

World No.1 Total ICU Solution
VO+EM

*The 1st ICU leading company
through value innovation!*



VO+EM
Network Patient Monitor System



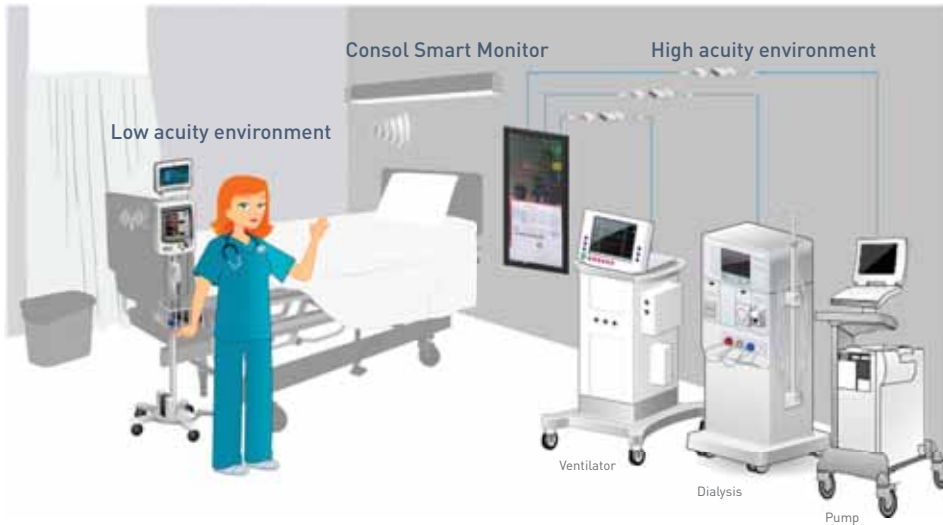
VO+EM

Corporate Headquarters
VOTEM CO., LTD

27, Geodudanji 1-gil, Daejeon-myeon, Chungcheong-Si, Gangwon-Do, Korea 24398
Tel +82-33-910-0701 Fax +82-33-911-0701 E-Mail votem@votem.kr
Homepage www.votem.kr

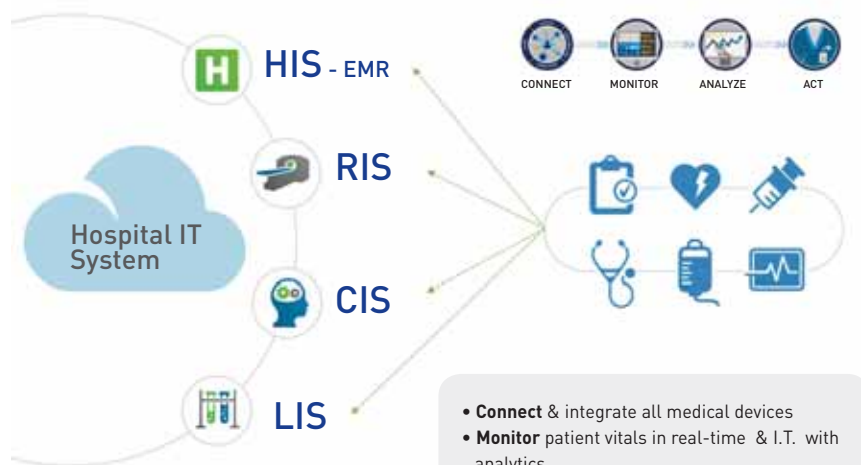
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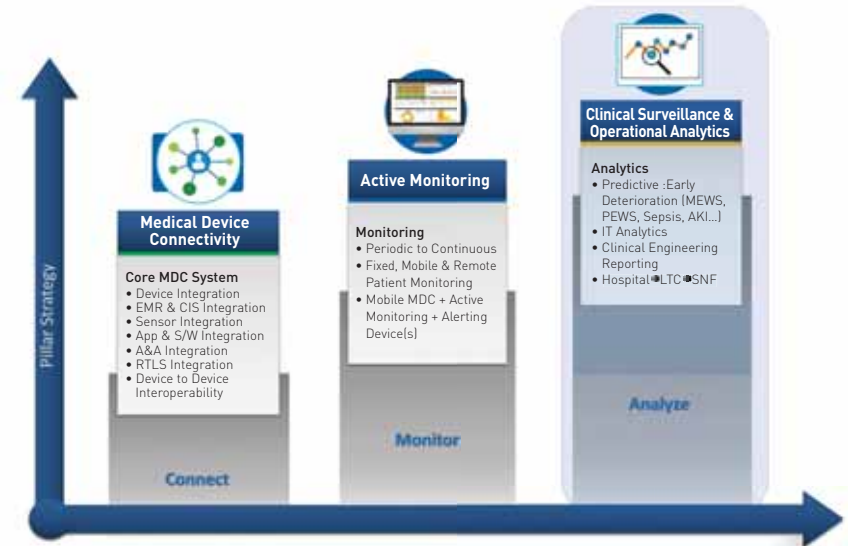
CONSOL SMART PATIENT MONITOR

NEW GENERATION ADVANCED LEVEL
MULTI PARAMETER PATIENT SMART MONITOR



- **Connect** & integrate all medical devices
- **Monitor** patient vitals in real-time & I.T. with analytics
- **Analyze** & provide real-time surveillance and prediction of early clinical deterioration
- **ACT!**

How does device connectivity work?



What are the advantages?



NEW GENERATION ADVANCED LEVEL
MULTI PARAMETER PATIENT SMART MONITOR

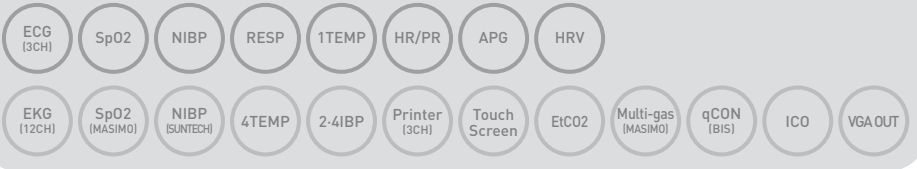
Benefits

- Ensures that the vital signs are charted accurately
- Improves the timeliness of vitals documentation
- Reduces charting duplication and redundancy
- Enhances clinical decision-making since vitals are readily available in the patient's record
- Allows the caregiver to spend more time with the patient, not with computer
- Immediate availability on EMR which facilitate access and diagnostic
- Facilitate Paper free hospital environment



VM15

Modular Patient Monitor



- 15" high resolution(768x1024)TFT LCD
- Standard Configuration - ECG, SpO2, NIBP, Resp, 1Temp,
- Masimo Multi-gas Mainstream(IRMA AX+), Sidestream(ISA AX+, OR+)
- Responics' EtCO2 Mainstream(C5), Sidestream(LoFlo)
- 4.3" Transport monitor(TFT LCD)
- 3CH ECG : Full 7 ECG & ST Segment analysis(Lead I, II, III, aVR, aVL, aVF, V)
14 Arrhythmia analysis & Pacemaker detection
- 7 days tabular and graphic trend date save
- Multi high-end functions
Drug Dose Calculation, ECG Recall, MiniTrend, ICO, Color change,
NIBP STAT, OXY-CRG, Patient information, Event Management
- Easy S/W upgrade using USB [16GB]
- Durable, and light Li-ion battery operation(Std 1Pack : 2hrs, 2Pack : 4hrs)
- Wired and Wireless LAN Connection
- HRV, APG Detection,
- Touch Screen - Option
- Built-in Printer - Option

SPECIFICATION

General

Display

- 15 inch Color TFT LCD (768 x 1024)
- Up to 12 waveform per screen

Interface

- USB host storage (firmware upgrade)
- Ethernet 10 BASE-T / 100 BASE-TX
- VGA OUT (Option)

Power

- AC 100 - 240 (±10%), 50/60 Hz, 2 A input
- Battery : Li-ion(2hours)(opt : 2 Packs(4hours))

Thermal Printer (Option)

- 3 channel
- Speed : 12.5, 25, 50 mm/sec
- Paper size : 150, 175, 200, 225, 250, 275, 300 mm

Trend

- Memory Storage : 7 days (Standard)
- Data Interval : 1, 5, 15, 20 min...and 1 hour
- Save up to 20 Event data

Language

ENGLISH, FRENCH, SPANISH, GERMAN,
ITALIAN, RUSSIAN, TURKISH, CZECH,
ROMANIAN, PORTUGUESE, POLISH

Physical Dimension

- 420mm x 370mm x 510mm
- weight : 8.7kg(include battery)

Performance

ECG

- Lead 3 Lead, 5 Lead
- Channel 3 channel
- Speed 6.25, 5, 10, 20, 30, 40 mm/mV, Auto
- Gain 2.5, 5, 10, 20, 30, 40 mm/mV, Auto
- ST analysis "Range : -9.9 ~ +9.9 mm
Resolution : 0.1 mm"
- Arrhythmia Detection TAC, BRD, PVC, VTAC, ASY,
BGM, TGM, VENT, VFIB, CPT,
TPT, MIB, RonT, SVT
- PaceMaker detection mode PaceMaker Arrhythmia
Detection(PNF,PNC)

SpO2

- Range 0 ~ 100%
- Accuracy 100 ~ 70% ±2% 69 ~ 50% ±3%
49 ~ 0% unspecified
- Pulse range 0 ~ 300 bpm
- Pulse accuracy 0 ~ 240 bpm ±2 bpm
241 ~ 300 bpm ±3 bpm
- PI(pulse index) 0 ~ 20%

Respiration

- Range 4 ~ 150 bpm
- Apnea OFF, 0~40 sec

Performance

NIBP

- Technique Oscillometric
- Range Adult : 0 ~ 300 mmHG
Neonate : 0 ~ 150 mmHg
- Mode Auto/Manual/STAT/ VENOUS STAT
- Auto Interval 2, 3, 4, 5, 10, 15, 30, 60 min /
1, 2, 4, 8, 12 hrs
- STAT 5 ~ 15 min Screen ON / OFF
- VENOUSE STAT 50 ~ 200 mmHG

IBP(Optional)

- Channel 2 / 4
- Range -50 ~ 350 mmHg (±1%)
- Catheter Yuta

ICO(Optional)

- Parameters CI, SV, SI, LYSW, LYSWI, RVSW,
RVSWI, SVR, SVRI, PVR, PVRI
- injection temp range 0 ~ 30.0°C

TEMP

- Channel 1[Standard], 3[Option]
- Range 0 ~ 50°C
- Accuracy 25.0 ~ 50.0°C ±0.1°C
0 ~ 24.9 °C ±0.2 °C

EtCO2(Optional)

- Measurement Mode Mainstream / Sidestream
- Range 0 ~ 150 mmHg
[0 ~ 20 kPa / 0 ~ 19.7 %]
- Resp Rate 2 ~ 150 bmp

qCON(Optional)

- EEG ±475 uV
- qCON 0-99
- BSR (Burst Suppression) Curve,index of 0 ~ 100%
- EMG Curve,index of 0 ~ 100%
- Index trend 8 minutes
- SQT Curve,index of 0 ~ 100
- Data logging qCON,EMG,EEG,BSR,SQT,
Impedances and comments
posted by the user
- EEG sampling frequency 1024 Hz, 16 bits
- CMRR > 100 dB
- Alarm HIGH : 0 ~ 100, OFF
LOW : OFF, 0 ~ 100
- Manufacturer QM[Quantium Medical]
- Type CCM

Multi-Gas(Optional)

- Parameters CO2,N2O,O2,HAL,ENF,ISO,SEV,DES
- Anesthetic Agent Halothane,Enflurane,Isoflurane,
Desflurane,Sevofurane
- Speed 6.25, 12.5, 25, 50 mm/sec
- Calibration START / STOP
- SET-MODE SELF TEST / SLEEP / MEASURE
- Manufacturer MASIMO(Phasin)

VP1200

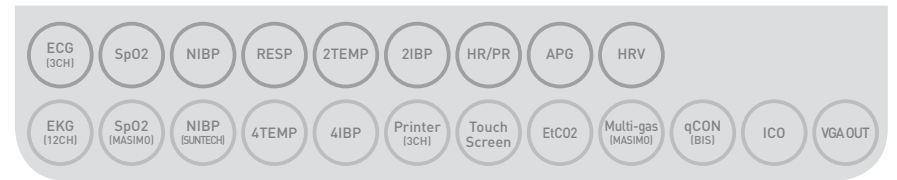


Multi-parameter Patient Monitor

Excellent monitoring for Best clinical care



VP1000



VP1200, VP1000

Excellent Monitoring for Best Clinical Care

- 12.1" (10.4") high resolution (800x600) with maximum 10 waveforms
- Standard Configuration : ECG, SpO2, NIBP, Resp, 2Temp, 2IBP
- 6 kinds of Virtual Screen
- 3CH ECG : Full 7 ECG & ST Segment analysis (Lead I, II, III, aVR, aVL, aVF, V) 14 Arrhythmia analysis & Pacemaker detection
- 7days tabular and graphic trend data save
- Multi high-end functions
Drug Dose Calculation, ECG Recall, MiniTrend, ICO, Color change, NIBP STAT, OXY-CRG, Patient information, Event Management
- Touch Screen - Option
- Built-in Printer - Option
- Easy S/W upgrade using SD Card (Max 2GB)
- Durable, and light long Li-ion battery operation (Std 1Pack : 3hrs, 2Pack : 6hrs)
- Wired and Wireless LAN Connection
- Masimo's Multi-gas Mainstream (IRMA AX+), Sidestream (ISA AX+ OR+) - Option
- Respironics' EtCO2 Mainstream (C5), Sidestream (LiFlo) - Option
- MASIMO SpO2, SUNTECH NIBP - Option
- HRV, APG Detection

VP1200 & VP1000

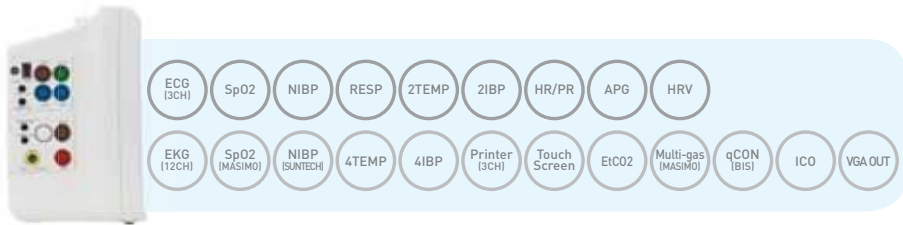
"You can get more and better than anything you have ever choiced before"

12.1"(10.4") high resolution(800x600)

- Provides clear visibility from long distance and any angle
- Maximum 10 waveforms

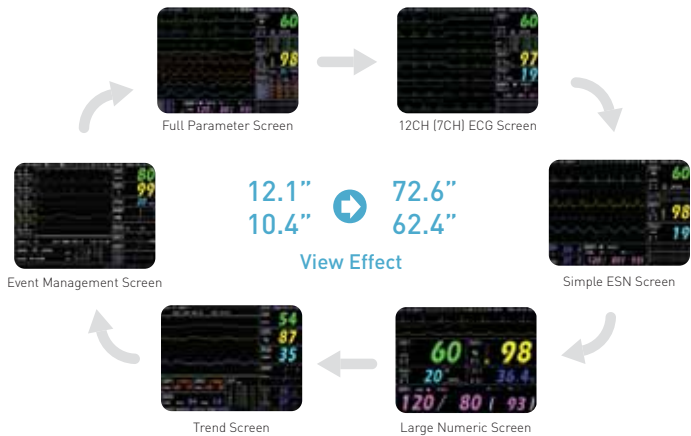


Supreme Standard configuration and extensionality



Small size but large virtual screen

- 12.1"(10.4") Monitor provides 72.6"(62.4") view effect by using 6 Virtual Screens.



Proved 3CH ECG(Std.) will make you ECG analysis specialist.

- Livegraphy waveform by VOTEM's digital Filter Technology
- 3CH ECG(Std.) displays full 7 ECG waves & ST Segment analysis (Lead I, II, III, aVR, aVL, aVF, V)
- 14 Arrhythmia analysis & Pacemaker detection (TAC, BRD, PVC, VTAC, ASY, BGM, TGM, VENT, VFIB, CPT, TPT, MIB, RonT, SVT)
- ST Segment analysis permits simultaneous viewing, adjustment, and monitoring 12 ECG leads. Adjustable ISO and J points, plus the ability to view both learned and averaged ST complexes provide exceptional flexibility.



7CH ECG Screen



12CH ECG Screen

Multi high-end functions

Drug Dose calculation



Helps you to manage total quantity of drug to be delivered to the patient over time.

ECG Recall and Analysis



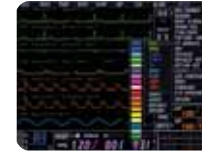
Recalls 20 seconds event data with graphic, and 2sec-long data can be zoomed to observe and analyze.

Mini-Trend



You can see 2hrs-long mini-trend data on the main screen.

Color Change



Selectable color configuration of waveform and numeral for all parameters up to 18 colors.

NIBP STAT



NIBP can be measured from 5 to 15 minutes automatically.

OXY-CRG



You can analyze patient's HR, SpO2 and Resp. for every 0.3 seconds during 2 minutes.

Patient Information



You can store patient's admission date, ID, name, gender, date of birth, weight and height.

Event Management



Saving and management of individual EVENT up to 20 cases.

7days Graphic & tabular trend data save

- All parameters
- 10,080 sets(1set per minute) of data can be stored, reviewed, and printed out.



Trend Screen



Touch Screen

Touch Screen (OPT)

- Enhance easier and more convenient operation.

Easy S/W upgrade by using SD Card(Max. 2GB)

- You can upgrade s/w continuously without disassembling the product by using SD card.



S/W upgrade Screen

Durable, and light Li-ion battery operation



- Std (1pack) : 3hrs or more
- Opt (2Packs) : 6hrs or more

ECG OUT(OPT)



- You can download captured ECG analog signal for more analysis.

Diversity of module choice



CAPNOSTAT 5 MainStream CO2 Sensor
21st Century CO2 Technology for main stream CO2 monitoring in critically ill, intubated patients.



LOFLO Side stream CO2 Sensor
21st Century CO2 Technology for side stream CO2 monitoring both intubated and non-intubated patients



qCON BIS
The qCON allows acquiring EEG patterns in a state of anesthesia or sedation.



Masimo Multi-Gas
Offer flexible solutions for its Capnography and Multigas Monitoring.



MASIMO SpO2
Demonstrated the highest sensitivity and specificity during induced conditions of motion and low perfusion.



SUNTECH NIBP
NIBP technology designed to meet specific needs for nearly all clinical applications and patient populations.

SPECIFICATION

General

Display

- 10.4, 12.1 inch (800 X 600)
- Up to 7, 10 wave trace On/Off (3ch ECG, SpO2, 4 IBP, Resp, EtCO2)
- Full ECG 7 wave display. (I, II, III, aVR, aVL, aVF, V)

Parameters (10EA)

- ECG, SpO2, NIBP, 4 IBP, Resp, 4 Temp,
- EtCO2, HRV, AP6 detect analysis



Interface

- RS-232 port, VGA Port, LAN, ECG Output.
- SD Memory Card Port.

Power

- AC 100~240V, 50/60Hz, 80VA (MAX)
- BATTERY : Li-ion (3hours) [opt : 2 Packs (6hours)]
- AC 100~240V, 50/60Hz, 60VA

Thermal Printer (Option)

- 3 channel
- Speed : 12.5, 25, 50 mm/sec
- Paper size : 58 mm

Data Storage

- Memory Storage : 7 days (Standard)
- Tabular and Graphic Data Interval : 1, 5, 15, 30 min...and 1 hours
- Save up to 20 Event data

Language

ENGLISH, FRENCH, SPANISH, GERMAN, ITALIAN, RUSSIAN, TURKISH, CZECH, ROMANIAN, PORTUGUESE, POLISH

Physical Dimension

- 290mm x 175mm x 280mm
- Weight : 4.4kg(include battery)

ICO (Option)

- CI, SV, SI, LVSW, LVSWI, SVR, SVRI, PVR, PVRI
- Catheter : Swan-Ganz standard thermodilution pulmonary/Artery Catheter (131 HF7, 744HF75)
- Edward Lifesciences

qCON (Option)

- Range : qCON 0~99, 1sec display update
- SQI Range : 0~100%
- EEG : ± 475 uV, 16 bit resolution

Masimo SpO2 (Option)

- Range : 0~100%
- Accuracy : ±2%(70~100% Adult/Pediatric. Non-motion)
- Pulse rate Range : 25~250bpm

Performance

ECG

- LEAD : 3 leads[Option], 5 leads[Standard]
- Channel : 3 Channel : 3 leads / 7 leads (Full Display)
- HR Range : 0 ~ 300 bpm (± 2 bpm)
- GAIN : 2.5, 5, 10, 20, 30, 40, Auto mm/mV
- Sweep Speed : 6.25, 12.5, 25, 50 mm/sec
- Pacemaker Mode : Pacemaker Arrhythmia Detection (PNF, PNC)
- Arrhythmia Detect : TAC, BRD, PVC, VTAC, ASY, BGM, TGM, VENT, VFIB, CPT, TPT, MIB, RonT, SVT
- ST Analysis : Range : -9.9mm ~ +9.9mm
- HR Calculation : Resolution : 0.1 mm 4~16 wave

SP02

- Range : 0 ~ 100 %
- Accuracy : 100 ~ 70% ± 2%, 69 ~ 50% ± 3%, 49 ~ 0% unspecified
- Pulse range : 0 ~ 300 bpm
- Accuracy : 0 ~ 240 bpm ± 2 bpm, 241 ~ 300 bpm ± 3 bpm
- Low Perfusion : 0.1% up to
- Setting Time : Wave out Time : Max 2 sec., SpO2 Percentage Display : Max 10 sec.
- GAIN : 0.25, 0.5, 1, 2, 3, 4, Auto mm/mV
- Sweep Speed : 6.25, 12.5, 25, 50 mm/sec

Respiration

- Range : 0 ~ 200 rpm (± 2% or ± 2bpm)
- Apnea : OFF, 10 ~ 40 sec
- Waveform : 0.25, 0.5, 1, 2, 3, 4, Auto ohm display

NIBP

- Technique : Oscillometric
- Measurement Range : 0 ~ 300 mmHg
- NIBP STAT : 5~15 min
- NIBP VENOUS STAT : 50~200 mmHg

IBP

- Channel : 2 (Standard), 4 (Option)
- Range : -50 ~ 350 mmHg
- Accuracy : ± 1 %
- Transducer : Yuta, Edward, Medex, Philips, Abbott, BD type

TEMP

- Channel : 2 (Standard), 4 (Option)
- Range : 0 ~ 50.0 °C
- Accuracy : 25.0 ~ 50.0°C ± 0.1°C, 0 ~ 24.9 °C ± 0.2°C

EtCO2 (Option)

- Measurement Mode : Respiration Mainstream/Sidestream
- Range : 0 ~ 99 mmHg (0 ~ 9.9kPa / 0 ~ 9.9%)
- Resp Rate : 0 ~ 150 bpm

Multi-Gas (Option)

- Gas : CO2, N2O, HAL, ISO, ENF, SEV, DES, O2
- Range : CO2 : 0~25%, N2O : 0~100%, HAL, ISO, ENF : 0~25%, SEV : 0~25% DES : 0~25%, O2 : 0~100 %

VP1200 & VP1000



Clinical Research Institute of
Kangwon National University Hospital
Chuncheon, Republic of Korea

Woo Seok Tae, PhD
KangwonDaehak-guk 1, Chuncheon-si
Kangwon-do, 200-701, Republic of Korea
Tel : +82-33-258-9164

CLINICAL TRIAL STUDY : The Performance comparative evaluation between VOTEM's MRI compatible patient monitoring system with Philips IntelliVue MP70

1.ECG : locate 6 leads (3 leads on each monitor) on a patient

- Check the max/min heart rate from the each monitor for a minute
- Check the heart rate for a minute for 10 times(total 10 minutes) for one person, and do the same procedures for 100 people
- Compare the results from the each monitor



2.SpO2 : connect the two different SpO2 sensors from the each monitor to the applicant's left index finger and middle finger

- Check the max/min HR and SpO2 from the each monitor for a minute
- Check the heart rate for a minute for 10 times(total 10 minutes) for one person, and do the same procedure for 100 people.
- Compare the results of the each monitor



3.NIBP

- After checking the first NIBP, wait 10 minutes for the next step
- One NIBP check contains the following procedures checking the NIBP of an applicant alternately from the each monitor after checking the first NIBP with a manual manometer(mercury sphygmomanometer). Compare the data after five NIBP checks
- When using a mercury sphygmomanometer, record only systolic/diastolic BP, and record average BP when using the two monitors
- Perform five NIBP checks for 100 people



4.Results

- The reliability of the repeated measurement of a manual mercury sphygmomanometer : 0.947(systolic BP), 0.934(diastolic BP)
- The reliability of the repeated blood pressure measurement of the Votem's VP1200 : 0.941(systolic BP), 0.934(diastolic BP)
- The reliability of the repeated blood pressure measurement of the Phillips' MP70 : 0.947(systolic BP), 0.934 (diastolic BP)
- The reliability of the repeated SpO2 measurement of the Votem's VP1200 : 0.888(systolic BP), 0.932(diastolic BP)
- The reliability of the repeated SpO2 measurement of the Phillips' MP70 : 0.856(systolic BP), 0.933(diastolic BP)
- The reliability of the repeated heart rate measurement of the Votem's VP1200 : 0.978
- The reliability of the repeated heart rate measurement of the Phillips' MP70 : 0.980
- The above results of the reliability are based on the Cronbach's alpha
- Seen from the results, both Votem's and Phillips' equipment have shown the identical excellent repeated measurement reliability, as well as the SpO2 measurement.

Multi-parameter Patient monitor

• VP1200 vs MP70 SpO2



• VP1200 vs MP70 heart rate



The cronbach's alpha of the two equipment have shown the high conformity(Cronbach's alpha of SpO2=0.954, heart rate =0.931. However, during the heart rate measurement of the participants, the one patient showed an outlier, which was shown as 60bpm on VP1200, and 120 bpm on MP70. After checking with the manual measurement, Phillips' MP70 made an error of doubling the result of heart rate, and it was judged that the analysis was derived from the wrong ECG wave.

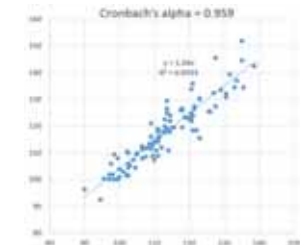
• Mercury manometer vs MP70 Sys BP



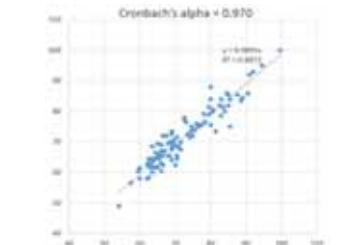
• Mercury manometer vs MP70 Dia BP



• VP1200 vs MP70 Sys BP



• VP1200 vs MP70 Dia BP



On the mutual conformity analysis of systolic and diastolic blood pressure measurement of the manual mercury sphygmomanometer, VP1200, and MP70, the three equipments have shown excellent conformity showing over 0.9 Cronbach's alpha. Thus, VP1200 shows the identical performance of heart rate measurement with the manual mercury sphygmomanometer, and Phillips' MP70.

5.Conclusion

Seen From the above results, Votem's VP1200 and Phillips' IntelliVue MP70 show the same results of SpO2, Heart rate, and pulse rate, and thus it can be concluded that the VP1200 performs the identical performance of MP70's

VP700

Multi-parameter Patient Monitor

Excellent Monitoring for Best clinical care



VP700

Excellent Monitoring for Best clinical care

- 7" high resolution(800x480) with maximum 7 waveforms
- Standard Configuration : ECG, SpO2, NIBP, Resp, 1TEMP
- 6 kinds of Virtual Screen
- 3CH ECG : Full 7 ECG & ST Segment analysis (Lead I , II, III, aVR, aVL, aVF, V) 14 Arrhythmia analysis & Pacemaker detection
- 7days tabular and graphic trend data save
- Color Change, NIBP STAT, Patient Information, Event Management
- Touch Screen - Option
- Easy S/W upgrade using SD Card(Max 2GB)
- Durable, and light long Li-ion battery operation (1 Pack : 2hrs, 2 Pack(opt.) : 4hrs)
- Wired and Wireless LAN Connection
- Respiration's EtCO2 Mainstream[C5], Sidestream[LiFlo] - Option
- MASIMO SpO2, SUNTECH NIBP - Option
- HRV, APG Detection
- DC 15V Input

VP700

"You can get more and better than anything you have ever choiced before"

7" high resolution[800x480]

- Provides clear visibility from long distance and any angle
- Maximum 7 waveforms



Supreme Standard configuration and extensionality



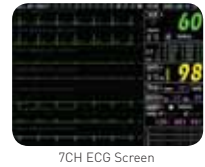
Small size but large virtual screen

- 7" monitor provides 42"[7"x6"] view effect using 6 different Virtual Screens.



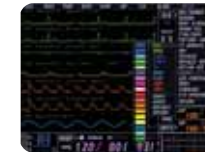
Proved 3CH ECG(Std.) will make you ECG analysis specialist.

- Clear waveforms by VOTEM's Digital Filter Technology
- 3CH ECG(Std.) displays full 7 ECG waves & ST Segment analysis (LeadI, II, III, aVR, aVL, aVF, V)
- 14 Arrhythmia analysis & Pacemaker detection (TAC, BRD, PVC, VTAC, ASY, BGM, TGM, VENT, VFIB, CPT, TPT, MIB, MIB, RonT, SVT)
- ST Segment analysis permits simultaneous viewing, adjustment, and monitoring 7 ECG leads. Adjustable ISO and J points, plus the ability to view both learned and averaged ST complexes provide exceptional flexibility



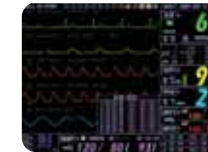
Multi high-end functions

Color Change



Selectable color configuration of waveform and numeral for all parameters up to 18 colors.

NIBP STAT



NIBP can be measured from 5 to 15 minutes automatically.

Patient Information



You can store patient's admission date, ID, name, gender, date of birth, weight and height.

Event Management



Saving and management of individual EVENT up to 20 cases.

7 days graphic & tabular trend data save

- All parameters
- 10,080 sets(1set per minute) of virtual signs list data can be stored, reviewed, and printed out.

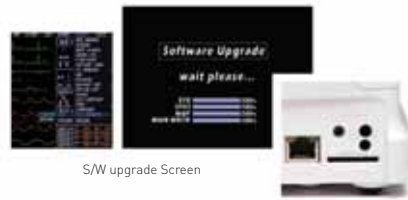


Touch Screen(OPT)

- Enhance easier and more convenient operation.

Easy S/W upgrade by using SD Card(Max. 2GB)

- You can upgrade s/w continuously without disassembling the product by using SD card.



S/W upgrade Screen

Li-ion battery



- Std(1Pack) : 2hrs or more
- Opt (2Packs) : 4hrs or more

ECG OUT(OPT)



- Able to download and capture ECG analog signal for more analysis
- Provides direct connection between monitor and defibrillator

Diversity of module choice

RESPIRONICS



CAPNOSTAT 5 MainStream CO2 Sensor
21st Century CO2 Technology for main stream CO2 monitoring in critically ill, intubated patients.



LOFLO Side stream CO2 Sensor
21st Century CO2 Technology for side stream CO2 monitoring both intubated and non-intubated patients



Single Patient Use Airway Adapter

21st Century CO2 Technology for main stream CO2 monitoring in critically ill, intubated patients.



Nosol Co2 Sampling Cannula **Airway Adapter kit** **Filter line with Female Luer**

21st Century CO2 Technology for side stream CO2 monitoring in both intubated and non-intubated patients.

MASIMO



MASIMO SpO2

Demonstrated the highest sensitivity and specificity during induced conditions of motion and low perfusion.

SunTech Medical



SUNTECH NIBP

NIBP technology designed to meet specific needs for nearly all clinical applications and patient populations.

SPECIFICATION

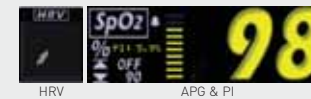
General

Display

- 7" inch (800 x 480)
- Up to 7 waves trace On/Off (3ch ECG, SpO2, 2 IBP, Resp or EtCO2)
- Full ECG 7 wave Display. (I, II, III, aVR, aVL, aVF, V)

Parameters (10EA)

- ECG, SpO2, NIBP, 2 IBP, Resp, 2 Temp, EtCO2
- HRV, APG analysis



Interface

- RS-232 port, VGA Port, LAN, ECG OUT(opt.)
- SD Memory Card Port, DC 12V Connector

Power

- AC 100~240V, 50/60Hz, 60VA
- BATTERY : Li-ion(2hours) [opt : 2 Pack(4hours)]

Thermal Printer (Option)

- 3 channel
- Speed : 12.5, 25, 50 mm/sec
- Paper size : 58 mm

Trend

- Memory Storage : 7 days (standard)
- Data Interval : 1, 5, 15, 30 min...and 1 hours
- Save up to 20 Event data

Language

ENGLISH, FRENCH, SPANISH, GERMAN, ITALIAN, RUSSIAN, TURKISH, CZECH, ROMANIAN, PORTUGUESE, POLISH

Physical Dimension

- 190mm X 200mm X 180mm
- Weight : 3.0Kg(include battery)

Masimo SpO2 (Option)

- Range : 0~100%
- Accuracy : $\pm 2\%$ (70~100%, Adult/Pediatric. Non-motion)
- Pulse rate Range : 25~250bpm

Performance

ECG

- LEAD 3-leads (Option), 5-leads (Standard)
- Channel 3 Channel : 3-leads / 7-leads (Full Display)
- HR Range 0 ~ 300 bpm (± 2 bpm)
- GAIN 2.5, 5, 10, 20, 30, 40, Auto mm/mV
- Sweep Speed 6.25, 12.5, 25, 50 mm/sec
- Pacemaker Arrhythmia Detection (PNF, PNC) Pacemaker Arrhythmia Detection (PNF, PNC)
- Arrhythmia Detect TAC, BRD, PVC, VTAC, ASY, BGM, TGM, VENT, VFIB, CPT, TPT, MIB, RonT, SVT
- ST Analysis Range : -9.9mm ~ +9.9mm
- HR Calculation Resolution : 0.1 mm

SP02

- Range 0 ~ 100 %
- Accuracy 100 ~ 70% $\pm 2\%$, 69 ~ 50% $\pm 3\%$, 49 ~ 0% unspecified
- Pulse range 0 ~ 300 bpm
- Accuracy 0 ~ 240 bpm ± 2 bpm, 241 ~ 300 bpm ± 3 bpm
- Low Perfusion 0.2% up to
- Setting Time Wave out Time : Max 2 sec., SpO2 Percentage Display : Max 10 sec.
- GAIN 0.25, 0.5, 1, 2, 3, 4, Auto mm/mV
- Sweep Speed 6.25, 12.5, 25, 50 mm/sec

Respiration

- Range 0~200bpm
- Apnea OFF, 10 ~ 40 sec
- Waveform 0.25, 0.5, 1, 2, 3, 4, Auto ohm display

NIBP

- Method Oscillometric
- Measurement Range Adult : 0 ~ 300 mmHg, Neonate : 0 ~ 150 mmHg
- NIBP VENOUS STAT 50 ~ 200 mmHg

IBP (Option)

- Channel 1 / 2
- Range -50 ~ 350 mmHg
- Accuracy $\pm 1\%$
- Tranducer Yuta, Edward, Medex, Philips, Abbott, BD type

TEMP

- Channel 1(Standard), 2(Option)
- Range 0 ~ 50.0 °C
- Accuracy 25.0 ~ 50.0°C ± 0.1 °C, 0 ~ 24.9 °C ± 0.2 °C

EtCO2

- Measurement Mode Respironics Mainstream/Sidestream
- Range 0 ~ 99 mmHg (0 ~ 9.9kPa / 0 ~ 9.9%)
- Resp Rate 0 ~ 150 bpm

VP7005N

Vital-Signs Monitor

- 7" high resolution(800x480) TFT LCD
- Standard Configuration : SpO2, NIBP
- 2 kinds of virtual screens
- 7 days tabular and graphic trend data save
- Multi high-end function : Patient information, NIBP STAT
- Easy S/W upgrade using SD Card(Max 2GB)
- Durable, and light long Li-ion battery operation [Std 1Pack : 2hrs, 2Pack : 4hrs]
- Wire and Wireless LAN Connection
- Built-in Printer – Option



VP7005NT

Vital-Signs Monitor



- 7" high resolution(800x480) TFT LCD
- Standard Configuration : SpO2, NIBP, 1TEMP (Covidien's Filac 3000 Fast Temp)
- 4 kinds of virtual screens
- 7 days tabular and graphic trend data save
- Multi high-end function : Patient information, NIBP STAT
- Easy S/W upgrade using SD Card [Max 2GB]
- Durable, and light long Li-ion battery operation [Std 1Pack : 2hrs, 2Pack : 4hrs]
- Wired and Wireless LAN Connection
- Built-in Printer – Option



SMART CARE SYSTEM

Interact with patient monitors by reliable solution anytime, anywhere.



Various screens and functions

The choice of yours!

List screen



Display connected and registered patient monitors. status is automatically refreshed per minute.

Wave screen



Display real-time waveforms of patient monitors to your smart phone or tablet

Text screen



Display real-time numeric data of each parameters

Trend Menu screen



Desired trend of each parameters can be selected

Trend screen



Save 7 days trend data on server. [ECG, SpO2, IBP, RESP, EtCO2, NIBP, TEMP]

Event screen

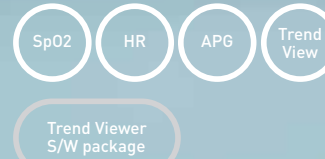


Save 100 Events(20secs/event) in server

Network Patient Monitor System



A Quick, Easy-to-use device to bring you the performance that eliminates difficulties in motion artifacts and low perfusion pulse oximeter. VO100 is the most economical, high performance and easy to use handheld pulse oximeter

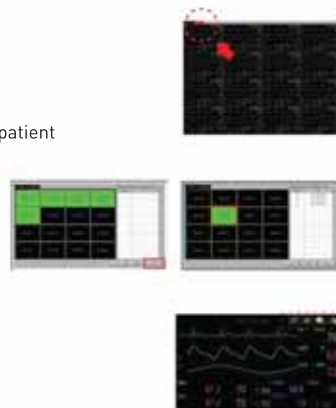


VC2000

Central Monitoring System

The choice of yours!

- Up to 256 patients simultaneous monitoring on a single screen
- Flexible screen layouts (4,9,16,32...256 patients)
- Easy alarm setup and monitor connection
- Convenient Bi-directional Control
- Real-time comprehensive data storage and review
- Saves trend for 30 days(720hrs) and 200 events per each patient
- Interfaces with HIS and EMR Bitmap
- Lan & wireless Lan (AP:WDS Mode) connection
- Compatible with any types of PC printers
- Multi-waveform monitoring
 - ECG lead (I, II, III, aVR, aVL, aVF, V1-V6)
 - SpO2, Resp, 4-IBP, EtCO2
- Multi-parameter monitoring
 - HR, ST, PR, NIBP, IBP, SpO2, 2-Temp, EtCO2



VO100

Handheld Pulse Oximeter

The choice of yours!

- Real time SpO2% and Heart Rate
- Plethysmographic waveform display
- 72 hours of patient trend data save.
- Easy S/W upgrade and save trend data (SpO2, Pulse Rate) using SD card
- APG detect analysis
- Symbol icons for easy operation
- Long battery life : 12 hours (Li-ion)
- Trend view and print in PC using TrendViewer S/W (Option).

