OMNI EXPRESS

PORTABLE PATIENT MONITOR

INFINIUM™

OMNI EXPRESS

Intuitive

Designed for a fast paced work environment, the Infinium **Omni Express™** patient monitor offers an extremely simple and adaptable user interface. Patient information along with vital sign settings can be quickly modified to meet the needs of a patient's changing condition. The **Omni Express** offers a high resolution 7 inch touch screen to optimize the speed of patient care. The user can therefore make quick screen adjustments, set default settings, alarm limits, and manage up to 72 hours of detailed patient data.

Upgradable

From the general floor to high acuity surgeries, the Infinium Omni Express series patient monitors are designed to fit-in and move amongst many patient care areas. The **Omni Express™** offers standard measurements of: non-invasive blood pressure, ECG with arrhythmia detection, motion tolerant SpO_2, Temperature, and Respiration rate. End-tidal CO_2 can added on-site by simply attaching our plug in modules. This field upgradability can allow the user to customize the monitor's acuity level while the patient's condition changes. If desired, the user can move from a basic vital signs monitor, to a continuous bed side monitor, to an operating room monitor while keeping the patient on a single monitor at all times.

Connective

The **Omni Express™** offers several connective solutions to network multiple monitors and/or manage patient data on an electronic medical records platform or a HL7 based hospital information system. The **Omni Express** patient monitor offers Ethernet and RS-232 connections with an open source communication protocol. Infinium offers 2 levels of networking and connectivity. The **Omni Express** is HL7 compliant. The HL7 network protocol will allow for all patient information and vital sign trends to be transferred and stored on a hospital information system. For non-HL7 medical facilities, there is the Infinium **Omniview™** central station which allows the real time remote monitoring and network of up to 32 **Omni** patient monitors. The Omniview™ archives full disclosure of all patient vital sign trends. The patient data from the **Omniview™** can be very simply saved, stored, printed, and, transferred.

A Field Upgradable Operating Room Solution
A MONITOR THAT CAN GROW WITH YOU...

Whether it be a basic outpatient procedure or a high acuity cardiac surgery the **Omni Express™** can be upgraded and custom tailored on-site by the user. The **Omni Express** is preconfigured with non-invasive blood pressure, 3/5 ECG with arrhythmia detection, impedance respiration, SpO2, and temperature. More advanced readings of End-tidal CO_2 can be activated by the user at anytime.

Capnography & Anesthetic Agent Measurement plug in Module:

The Infinium **Capnotrack™** module s a field upgradable plug in module that can measure End-tidal CO_2 alone

Both mainstream and sidestream modules are available for End-tidal CO2 and agent measurement

The Capnotrack™ utilizes a low flow (50ml/min) sidestream method that allows use for intubated and non-intubated applications. The Capnotrack™ sample line connection incorporates filter cells to eliminate the potential of cross contamination

Simple connection sample lines allows the Capnotrack™ to be one of the industries lowest cost per patient End-tidal CO_2 systems

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OMNIVIEW Central Station

SIMPLICITY IN CONNECTIVITY:
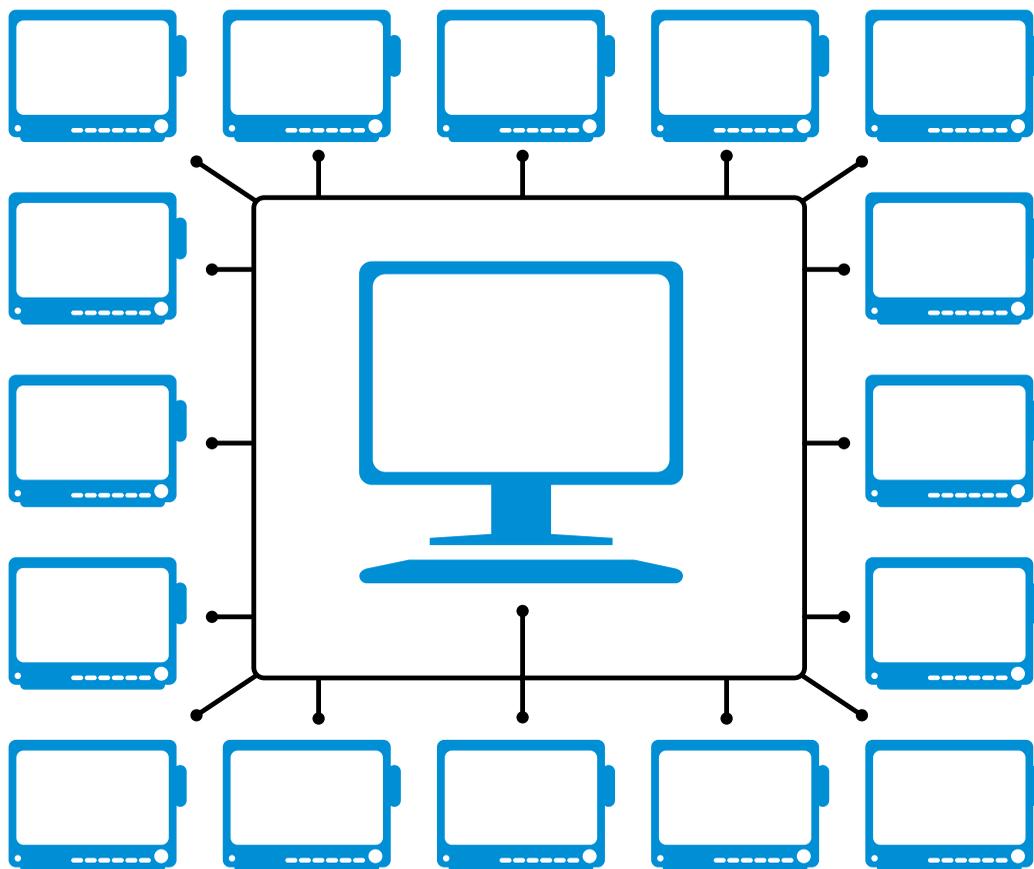
The **Omniview™** central station allows the wireless or hard-wired measurement for a network of up to 32 **Omni** patient monitors. The **Omniview™** archives full disclosure of all patient information and vital sign trends. In real time the **Omniview™** displays the patient's numeric vital signs along with waveforms. The patient data from the **Omniview™** can transferred to a EMR as a supplement to the patient's file or integrated into a hospital information system.

The **Omniview™** gives a real time display of all patient vital signs: Heart rate, Last BP reading, SpO2, Temp, EtCO2 and Respiration rate with waveforms.

Mounting Solutions
A RELIABLE CONNECTION

Several mounting systems are available for the **Omni** series patient monitors.

ROLLING STAND

Height and tilt adjustable with a large wheel base allows for smooth and stable mobility.

- **Quick release slide mount**
- **Accessory basket**
- **Medical grade steel construction**
- **Lockable wheels**

WALL MOUNTS

Height and tilt adjustable wall mounts offer.

- **Quick release of monitor**
- **Medical grade construction**
- **Adaptable to anesthesia machines**
- **Adaptable to most wall rail systems**

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OMNIVIEW CENTRAL MONITORING SYSTEM SPECIFICATIONS:

MAIN FRAME

Power Supply
AC100-240V 6A/3A

Basic Configuration
20" or larger color display
Intel Pentium IV2.0G CPU
Windows XP professional operating system
512MB RAM
80GB Fixed Disk drive

PERFORMANCE

Display
Size:	color TFT display 20" or larger
Number of display:	1 or 2 sets (optional)
Resolution:	1280 x 1024

Waveform
ECG (I, II, III, aVR, aVL, aVF, V1-V6)
PLETH, RESP, CO2, IBP, Multi-gas

Parameter
HR, ST, NIBP, IBP, SpO2, PR, RR, TEMP, EtCO2, Multi-gas

Indicator
Up to 32-waveform presentation
12.5mm/s, 25.0mm/s, 50.0mm/s user-adjustable sweep speed
Alarm sound

Alarm
High and Low limits alarm
Audiable and visual alarm

Record Type
8 seconds real-time recording
Freeze waveform recording
Trend data recording
Alarm strip recording

Printer
External Laser Printer

View
Up 64 waveforms for up to 32 bedside monitors
 (8 monitors per screen)
All waveform presentation for single patient
48 hours of trend display for all parameters
Multi-leads ECG waveform display
Waveform freeze
Wireless Networking
Industry standard 802.11b/g WLAN
Connected bedside number: up to 16 bedside monitors

Review
240 hours trend review for each bedside monitor
720 items parameters alarm review for each bedside monitor
720 NIBP measurements review
72 hours of 32 channels full-disclosure waveforms
 store and review

Connection methods
Wireless via transmitter
Hardwired via ethernet
Hardwired via RS-232

OMNI EXPRESS TECHNICAL SPECIFICATIONS:

PEFORMANCE SPECIFICATIONS
Display:	7" color TFT
Resolution:	1024×860
Trace:	2 or 3 waveforms
Waveforms	ECG(I, II, III, aVR, aVL, aVF, V1-V6), PLETH, RESP, ETCO2
Indicator:	Alarm indicator
	Power indicator
	QRS beep and alarm sound
Trend time:	From 30 minutes to 72 hours

ECG
Input:	5 lead or 3 lead ECG cable and standard AAMI line for connection
Lead Choice:	I, II, III, aVR, aVF, aVL, V
Gain Choice:	×0.5, ×1.0, ×2.0
CMRR (common mode rejection ratio):	>100 dB at 50 Hz or 60 Hz
Frequency Characteristic:	0.67~40 Hz (+3dB attenuation)
ECG Waveforms:	7 channels
Sweep Speed:	12.5, 25 and 50 mm/s
HR Display Range:	30~300bpm
Accuracy:	±1bpm or ±1%, whichever is greater
Alarm Limit Range	Upper limit: 80~400bpm
	Lower limit: 20~150bpm

RESPIRATION
Measure Method:	RA-LL impedance
Range:	0~120 rpm
Accuracy:	±3 rpm
Alarm Upper-lower Limit:	Upper limit: 6~120 rpm, Lower limit: 3~120 rpm
Sweep Speed:	12.5 and 25mm/s

NIBP
Measuring Technology:	Automatic oscillating measurement
Cuff Inflating:	<30s (0~300 mmHg, standard adult cuff)
Measuring Period:	AVE<40s
Mode:	Manual, Auto, STAT
Measuring Interval in AUTO Mode:	2 min~4 hrs
Pulse Rate Range:	30 bpm~250 bpm
Measuring Range:	Adult/Pediatric Mode
	SYS 40~250 (mmHg)
	DIA 15!200 (mmHg)
	Neonatal Mode
	SYS 40!135 (mmHg)
	DIA 15!100 (mmHg)
Resolution:	1mmHg

NIBP (continued)
Pressure Accuracy:	Maximum Mean error: ±5mmHg
	Maximum Standard deviation: 8mmHg
Overpressure Protection:	Adult Mode 280(mmHg)
	Neonatal Mode 150 (mmHg)
Alarm Limit:	SYS 50~240 mmHg
	DIA 15~180 mmHg

TEMPERATURE
Range:	25~50 (ºC)
Accuracy:	± 0.2 ºC (25.0~34.9 ºC)
	± 0.1 ºC (35.0~39.9 ºC)
	± 0.2 ºC (40.0~44.9 ºC)
	± 0.3 ºC (45.0~50.0 ºC)
Display Resolution:	0.1 ºC
Alarm Upper-lower Limit:	Upper limit 0~50 ºC
	Lower limit 0~50 ºC
Channel:	1 channels
Alarm Limit:	10~50 (ºC)

SPO2
ASpO2:	Anti-motion SpO2
SpO2% Range:	0~100%
SpO2 Accuracy:	± 2% (70~100%, non-motion)
	± 3% (70~100%, motion)
Pulse Rate Range:	30-250 bpm
Pulse Rate Accuracy:	±2 bpm(non-motion)
	±3 bpm (motion)
Alarm Upper-lower Limit:	Upper limit 70~100%, Lower limit 70~100%
SpO2 Probe:	Red light LED wavelength 660nm±5nm
	Infrared light LED wavelength 940nm±10nm

EtCO2 (OPTION)
Mode of Sampling:	Sidestream or Mainstream
Principle of Operation:	Non-dispersive infrared (NDIR) single beam optics, dual wavelength, no moving parts.
CO2 Measurement Range:	0 to 150 mmHg (0 to 19.7%, 0 to 20 kPa)
CO2 Calculation Method:	BTPS (Body Temperature Pressure Saturated)
CO2 Resolution:	0.1mmHg (0-69mmHg), 0.25mmHg (70-150mmHg)
CO2 Accuracy:	0~40 mmHg ± 2 mmHg
	41~70 mmHg ± 5% of reading
	71~100 mmHg ± 8% of reading
	101~150 mmHg ± 10% of reading
	Above 80 breath per minute ± 12% of reading

EtCO2 (OPTION) (continued)
Sampling Rate:	100Hz
Respiration Rate:	2~150 bpm
Respiration Rate Accuracy:	±1 breath
Response Time:	<3 seconds - includes transport time and rise time
Inspired CO2 Measurement Range:	3~50 mmHg

NETWORKING
Wired Networking:	Industry standard: IEEE 802.3 wired network
	Connected bedside number: Up to 16 bedside monitors
	RJ45 interface or RS232 serial port
Wireless Networking:	Up to 100m indoors
	Frequency Range: 2.412~2.484 GHz
	Industry standard 802.11b/g wireless
	Supports TCP/IP and UDP/IP Protocols

POWER
Source:	External AC power and internal battery
AC Power:	100~240VAC, 50/60Hz, 150VA
Battery:	Rechargeable Lead-Acid
	Type: FB 1223 12v-2.3Ah
	Operating time under the normal condition: 1 hour
	Operating time after the first alarm of low battery: 10 minutes
	Manufacturer: Pilot Battery Co.,Ltd.
Charge Time:	4 hours
Operating Time:	1 hour

ENVIRONMENTAL SPECIFICATIONS
Temperature:	Operating: 5~40 °C
	Storage: -10~45 °C
Humidity Range:	Operating: ≤80 %
	Storage: ≤80 %

RECORDER (OPTION)
Record Width:	48 (mm)
Paper Speed:	25 (mm/s)
Print Data:	3 waveforms with patient info and digital values

FUSE
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