AnyView A8/A5

Modular Patient Monitor





Size and Weight

Size A8: 434×389×206mm

A5: 350×340×207mm

Weight A8≤11kg

A5≤8kg

Power

Standard According to IEC 60601-1 and IEC 60601-1-2

Input voltage 100V-240V AC
Frequency 50Hz/60Hz
Earth leakage current <0.3 mA
Input current 1.7A -0.8A
Fuse A8: T 2.5A/250V,

A6. 1 2.3A/250

A5: T 2A/250V

Display

Type Color TFT LCD Size(diagonal) A8: 17 inch

A5: 12.1 inch

Resolution A8: 1280×1024 pixels

A5 800×600 pixels

External display

Type Medical-Grade TFT display

Size ≥15inch

Resolution A8: 1024×768 pixels

A5: 800×600 pixels

Recorder

Type Thermal dot array

Horizontal resolution 16 dots/mm(at 25 mm/s paper speed)

Vertical resolution 8 dots/mm
Paper width 50 mm
Paper length 15 m

Recording speed 12.5 mm/s, 25 mm/s, 50 mm/s

Recording waveform Maximum 3 tracks

Recording way Real-time / periodic / alarm recording

Battery

Type Rechargeable lithium ion battery 11.1V/4Ah

Operating time A8: ≥60 minutes

A5: ≥150 minutes

(1 new and fully charged battery at 25°C temperature, connecting SpO2 sensor & NIBP work on AUTO mode for 15 minutes interval)

Charge time 6h to 100%(Standby)

Data Storage

Alarm event 128 groups and associated waveform Trend 168h, minimum resolution is 1min

2h, minimum resolution is 5s

ARR event 128 groups and associated waveform

NIBP 1000 groups

Interfacing & I/O devices

Keyboard & Mouse Support

Barcode Scanner Support 1D barcode (USB connector)

Touch screen Option

Wired network 1 standard RJ45 interfaces
Wireless network 2.4G / 5G dual band (Option)

USB socket A8: 6 sockets

A5: 4 sockets

Video output 1 VGA (A8: standard; A5: option)

1 DVI-D (only for A8)

Nurse call 1 RJ11 connector

Analog signal output Option.

Defibrillation synchronization 1 BNC connector

Environmental requirements

Operating temperature 5°C to +40°C

Operating humidity 15% to 85% (non condensing)

Operating air pressure 700hPa to 1060hPa Storage temperature -20°C to +55°C

Storage humidity 10% to 93%(non condensing)

Storage air pressure 500hPa to 1060hPa

ECG

Lead 3 lead: I, II, III

5 lead: I, II, III, aVR, aVL, aVF, Vx

12 lead: I, II, III, aVR, aVL, aVF, V1-V6

Lead standard AHA, IEC

Gain x 0.125, x 0.25, x 0.5, x 1, x 2, x 4, Auto.

CMRR Diagnostic mode ≥ 90 dB

Monitor mode ≥ 105 dB Surgery mode ≥ 105 dB

Bandwidth (-3dB) Diagnostic mode: 0.05 Hz to 150 Hz

Monitor mode: 0.5 Hz to 40 Hz Surgery mode: 1 Hz to 25Hz

 $\begin{array}{ll} \text{Input impedance} & \geq 5.0 \text{ M}\Omega \\ \text{ECG signal range} & \pm 10.0 \text{ mV} \\ \text{Electrode offset potential } \pm 500 \text{ Mv} \\ \text{Patient leakage current} < 10 \text{ uA} \\ \end{array}$

System noise \leq 30 μ Vpp (RTI) Standardizing signal 1 mV ± 5%

Baseline recovery Monitor mode: \leq 3 s; Surgery mode: \leq 1 s Recovery time after defibrillation: waveform recover to baseline in 10s. Sweep speed 6.25 mm/s, 12.5 mm/s, 25 mm/s, 50 mm/s

ST segment

Measurement Channels Calculating I, II, V- lead etc. at the same time

Default II lead

Measurement range -2.0 mV to +2.0 mV

Accuracy -0.8 mV to +0.8 mV: ±0.02 mV or ±10%,

(whichever is greater)

Over ±0.8mV: unspecified

Resolution 0.01mV

Heart Rate				BLT Digital SpO2	
Measurement range	Adult		10 bpm to 300 bpm	Measurement range	0% ~ 100%
-	Pediatric 8	Neonatal	10 bpm to 350 bpm	Resolution	1%
Resolution	1 bpm			Accuracy	70% ~ 100% ±2%
Accuracy	±1% or ±1 bpm, whichever is greater				0% ~ 69% unspecified
Arrhythmia analysis				PR	
Kinds	ASYSTOL	E, VENT FIB	/TACH, PAC, RUN PVCS,	Measurement range	25 bpm to 254 bpm
COUPLET, BIGEMINY, TRIGEMINY, R on T, TACHY, BRADY, MISSED				Resolution	1 bpm
BEATS, MULRI PACS, PNP, PNC, NOISE, VPB, ST HIGH,				Accuracy	±1% or ±1 bpm, whichever is the greater
ST LOW, VTACH, P	VCS HIGH.			Nellcor SpO2 (option)	
Respiration					00/ 1 4000/
Lead			A) or II (RA-LL)	Measurement range	0% to 100%
Measurement range	0 rpm to 1	•	war is the greater	Resolution	0.01
Accuracy	±2 rpm or ±2% , whichever is the greater 6.25mm/s, 12.5mm/s, 25mm/s			Accuracy	70% to 100%: ±2%(adult/pediatric) 70% to 100%: ±3%(neonate)
Sweep speed	10/15/20/25/30/35/40/45/50/55/60s				0% to 69%, unspecified
Delay of aprilea alaitii	10/10/20/2	3/30/33/40/4	0/00/00/003	PR	070 to 0970, unspecified
NIBP				Measurement range	20 bpm to 300 bpm
	2-30. EN 10	60-1. EN106	60-3, EN 1060-4, SP10	Accuracy	20 bpm to 250 bpm: ±3 bpm
Measurement way				, ,	251 bpm to 300 bpm: unspecified
Measurement mode	Manual , Auto, STAT			Resolution	1 bpm
Intervals for Auto measurement: 1/2/3/4/5/10/15/30/60/90min, 2/4/8/12h.					
STAT mode cycle time Keep 5 minutes, at 5 seconds interval.				Masimo SpO2 (option)	
Systolic range	Adult	30 to 270 n	nmHg	Measurement range	0% to 100%
	Pediatric	30 to 235 n	nmHg	Resolution	0.01
	Neonatal	30 to 135 n	nmHg	Accuracy	70% to 100% ±2% (adult/pediatric, non-motion)
Diastolic range	Adult	10 to 220 n	nmHg		70% to 100% ±3% (neonate, non-motion)
	Pediatric	10 to 220 n	•		70% to 100% ±3%(motion conditions)
	Neonatal	10 to 100 n	=		0% to 69% unspecified
Mean range	Adult	20 to 235 n	=	PR	
	Pediatric	20 to 235 n	· ·	Measurement range	25 bpm to 240 bpm
0 "	Neonatal 20 to 125 mmHg			Accuracy	±3 bpm(non-motion conditions)
Cuff pressure range	0 to 300 mmHg			Desclution	±5 bpm(motion conditions)
Resolution	1 mmHg			Resolution SpCO	1 bpm
Pressure accuracy	re accuracy Static: ±3 mmHg Clinic: Average error ±5 mmHg, standard deviation: ≤8 mmHg			Measurement range	0% to 100%
				Accuracy	0% to 40%: ±3%(non-motion conditions)
PR range	· · ·			riodurady	> 40%, unspecified
				SpMet	7 40 70, unopeomod
Software overpressure protection Adult (297±3) mmHg				Measurement range	0% to 100%
•	'	Pediatric	(252±3) mmHg	Accuracy	0% to 15% ±1%(non-motion conditions)
		Neonatal	(147±3) mmHg	•	> 15% unspecified
			, , ,	PI	
SunTech NIBP (option)				Measurement range	0.05% to 20%
Way of measurement Oscillometric.				SpHb	
Measurement range	Adult	SYS	40~260 mmHg	Measurement range	0 g/dl to 25 g/dl
		DIA	20~200 mmHg	Accuracy	8g/dl to 17g/dl: ±1g/dl (non-motion conditions)
		MAP	26~220 mmHg		< 8 g/dl or > 17 g/dl, unspecified
Child	Pediatric	SYS	40~160 mmHg	SpOC	
		DIA	20~120 mmHg	Measurement range	0 ml/dl to 35 ml/dl
		MAP	26~133 mmHg		
Neonate SYS	Neonatal	SYS	40~130 mmHg	Temperature	
		DIA	20~100 mmHg	Standard	EN 12470-4
		MAP	26~110mmHg	Measurement way	Thermal resistance way
Pressure Accuracy	_		or 2 % of the reading	Measurement range Accuracy	0.0°C to 50.0°C(32°F to 122°F)
Pulse rate range	•				±0.1°C or ±1°F (exclusive of probe)
Pulse Rate Accuracy	2% or 3 bpm, whichever is greater			Resolution	0.1°C or 1°F
Overpressure Protect		<300 mmH	· ·	Unit	°C or °F
(Hardware & software)	software) Child <300 mmHg		Minimum accurate measuring time Surface <100s;		

<80s.

Coelom

Neonatal <150 mmHg

IBP (option) Calibration Zeroing recommend when chang airway adapter. Standard EN 60601-2-34 / IEC 60601-2-34 Warm up time Concentration are reported & automatic agent Sensitivity of transducer 5uV/V/ mmHq, ±2% identification running in 10s,full accuracy in 20s. Impedance of transducer 300Ω to 3000Ω Rise time CO2 ≤ 90 ms Static measurement range -50 mmHg to +350 mmHg N2O ≤ 300 ms Static measurement accuracy ±1 mmHg or ±2% of the reading, ISO, ENF, SEV,HAL,DES ≤ 300 ms whichever is the greater (exclusive of transducer) (Flowing speed 10L/min) ±4 mmHg or ±4% of the reading, whichever System response time < 1s is the greater (inclusion of transducer) Measurement range and accuracy of gas Dynamic measurement range -50 mmHg to +350mmHg Gas Range (%) Accuracy Dynamic measurement accuracy ±4mmHg or ±4% of the reading CO₂ 0 to 15% ± (0.2% + 2% of reading) N20 whichever is the greater 0 to 100% \pm (2% + 2% of reading) Resolution 1 mmHa ISO, ENF, HAL 0 to 8% \pm (0.15% + 5% of reading) Unit mmHq, kPa, cmH2O SEV 0 to 10% ± (0.15% + 5% of reading) DES 0 to 22% \pm (0.15% + 5% of reading) Frequency Response 0 Hz to 20 Hz Kinds of Measurement ART, PA, CVP, RAP, LAP, ICP, P1/P2 awRR range 0 rpm to 150 rpm awRR accuracy ±1 rpm Sidestream CO2 (option) Measurement range 0.0 % to 13.1 % (0 mmHg to 99.6 mmHg) Sidestream AG (option) Resolution 0.1% or 1mmHg Sampling flow rate 50ml/min ± 10ml/min Unit %. mmHa. kPa **Parameters** CO2, N2O, O2, agent (ISO,ENF,SEV,HAL,DES) Accuracy 0% to 4.9% ±0.3 % (±2.0 mmHg) Compensations Automatic compensation for pressure, 5.0% to 13.1% < ±10 % of the reading temperature & broadening effects on CO2. Calibration Measurement range of awRR: 3 rpm to 150 rpm No span calibration is required for the IR bench. Reach 97% of full specifications within 45s and Warm up time An automatic zero reference calibration is full specifications within 10 minutes. performed at startup & then 1~3 times perday. Sample Flow Rate User adjustable, 50/100/150/200/250ml/min Warm-up time < 20s(Concentrations reported, automatic agent identification enabled and full accuracy) Typical rise time CO2≤300ms Mainstream CO2 (option) N2O, O2,ISO, ENF, SEV, DES \leq 400 ms Warm up time Capnogram displayed in less than 15s, at ambient HAL≤ 500 ms temperature 25°C,full specifications within 2min. (at 50ml/min sample flow) Measurement range 0% to 19.7 %(0 mmHg to 150 mmHg) System response time < 3s (with 2m sampling line) Resolution 0.1% or 1mmHg Primary agent threshold 0.15%. When an agent is identified, < 60ms concentrations will be reported below 0.15%. Rise time Unit Second agent threshold 0.2 % +10% of total agent concentration %, mmHg, kPa Accuracy 0 mmHg to 40 mmHg, ±2 mmHg Agent identification time <20s (typically <10s) 41 mmHg to 70 mmHg, ±5% of reading Measurement range and accuracy of gas: 71 mmHg to 100 mmHg, ±8% of reading Gas Range (%) Accuracy 101 mmHg to 150 mmHg, ±10% of reading CO₂ 0 to 15% $\pm (0.2\% + 2\% \text{ of reading})$ awRR range 0 rpm to 150 rpm N20 0 to 100% \pm (2% + 2% of reading) awRR accuracy HAL, ENF, ISO 0 to 8% ±1 rpm $\pm (0.15\% + 5\% \text{ of reading})$ SEV 0 to 10% $\pm (0.15\% + 5\% \text{ of reading})$ DES MicroFlow CO2 (option) 0 to 22% ±(0.15%+5%of reading) Warm up time Capnogram displayed in less than 20s, At ambient 02 0 to 100% \pm (1% + 2% of reading) temperature 25°C, full specifications within 2min. awRR range 0 rpm to 150 rpm 0% to 19.7 %(0 mmHg to 150 mmHg) Measurement range awRR accuracy ±1 rpm Resolution 0.1% or 1 mmHg Unit %, mmHg, kPa ICG (option) Accuracy 0 mmHg to 40 mmHg, ±2 mmHg Measurement way Thoracic electrical bioimpedance 41 mmHg to 70 mmHg, ±5% of reading Measurement range HR: 40 bpm to 250 bpm 71 mmHg to 100 mmHg, ±8% of reading SV: 0 mL to 250 mL 101 mmHg to 150 mmHg, ±10% of reading

SI: 0 mL/m2 to 125 mL/m2

C.O.: 0 L/min to 30 L/min TFC: $5/k\Omega$ to $150/k\Omega$ HR: +10%

Accuracy

SV: ±15% C.O. : ±15%

Recovery time after defibrillation: ICG module is protected against cardiac defibrillations & will return to the standard operation in 10s after discharge.

Mainstream AG (option)

awRR range

awRR accuracy

Sample flow rate

Parameters CO2, N2O, agent(ISO, ENF, SEV, HAL, DES)

50 ml/min ± 10 ml/min

2 rpm to 150 rpm

±1 rpm

Resolution 1% BIS (option) C.O. (option) Bispectral index (BIS), myoelectric activity (EMG), Measurement Index Measurement Mode

Parameter measurement range

BIS range

EMG range

SEF range

RM (option)

SQI / SR range

signal quality index (SQI), suppression ratio (SR), Measurement Wave break count (BC), total power (TP), **Parameters**

spectral edge frequency (SEF) Measurement Range C.O.: 0.1 L/min ~ 20 L/min

Thermal dilution method

Thermal dilution curve

C.O., TB, TI,

TB: 23.0 ~ 43.0°C

0~100; TI: -1.0 ~ 27.0°C 30~55dB (bar chart) with intensity between Resolution C.O.: 0.1 L/min

30 dB and 80 dB (tendency chart); TB: 0.1°C TI: 0.1℃ 0%~100% 0.5~30Hz Accuracy C.O.: 2% SD

TP range 40~100dB TB.TI: ±0.1°C

BC range 0~30 (only limited to the combined use of an

external sensor with a BIS module). **Emergency Mobile Sever (EMS) EEG** measurement specifications Size and weight

Input impedance > 5MΩ Size 160mm×99mm×71mm

Noise(RTI) < 2uv (0.25~50Hz) Weight < 0.6 kgInput signal range ± 1mV Display

EEG bandwidth between 0.25 Hz and 110Hz. 3.5 inch, TFT LCD, 320×240 pixels Screen

Waveform Up to 12 tracks

Battery Flow range Adult 1.5 to 100 L/min Type Rechargeable lithium ion battery

LB-02B Paediatric 0.25 to 25 L/min Model

MVe/MVi range Adult Size 62.5mm×40.5mm×11.5mm 1.5 to 100 L/min < 50g Paediatric 0.5 to 5 L/min Weight

TVe/TVi range Adult 150 to 2000 ml Quantity

3.7 VDC Paediatric 15 to 300 ml Rated voltage TVe/TVi accuracy Adult: ±6% or ±30 ml, whichever is greater. Capability 1800 mAh

Paediatric ±6% or ±4 ml, whichever is greater Operating time >60 minutes(New & fully charged battery at 25°C awRR range Adult

4 to 35 rpm without connect ECG, Temp, IBP, connect SpO2 sensor. NIBP on AUTO mode for 15min interval. Paediatric 4 to 50 rpm

PAW range Adult/Paediatric -20 to 100 cmH2O Charging time Standby state: ≤ 6 h

PAW accuracy +1 cmH2O Turn off delay 5 to 10min after the low battery alarm first occurs.

Loops display Support **EMS** configuration

Standard config 2-TEMP+ NIBP + Adult accessory kit + battery EMS 1 Standard + BLT SpO2 + 3/5 lead ECG + 2-IBP EEG (Option)

Sampling frequency 250 dots/s/ channel EMS 2 Standard + BLT SpO2 + 12 lead ECG + 2-IBP Signal input Range ±500uV EMS 3 Standard + BLT SpO2 + 3/5 lead ECG

Polarization resistance voltage ±320mV EMS 4 Standard + BLT SpO2 + 12 lead ECG

Input impedance ≥15MQ(using10Hz sine wave to test) EMS 5 Standard + Nellcor SpO2+3/5 lead ECG+2-IBP 0.5~30Hz(default), can expand to 0.25~110Hz Frequency range Standard + Nellcor SpO2+12 lead ECG+2-IBP EMS₆

Standard + Nellcor SpO2 + 3/5 lead ECG Noise level $3.0 \text{uVp-p}(0.5 \sim 30 \text{Hz})$ EMS 7 **CMRR** >80dB (close the power frequency filter, using EMS 8 Standard + Nellcor SpO2 + 12 lead ECG

10Hz sine wave to test) EMS 9 Standard + Masimo SpO2+3/5 lead ECG+2-IBP >105dB (open the power frequency filter, using **EMS 10** Standard + Masimo SpO2+12 lead ECG+2-IBP Standard + Masimo SpO2+ 3/5 lead ECG 50Hz sine wave to test) **FMS 11**

Leakage current ≤10uA(using100V AC signal to test) **EMS 12** Standard + Masimo SpO2+ 12 lead ECG

Input protection 4 kV (defibrillation-proof)

Option Module:

2-IBP module, 2-Temp module, Nellcor SpO2 module, Masimo SpO2 Module, RM module, Sidestream CO2 module, MicroFlow CO2 module, Mainstream CO2 module, Mainstream / Sidestream AG module, Suntech NIBP module, ICG module, C.O. module, EEG module, BIS module. Other option:

Thermal Printer, Rolling stand, Wall mount, External Display, Wireless Lan (Wifi), Analog Output (ECG or IBP), Touch Screen.



Add: No.2 Innovation First Road, Technical Innovation Coast, Hi-tech Zone, Zhuhai, P.R.China

Tel: +86-756-3399935 3399999 Fax: +86-756-3399911 E-Mail: Overseas@blt.com.cn Post code: 519085

Hlttp://www.blt.com.cn A5A8/S-1808-eng-V1; Date: Aug. 2018

