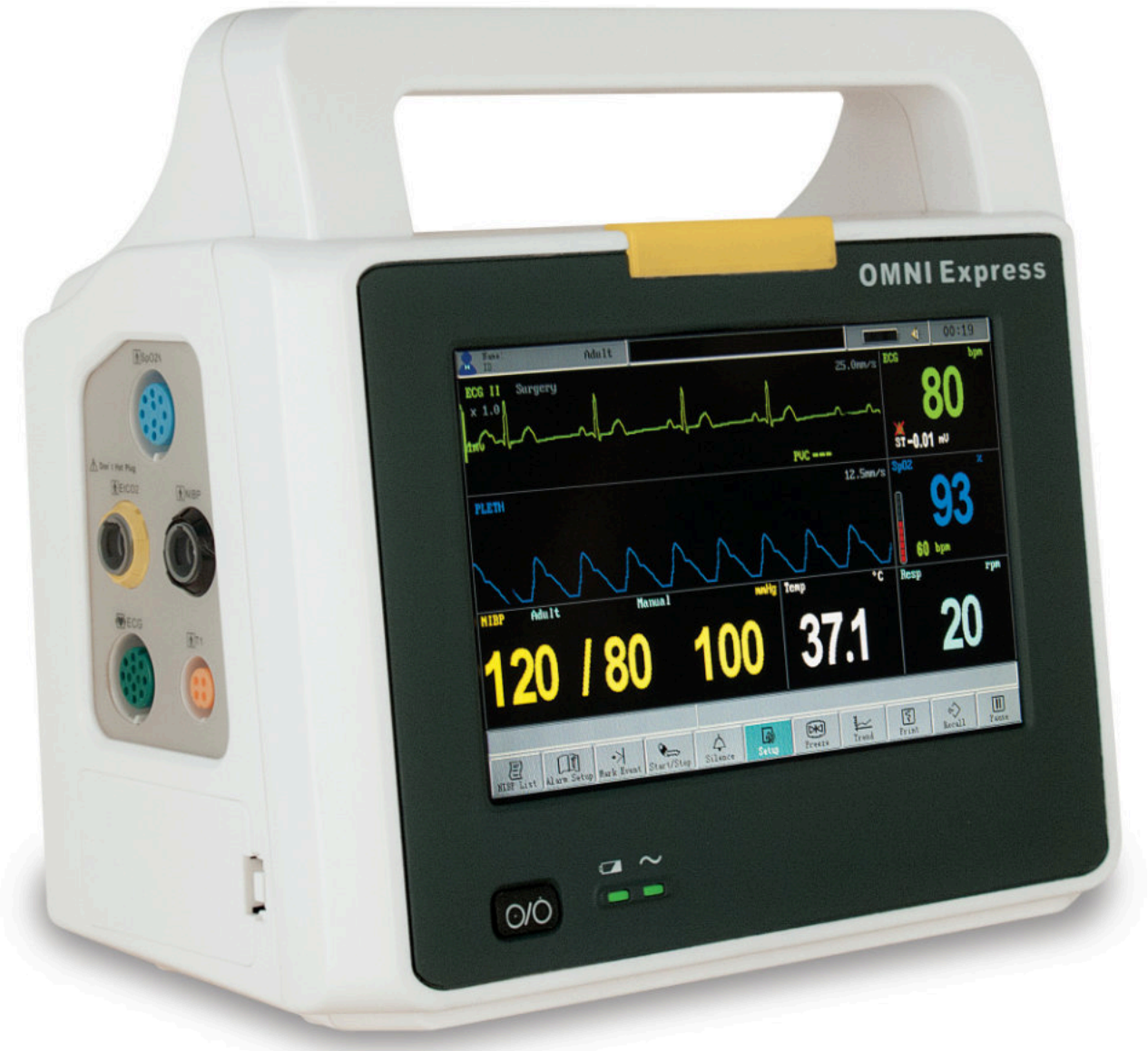
# OMNI® EXPRESS

## THE COMPREHENSIVE CAPNOGRAPH




INFINIUM®

MasimoSET®

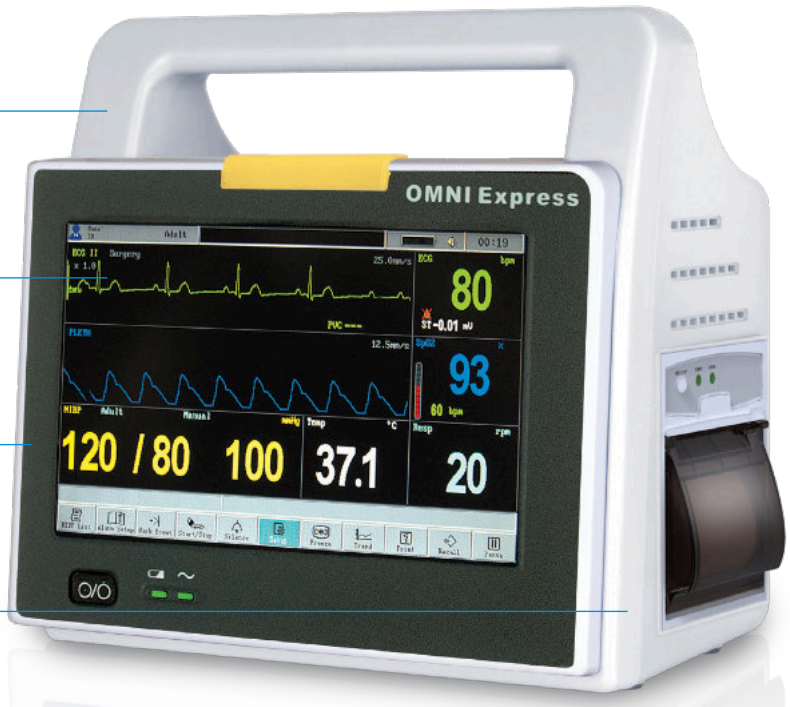
# OMNI® EXPRESS

## PORTABLE
With Battery Backup

Bright Color 7 Inch
## TOUCHSCREEN

## UPGRADABLE
Blood Pressure, SpO2, and 3-Lead ECG Additions

## UPGRADABLE
Printer Option




The **Omni® Express** is a new cost-effective approach to capnography measurement. The **Omni® Express** can be configured to measure any combination of: capnography (EtCO2), non-invasive blood pressure, SpO2, and ECG.

Weighing in at less than 5 LBS the portable **Omni® Express** is well suited for any patient care area by offering a multitude of vital sign combinations. The **Omni® Express** can be used as a basic capnograph for minor procedures or can offer more by adding blood pressure, pulse oximetry measurement or even 3-lead ECG. The **Omni® Express** is well suited for both bed side and procedure room use.

The **Omni® Express** simplifies clinician use by incorporating a touch screen with a simple user interface making the **Omni® Express** intuitive for any user. A long-life lithium Ion battery is standard and many mobile mounting solutions' are available for the **Omni® Express**.

### MULTIPLE CARE AREAS

- Minor Procedure
- Dental Sedation
- Sleep Labs
- Pain Management
- Respiratory Care
- Post Anesthesia Care

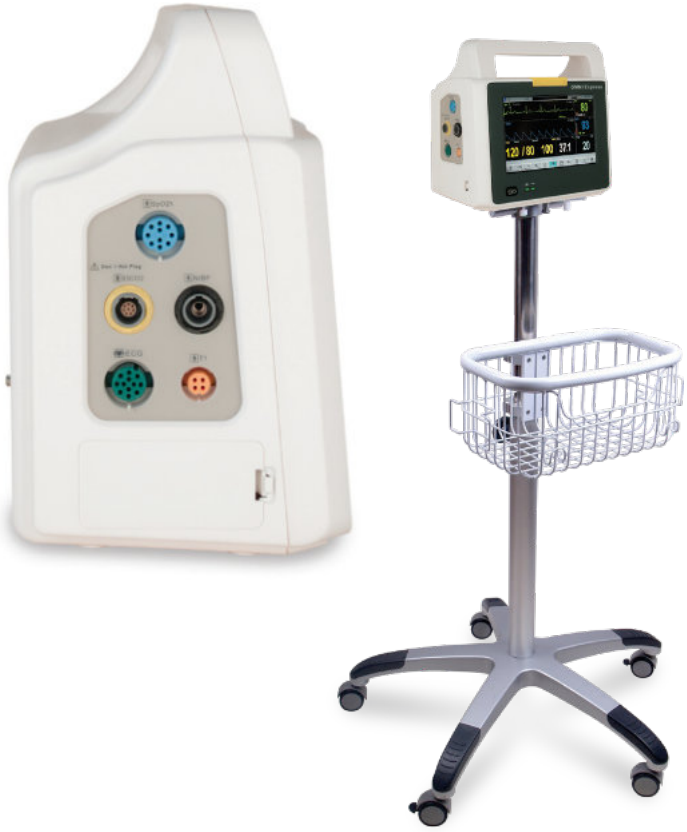
### MULTIPLE CONFIGURATIONS

- Capnography
- Capnogrpahy+SpO2
- Capnogrpany+SpO2+BP
- Capnogrpany+SpO2 +BP+ECG
- Rolling Stand Mounted
- Wall or Bedside Mounted

### PROVEN TECHNOLOGY

- Masimo® Spo2
- SunTech® Advantage BP
- Respironics® LoFLO EtCO2

# The Upgradeable
## CAPNOGRAPH



The **Omni® Express** capnograph provides a cutting edge low flow End-tidal CO2 measuring system. The **Omni® Express** uses a 50/ml per minute sidestream method to deliver the most accurate EtCO2 readings. Low cost sample lines allows the **Omni® Express** to be the industry's lowest cost per patient Capnograph. The **Omni® Express** can be used on both intubated and non-intubated patients. The **Omni® Express** sample line connection system uses filter cells to eliminate the potential of cross contamination.

The **Omni® Express** Capnograph is beneficial in:

### PAIN MANAGEMENT

Suppressed respiratory function can be caused by patient-controlled analgesia (PCA). Opiates may suppress the respiration of patient receiving pain management. The use of Capnography to measure End-Tidal CO2 (EtCO2) can quickly alert clinicians to the symptoms of a patient's respiratory depression which can lead to avoidance of coma or cardiac arrest.

### MINOR PROCEDURE SEDATION

The American Society of Anesthesiologists (ASA) States, "During moderate to deep sedation the Adequacy of Ventilation shall be evaluated by continual observation of qualitative clinical signs and monitoring for the presence of exhaled carbon dioxide." End-Tidal CO2 (EtCO2) is the earliest indictor of respiratory complications during medical procedures.

### SEDATION DENTISTRY

The American Association of Oral and Maxillofacial Surgeons (AAOMS) states, "During moderate or deep sedation and general anesthesia , the adequacy of ventilation shall be evaluated by the continual observation or qualitative clinical signs and monitoring of exhaled carbon dioxide."

# **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 120 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
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 (Included with ECG option only)

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)

## Masimo SET Pulse Oximetry (standard)

### SpO2

Measurement range: 0% to 100%
Resolution: 1%
Accuracy: 70% to 100%, +/-2%, Adult/ Pediatric, Non-motion conditions
70% to 100%, +/-3%, Neonate, Non-motion conditions
70% to 100%, +/-3%, Adult/ Pediatric/Infant/Neonate, Motion conditions
70% to 100%, +/-2%, Adult/ Pediatric/Infant/Neonate, Low perfusion conditions
Averaging time: 2~4 sec, 4~6 sec, 8 sec, 10 sec, 12 sec, 14 sec, 16 sec (user selectable)
Sensitivity settings: Normal, Maximum, APOD (user selectable)

### Pulse Rate

Measurement range: 25 to 240 bpm
Accuracy: +/-3 bpm, Adult/Pediatric/Infant/ Neonate, Non-motion conditions
5 bpm, Adult/Pediatric/Infant/ Neonate, motion conditions
Resolution: 1 bpm

### Perfusion Index (PI)

Measurement range: 0.02 – 20%

### Any other SpO2 (optional)

## EtCO2

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
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

## 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 normal condition: 3 hour
Operating time after the first alarm of low battery: 10 minutes
Manufacturer: Pilot Battery Co.,Ltd.
Charge Time: 4 hours
Operating Time: 3+ hour

## ENVIRONMENTAL SPECIFICATIONS

Temperature: Operating: 5~40 °C
Storage: -20~60 °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 T 3.0A