- Access to Web Monitoring from www.sairanmed.ir Website
- Showing All Vital Signs from SAIRAN Patient Monitors
- Define Permission and Accessibility for the User
- 24 Hours Patient Care



- *Monitor Patients around the World*





Cardiopack T220

Telemetry Monitoring System

- Transmission of ECG Graph (I,II,V)
- Storing Data for 48 Hours on microSD Memory (up to 16 GB)
- 24 hours Operating Time for Transmission ECG Using Only 1*AA Battery
- Provides a Graphical Screen to Display All Monitored ECG Leads
- Nurse Call Button on the Transmitter
- Enhances Patient Comfort with a Compact, Lightweight Design
- Up to 16 Telemetry Transmitters Can Be Used Simultaneously in a Cardiac Care Center
- 8 Channels Receivers with Internal Antenna
- Frequency/Power Settings Can Be Modified in Accordance with the Local Country Regulations
- High Reliability, Narrowband Wireless Transmission and Digital Modulation
- In Accordance with EN60601-2-27, ANSI/AAMI EC13, IEC 60601-1, IEC 60601-2 Standards



- *Don't Confine Patient for Cardiac Care*



Cardiopack T110

Telemetry Monitoring System

- Transmission of ECG Graph (I,II ,III), SpO₂%, Pulse Rate, Plethysmograph
- Provides a Graphical Screen to Display All Monitored ECG Leads
- Nurse Call Button on the Transmitter
- 8 Channels Receivers with Internal Antenna
- High Reliability, Narrowband Wireless Transmission and Digital Modulation
- Up to 16 Telemetry Transmitters Can Be Used Simultaneously in a Cardiac Care Center
- 48 Hours Operating Time for Transmission of Both ECG and SpO₂% Using Only 2*AA Batteries
- In Accordance with EN60601-2-27, ANSI/AAMI EC13, IEC 60601-1, IEC 60601-2 Standards



- *More Vital Signs Are Available Now with Cardiopack*



1.5

Section 1
Cardiovascular

Defibrillator/ Monitor

- RELIVE DM5





RELIVE DM5

Defibrillator

- Energy: 1-200 J
- Waveform: Biphasic Truncated Exponential
- Mode: Manual, Cardioversion, AED
- Charging Time: Less than 6 Seconds

Noninvasive Pacing

- Waveform: Rectilinear, Constant Pulse
- Current: 0 - 200 mA
- Rate: 30 - 180 ppm
- Refractory Period: 340 ms (30-80 ppm); 240 ms (90-180 ppm)
- Mode: Demand or Fixed Rate

Numeric Parameters

- Waveform: ECG, Pleth, IBP (2 channels), CO₂
- Numerical Values: HR, PR, SpO₂ %, Temp, IBP (2 channels), NIBP, EtCO₂



• *Saving Life is our Pleasure*

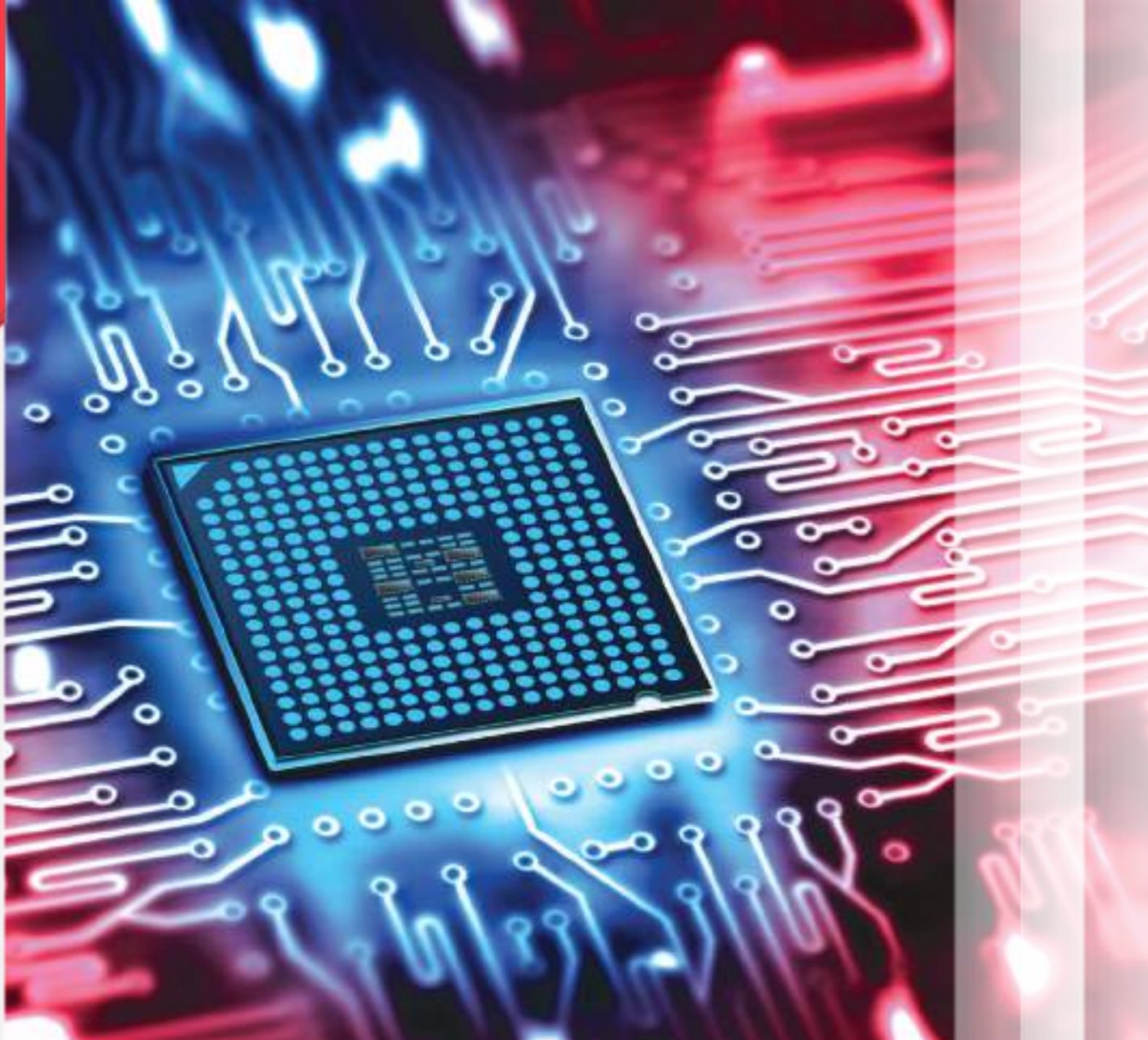


1.6

Section 1
Cardiovascular

OEM Modules

- OEM Modules
- Patient Monitoring
- OEM Modules





OEM Modules

- Mainboard
- IBP & Temp Module:
2,4 Channels IBP and 2 Channels Temp
- ECG & Respiration Module:
3,10 Channels High CMRR ECG Amplifier
3,7,12 Leads
- Thermal Recorder
- EEG Amplifier Module:
21 Channels high CMRR EEG Amplifier

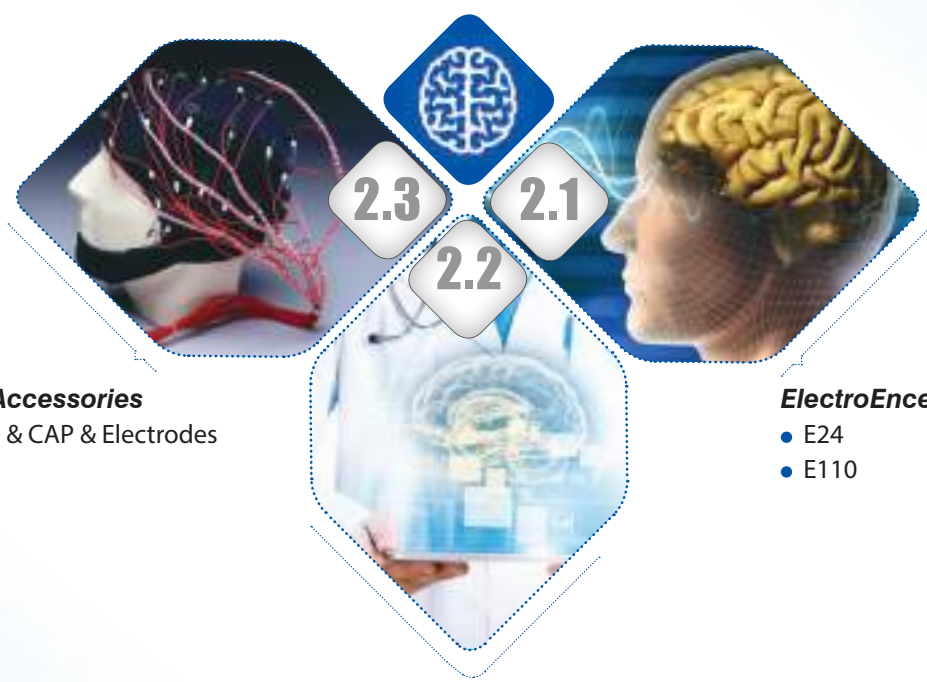




Section 2

Neurology





EEG Accessories

- Wire & CAP & Electrodes

ElectroEncephaloGram (EEG)

- E24
- E110

Conciosness Monitoring

- BIS Monitoring IOA Vision



2.1 Section 2 Neurology

Electro- Encephalo- Gram (EEG)

- E24
- E110





Neuroset E24

Technical Highlights

- Compact & portable (Laptop System)
- 21 Channels EEG +3 Extra Amplifier Channels
- FFT Analysis
- Programmable Photic Stimulator
- Color Brain Map
- Impedance Check Measurement
- USB and Serial Communication
- Compact and Portable Design
- Multi Languages Support



- *EEG Portability Is Possible Now*



Neuroset E110

Technical Highlights

- 21 Channels EEG + 3 Extra Amplifier Channels
- 15" Monitor (Laptop System)
- Thermal Printing on 216 mm Wide Continuous Paper Same as Analog EEGs
- FFT and Brain Mapping Software Analysis
- Remontage and Digital Filtering
- Impedance Check Measurement
- USB and Serial Communication
- Compact and Portable
- Persian and English Languages Support
- Laser Color and Monochrome Printer Support



- *EEG, Opening a Window to Neuroscience*



SAIRAN
medical
company



2.2 Section 2 Neurology

Conciousness Monitoring

- BIS Monitoring
IOA Vision





BIS Monitoring IOA Vision



Measurement

- Index of Consciousness
- SQI, ESR, EMG and BIS Measurement

Technical Highlights

- Compliance with Europe Standards
- Offered Accessories And Peripherals by SAIRAN Medical Equipment Industries
- Easy Installation and Utilization
- Bluetooth Interaction with SAIRAN Patient Monitors
- Waveform Display on Patient Monitor and Saving as Trend
- Graphical Low Consumption LCD
- Minimum 6 Hours Operation Time Using External Rechargeable Battery



- *Complete Your Neurology Department*



2.3

Section 2
Neurology

EEG Accessories

- Wire & CAP & Electrodes





EEG Accessories

- EEG Wire
- EEG Electrodes
- Patient Head cap

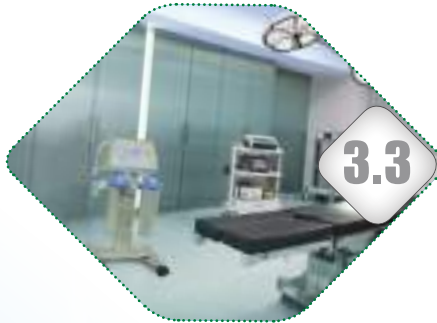




Section 3

Operating Room Equipment





3.3

Medical Suction

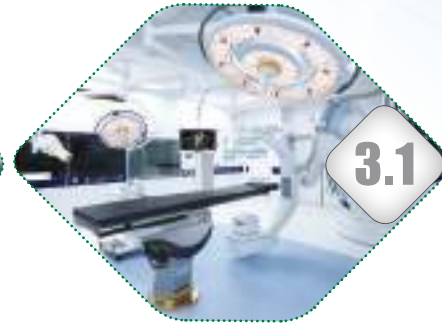
- C55F
- C25
- MC10
- Suction Accessories



3.2

Surgical light

- Luminous LED5
- Luminous LED3



3.1

Smart OR

- Modular Operating Room Walls
- Operating Room Management Systems (ORMS)



3.1 Section 3 Operating Room Equipment

Smart OR

- Modular Operating Room Walls
- Operating Room Management Systems (ORMS)





Modular Operating Room Walls

- Laminated Glass Panels
 - Stainless Steel Panels
 - Galvanized Panels
 - Laminar Airflow
 - Various Colors and Motifs
 - Available for Operating Rooms, ICU, CCU and ...
-
- *Ultimate Elegance and Sterilized Implementation*





Operating Room Management Systems (ORMS)

- Operating Room Video Source Integration (HDMI, SDI, VGA, DVI, TCP/IP, PACS)
- Video Routing
- Video Streaming
- Video Recording (USB, NAS, SAN)
- Surgical Light Control
- Video Conferencing
- BMS Control Panel

- *Now the Operating Room is Under Your Control*





SAIRAN
medical
company



3.2 Section 3 Operating Room Equipment

Surgical light

- Luminous LED5
- Luminous LED3





Luminous LED 5

Technical Highlights

- Multicolor Medical LEDs
- Capability of Imaging Surgery Area Using Full HD Camera (Optional)
- Light Focus Adjustment
- Controllability Using Smart Hospital System
- Color Temperature Adjustment
- Integrated Laser Pointer
- Emergency Battery Backup (Optional)
- Monitor Display for Showing Surgery Required Images
- Video Conferencing
- Controllability Using Mobile, Tablet and Remote Control

- *Perfect Shadowless Partner of Surgeon*





Luminous LED 3

Technical Highlights

- Multicolor Medical LEDs
- Light Focus Adjustment
- Controllability Using Smart Hospital System
- Color Temperature Adjustment
- Integrated Laser Pointer
- Emergency Battery Backup (Optional)
- Monitor Display for Showing Surgery Required Images
- Controllability Using Mobile, Tablet and Remote Control



- *Perfect Shadowless Partner of Surgeon*



Technical Data of SAIRAN LED5 and LED3 Surgical Light

Parameter	Model	LED5	LED3
Illuminance (kLUX)		160	130
Color Temperature (Kelvin)		3500, 3750, 4000, 4250 4500, 4750	3500, 3750, 4000, 4250 4500, 4750
Focusable Light Field Size(mm)		180-300	170 - 270
Color Rendering Index (Ra)		92	92
Working Distance (cm)		70 - 140	70 - 140
Number of LEDs		45	30
Life Time of LEDs		Up to 50000	Up to 50000
Mount		Ceiling	Ceiling
Power Consumption (W)		180	160
Operating Voltage AC (V)		220	220

Camera with Interface Board for LED5(Optional)

Objective system	10-Fold Optical Zoom 12-Fold Digital Zoom F=3.8 mm (wide) to 38 mm (telephoto) F 1.8 to F 3.4
Video Signal	1080 p/50
Video Output	HDMI
Focusing System	Automatic & Manual
Minimum Object Distance	10 mm (wide) to 800 mm (telephoto)
Resolution (Megapixel)	2.38
Power Consumption (W)	6
Dimension (mm)	45.6 *48.8 *78
Weight (g)	260



3.3 *Section 3* Operating Room Equipment

Medical Suction

- C55F
- C25
- MC10
- Suction Accessories





MEDICA C55F

Technical Highlights

- High Vacuum: -90 kPa, 675 mmHg
- High Flow: 50 L/min
- Dimension: 965x510x480 mm
- Weight: 17kg
- Safety Classification: IPX1
- In Accordance with
EN1079-1, EN 60601-1, EN 60601-2 Standards
- Fast Vacuum Build Up
- Quiet in Operation
- Hygienic and Easy to Use

Application

- Plastic Surgery
- General Surgery
- Neurosurgery
- Outpatient Surgery Centers
- Emergency Units



- *Extreme Vacuum Is Now Available*



MEDICA C25

Technical Highlights

- High Vacuum: -80 kPa, 600 mmHg
- High Flow: 20 L/min
- Dimension: 300x180x350 mm
- Weight: 6 kg
- Safety Classification: IPX1
- In Accordance with
EN1079-1, EN60601-1, EN60601-2 Standards
- Small, Lightweight and Portable Design
- Various Vacuum Levels
- Quiet in Operation
- Easy to Use Operating Elements



- *Best Choice for an Ambulance*



MEDICA MC10

Technical Highlights

- High Vacuum: -40 kPa , 300 mmHg
- High Flow: 16 L/min
- Dimension: 350x180x300 mm
- Weight: 6 kg
- Safety Classification: IPX1
- Small, Lightweight and Portable
- Various Vacuum Levels
- Quiet in Operation
- Easy to Use Operating Elements



- *When Children Need Their Own Suction Unit*



Suction Accessories

- Jar 1 ,2 ,3 Liter
- Lid 1 ,2 ,3 Liter
- Over Fill Protection
- Suction Bag & Canister
- Patient Tube
- Jar Holder
- Bacterial Filter
- Pedal Switch



Suction Trolley

- Extremely Impact Resistant
- Antistatic Wheels



A close-up photograph of a person in a white lab coat holding a grey stethoscope. The person's hands are visible, gripping the binaural part of the stethoscope. The background is a blurred hospital or clinic setting with a window and some greenery.

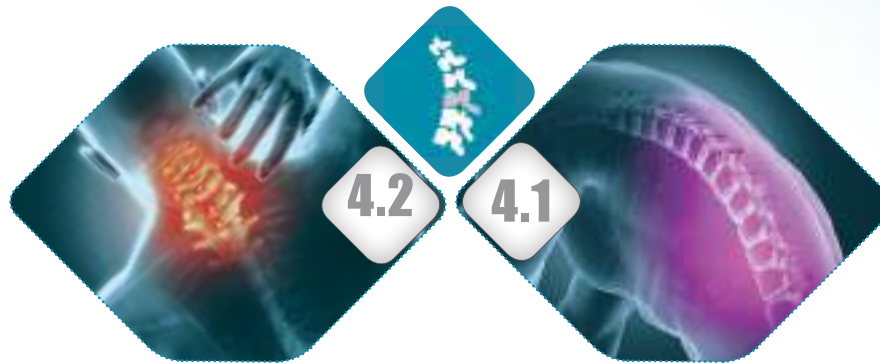
SAIRAN
medical
company



Section 4

Spinal Implants





Cervical Stabilization

- Cervical Screw–Rod\ Stabilization System
- Cervical Intervertebral Fusion Cages
- Cervical Vertebral Body Replacement (C-VBR)
- Occipital plate

Lumbar Stabilization

- Lumbar & Thoracic Screw–Rod Stabilization System
- Lumbar Intervertebral Fusion Cages
- Universal Pedicle Screw
- Iliac Screw
- Dynamic Rod
- Interspinous Spacer
- Lumbar Vertebral Body Replacement (L-VBR)



4.1 *Section 4* *Spinal Implants*

Lumbar Stabilization

- Lumbar & Thoracic Screw-Rod Stabilization System
- Lumbar Intervertebral Fusion Cages
- Universal Pedicle Screw
- Iliac Screw
- Dynamic Rod
- Interspinous Spacer
- Lumbar Vertebral Body Replacement (L-VBR)



Lumbar & Thoracic Screw-Rod Stabilization System

This system is intended for static stabilization of lumbar and thoracic vertebrae in treatment of severe spinal injuries in lumbar & thoracic levels.

- Manufactured from High Strength Titanium Alloy
- Posterior Implantation
- Polyaxial Pedicle Screw with Angular Positioning at the Screw Body and Screw Head to Enhance Implantation of the Contoured Rods
- Spinal Rod with Enhanced Mechanical Strength
- Available Pedicle Screw in Various Diameter and Length Suitable for Stabilization of Lumbar-Thoracic Column
- Cannulated Screw for Augmentation of Pedicle Screw in Vertebral Body

- *One System, Multiple Solutions*



Lumbar Intervertebral Fusion Cages

These cages are intended for preservation of lumbar disc height and Lordosis angle and accelerating the fusion of adjacent vertebra to the degenerated disc.

- Manufactured from PEEK Polymer
- Available in Two Types: PLIF, TLIF
- Optimized Bone Grafting Spacing
- Enhanced with Transverse Ridges on Superior and Inferior Surfaces for Mechanical Integration with Vertebrae Endplates
- Diagnosis of the Cage Position in Radiographic Scans through Position of the Pins
- Pins Manufactured from Titanium Alloy

- *Dual Solutions for Lumbar Interbody Fusion*



Universal Pedicle Screw

This screw is used with Screw-Rod stabilization system for treatment of scoliosis of spinal column.

- Manufactured from High Strength Titanium Alloy
- Dual Locking Mechanism of Screw and Rod
- With Inserting Nut
- With Locking Washer to Lock the Screw Body to the Screw Head
- With Freedom Advantage of Polyaxial Screw and Biomechanical Strength Advantage of Monoaxial Screw in Anatomical Fixation at the Injured Spinal Levels

- *Combined Mono/Poly Axial Pedicle Screw*



Iliac Screw

This screw is intended to be used with Lumbar Screw-Rod stabilization in treatment of severe injury at the lower vertebrae of lumbar or sacral with involvement of ilium.

- Manufactured from High Strength Titanium Alloy

- *Combines Simplicity and Versatility*

Dynamic Rod

Dynamic rod provides micro-motion in fixation of Lumbar Screw-Rod stabilization.

- Manufactured from High Strength Titanium Alloy
- Enhance Vertebrae Fusion



Interspinous Spacer

This implant is intended for treatment of mild herniated disc to limit the range of motion in extension of spinal column.

- Manufactured from High Strength Titanium Alloy
- Preservation of the Disc
- Preservation of the Range of Motion in Flexion of Spinal Column

- *More Active, Less Painful Lifestyle*



NEW
PRODUCT

Lumbar Vertebral Body Replacement (L-VBR)

L-VBR is intended for treatment of severe injuries of lumbar vertebrae.

- Manufactured from High Strength Titanium Alloy
- Expendable in Height
- Optimized Bone Grafting Spacing
- Enhanced Self-Locking Threads



NEW
PRODUCT



4.2 *Section 4* Spinal Implants

Cervical Stabilization

- Cervical Screw – Rod Stabilization System
- Cervical Intervertebral Fusion Cages
- Cervical Vertebral Body Replacement (C-VBR)
- Occipital plate



Cervical Screw–Rod Stabilization System

This system is intended for static stabilization of cervical vertebrae in treatment at severe spinal injuries in cervical zone.

- Manufactured from High Strength Titanium Alloy
- Posterior Implantation
- Polyaxial Pedicle Screw with Angular Positioning at the Screw Body and Screw Head to Enhance Implantation of the Contoured Rods
- Spinal Rod with Enhanced Mechanical Strength
- Available Pedicle Screw in Various Diameters and Lengths Suitable for Stabilization of Cervical Column

- *Beneficial for Surgeon and Patient Alike*



Cervical Intervertebral Fusion Cages

These cages are intended for preservation of the disc height and lordosis angle and also accelerating the fusion of adjacent vertebrae to the degenerated disc.

- Manufactured from PEEK Polymer
- Available in Three Types: Cervical Cage, Bladed Cage, Cage-Plate
- Optimized Bone Grafting Spacing
- Enhanced with Transverse Ridges on Superior and Inferior Surfaces for Mechanical Integration with Vertebrae Endplates
- Diagnosis of the Cage Position in Radiographic Scans Through Position of the Pins
- Pins Manufactured from Titanium Alloy
- Implantation Through Anterior Aspect of Cervical Column



- *Increased Migration Resistance*

Cervical vertebral body replacement (C-VBR)

C-VBR is intended for treatment of severe injuries of cervical vertebrae.

- Manufactured from High Strength Titanium Alloy
 - Expendable in Height
 - Optimized Bone Grafting Spacing
 - Enhanced Self-Locking Threads
-
- *Enhanced Implant Stability*



Occipital plate

This plate is designed to be used with cervical screw-rod system for stabilization of occipital portion of skull bone in treatment of upper portion of the cervical column.

- Product from high strength titanium alloy
- Manufactured from High Strength Titanium Alloy
- To Enhance the Biomechanical Stability of Cervical Screw-Rod Fixation in Treatment of Injuries in C1 and C2 Levels





Section 5

Smart Hospital Solutions



Smart OR

- Modular Operating Room Walls
- Operating Room Management Systems (ORMS)



5.6

5.1



5.5

Safety & Security

- CCTV
- Access Control
- Intruder Alarm
- Fire Alarm & Fire Fighting



5.4

5.3

RFID

- RFID and RTLS



Automation

- BMS



5.2

Communication

- LAN/ WAN/ WLAN/ FTTX
- VOIP
- Paging



Infotainment

- IPTV
- Digital Signage





5.1 *Section 5 Smart Hospital Solutions*

Automation

- BMS
Building Management
Systems





BMS

- Hospital Lighting Control
- Hospital Curtain Control
- Hospital HVAC Control
- Hospital Energy Management
- Hospital Data Center Control
- Access Control Integration
- CCTV Integration
- Remote Monitoring Via LAN or Internet
- 2D or 3D Graphical User Interface
- Various Protocols (TCP/IP, MODBUS, KNX)



- *Optimizing Hospital Energy Consumption*



COMMUNICATION

5.2 *Section 5 Smart Hospital Solutions*

Communication

- LAN/WAN/WLAN/
FTTX
- VOIP
- Paging





LAN/WAN/WLAN/FTTX

- 10Gb/s Back Bone Network Speed
- Wireless 802.11ac Support
- Structured Copper and Fiber Cabling
- Fiber Optic Networks (FTTH/FTTX)



- *Total Solution Integration*

VOIP

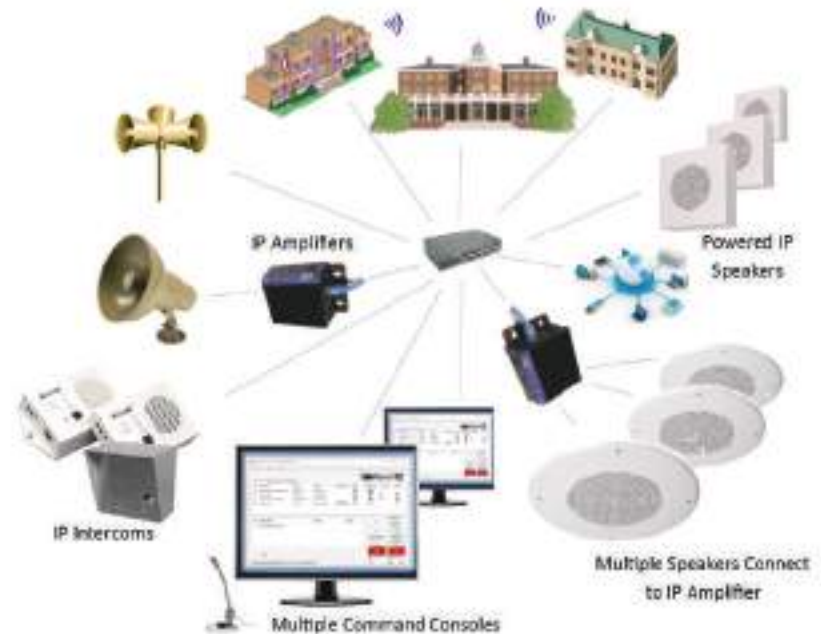
- Software Base or Embedded PBX Centers
- Video Phone Support
- Dect Phone Support
- Paging Integration





Paging

- IP Base Amplifiers
- Minimum Cabling Requirements
- Design Flexibility
- *Flexible and Expandable Paging Design*



HEALTH DATA

surgery 0
clinical test
medications
blood pressure
sbs test 52%
respiration 52%
sdr running



Smart Hospital



10-may-14

patient #08001



gender ♂
age 23
HR 95 bpm
12088
ECHO D
CD P16W-500
Ftg 2.0 MHz

SAIRAN
medical
company





5.3 *Section 5 Smart Hospital Solutions*

Infotainment

- IPTV
- Digital Signage





IP TV

- Live TV
- Video On Demand Service
- Music On Demand Service
- HIS Integration
- PACS Integration
- BMS Integration
- Installing On Bedside Patient Console or Smart Displays

- *Hospital or a Five-Star Hotel ... !*



Digital Signage

- Doctors Information
- Hospital Services
- Medical Services Advertising
- Remote Content Management
- Various Templates
- Various Schedules
- Optimum Network Infrastructure Bandwidth
- Installing On Smart Displays





5.4 *Section 5 Smart Hospital Solutions*

RFID

- RFID and RTLS





RFID and RTLS

- Different Readers Antennas and Tags
 - Medical Equipment Tracking
 - Surgical Instruments or Drugs Tracking
 - Patient Tracking
 - Real Time Location System via WLAN Network for Doctors, Nurses , Patients and Equipment
 - Wavehouse Management
 - Easily Integrated with All ERP or HIS, Softwares
 - Easily ORMS Integration
-
- *Locate Everything or Everybody Quickly*





5.5 *Section 5 Smart Hospital Solutions*

Safety & Security

- CCTV
- Access Control
- Intruder Alarm
- Fire Alarm & Fire Fighting





CCTV

- IP Base
- Video Analytic
- Camera Monitoring Software and Hardware

- *Increase Your Hospital Security Level*



Access Control

- RFID Card
- Finger Print
- Face Detection
- Plate Recognition





Intruder Alarm

- Microwave Sensors
- Passive and Active Infrared Sensors
- Microphonic Sensors
- Fiber Optic Sensors



- *Sometimes Safety is More Important than Security*

Fire Alarm and Fire Fighting

- Smoke Detection
- Heat Detection
- BMS Integration





SAIRAN
medical
company



5.6 *Section 5 Smart Hospital Solutions*

Smart OR

- Modular Operating Room Walls
- Operating Room Management Systems (ORMS)





Modular Operating Room Walls

- Laminated Glass Panels
- Stainless Steel Panels
- Galvanized Panels
- Laminar Air Flow
- Various Colors and Motifs
- Available for Operating Rooms, ICU, CCU and ...



- *Ultimate Elegance and Sterilized Implementation*



Operating Room Management Systems (ORMS)

- Operating Room Video Source Integration (HDMI, SDI, VGA, DVI, TCP/IP, PACS)
- Video Routing
- Video Streaming
- Video Recording (USB, NAS, SAN)
- Surgical Light Control
- Video Conferencing
- BMS Control panel

- *Now the Operating Room is Under Your Control*





**SAIRAN
medical
company**



Section 6 Services





Medical Equipment Calibration Laboratory

Formally Certified by the General Bureau of Medical Equipment

Quality Control and Calibration of Following Equipment:

- ECG Monitoring Equipment
- Patient Monitoring Equipment
- Pulse Oximeter Equipment
- Blood Pressure Equipment
- Defibrillator Equipment
- Infusion Device
- Transcutaneous Pacer Device
- Patient Ventilator Equipment
- Safety Tests on all Types of Medical Equipment



■ Defibrillator Analyzer



■ Patient Simulator



■ NIBP Calibrator



■ Infusion Device Analyzer



■ SpO₂ Simulator



■ Gas Flow Analyzer



Section 7 **History**





Cardioset ASA 9

- 19" Diagonal Display
- ECG + HR
- SpO₂ % + PR
- RESP + RR
- NIBP
- 2 Temp + 2 IBP
- CO₂ (Mainstream)

Options

- Arrhythmia Analyzer
- ST Segment Detection
- 2.0" Thermal Recorder
- CO₂ (Sidestream)



Cardioset VINA 9

- 15" Diagonal Display
- ECG + HR
- SpO₂ % + PR
- RESP + RR
- NIBP
- 2 Temp+ 2 IBP
- CO₂ (Mainstream)

Options

- Arrhythmia Analyzer
- ST Segment Detection
- 2.0" Thermal Recorder
- CO₂ (Sidestream)





Cardioaset PARS

- 15", 17", 19" and 21" Color TFT Display (User Selectable)
- ECG, RESP, SpO₂ %, NIBP, IBP (2 Channels), Temp (2 Channels), Multi-Gas/CO₂/O₂
- Depth of Anesthesia
- Sidestream CO₂, ST/ Arrhythmia
- Thermal Recorder, 12 leads ECG



Cardioaset X110

- 10.4" Color TFT Display
- ECG, RESP, SpO₂ %, IBP (2 Channels), Temp (2 Channels), NIBP
- CO₂, Thermal Recorder



Cardioaset S110

- 6.7" Color TFT Display
- ECG, RESP, SpO₂ %, NIBP





SAIRAN
medical
company



Section 8 Certificates





Certificates



■ CE Certificates



■ ISO Certificates



■ Production Certificates



■ Management System certificates



Section 9 Awards





Awards



Note:

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....