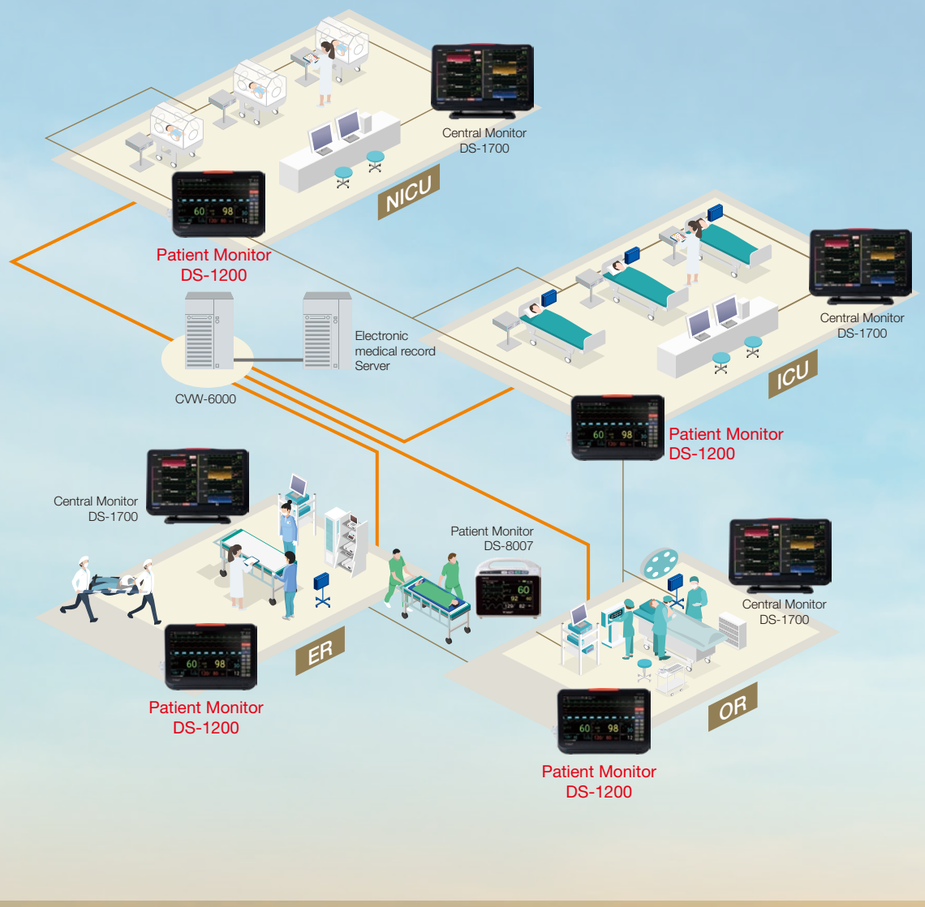
System data server storage system for the DS-1200 patient monitor

This data storage system can be used to support a variety of critical care departments



DYNASCOPE

DS-1200 System



CE 2797
UK CA 0086 MD

FUKUDA DENSHI reserves the right to change specifications without notice.

FUKUDA DENSHI CO., LTD.
3-39-4 Hongo, Bunkyo-ku, Tokyo, Japan
Tel: +81-3-5684-1455 Fax: +81-3-3814-1222
https://fukuda.com

Distributed by:

FUKUDA DENSHI

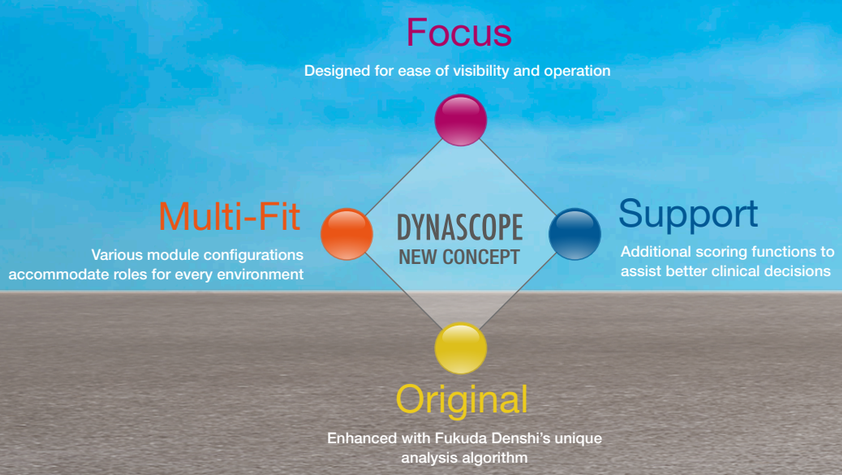
Printed in Japan NP.No.20260316Ⓚ

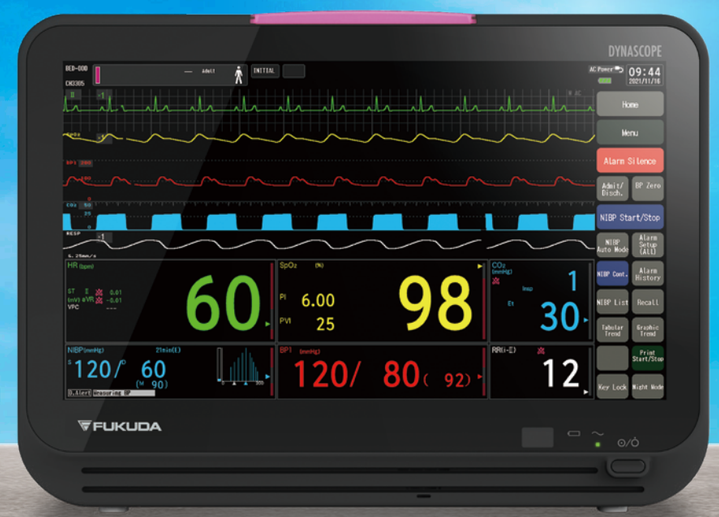
DYNASCOPE

Adaptive Monitoring Solutions, Expandable technology for now and the future

Flexible functionality to swiftly support all clinical environments.

The patient monitor DS-1200 system flexibly supports a variety of applications for use and monitoring parameters required in critical departments such as ICUs, CCUs, NICUs, and Operating rooms.





DS-1200 System
Patient Monitor

Focus

Designed for ease of visibility and operation



Focus
Multi-Fit
DYNASCOPE
NEW CONCEPT
Support
Original

All in One

A variety of modules fit directly into the main unit

Newly designed modules for various measurements such as $EtCO_2$ and anesthetic gas concentration are tailored to fit within the main unit. This design was created to remove unnecessary cables and increase the available space for patient care.



Familiar Flat design

Patient monitors used in busy clinical environments require both visibility that enables the instant and accurate understanding of the measured values, etc. during alarms and operability that enables rapid entry. Our system's display utilizes the same kind of flat design that is also used for smartphones and other mobile devices. The simple layout of the display design achieves both high visibility and stress-free operability, thereby supporting safe, accurate monitoring in ICUs and hospital wards.



Capacitive touch panel

Our system uses a touch panel screen that is clear and reduces glare. The screen specifically consists of an LCD surface with a sheet of touch-detecting film attached to it. The screen therefore achieves the clearer display of waveforms and numerical information while also being highly responsive to touch operations.



Support

Scoring function to support decision making



Equipped with Scoring Function

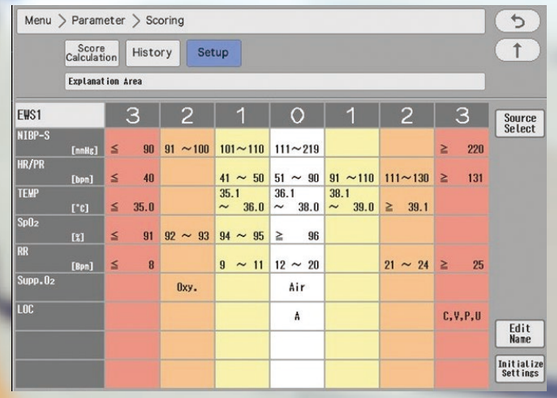
Rapid response systems (RRS) are currently being introduced by many medical institutions to enable specialized teams to promptly intervene and provide medical treatment based on prescribed standards. Meanwhile, an early warning score (EWS) is based on the respiratory rate, body temperature, blood pressure, oxygen saturation, and level of consciousness, which are used as standards to trigger the RRS, and such a score can be used to provide patient care based on any set standards.

Score mode equipped as standard

NEWS 2 (National Early Warning Score)
This scoring system was released by the NHS (National Health Service) in 2017.

Original score modes can also be set

The score can be set in combination with any other parameters according to hospital operations.



EWS1	3	2	1	0	1	2	3
NIBP-S [mmHg]	≤ 90	91 ~100	101~110	111~219			≥ 220
HR/PR [bpm]	≤ 40		41 ~ 50	51 ~ 90	91 ~110	111~130	≥ 131
TEMP [°C]	≤ 35.0		35.1 ~ 36.0	36.1 ~ 38.0	38.1 ~ 39.0	≥ 39.1	
SpO2 [%]	≤ 91	92 ~ 93	94 ~ 95	≥ 96			
RR [Bpm]	≤ 8		9 ~ 11	12 ~ 20		21 ~ 24	≥ 25
Supp.O2		Oxy.		Air			
LOC				A			C,V,P,U



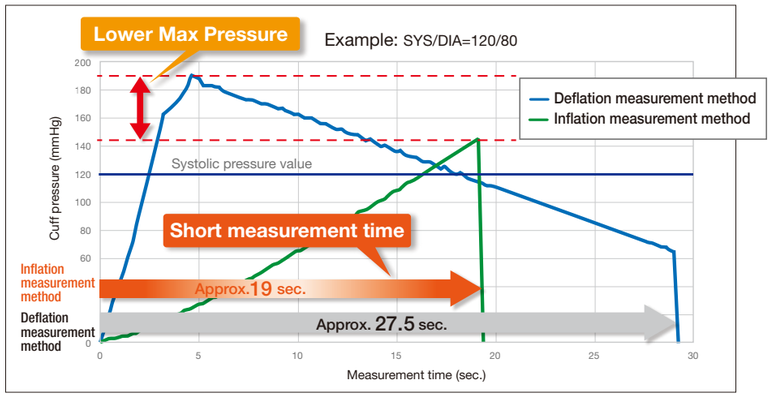
Original

Equipped with Fukuda Denshi original analysis algorithm

Inflation NIBP Measurement Method

Realizes “gentle blood pressure measurement” with lower max pressure than conventional devices.

* By using our designated device settings and cuff, blood pressure measurement during increasing pressure (inflation measurement method) is possible.



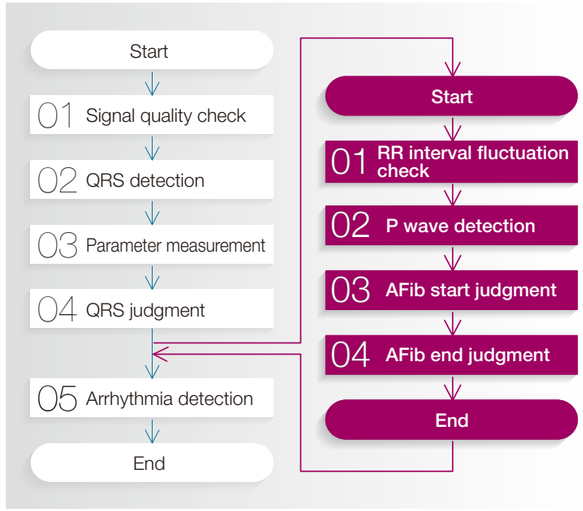
QT/QTc measurement

With its comprehensive set of waveform functions, our system can be used to achieve rapid and continuous QT/QTc monitoring.
This system can be easily used to quickly confirm the presence of long QT segments, which have been known to indicate cases with patients experiencing serious health issues or sometimes even sudden death.

FUKUDA DENSHI’S original AF Analysis Flow included

In addition to our algorithm for analyzing 28 types of arrhythmias, our system includes our own original analysis of Atrial fibrillation (AFib). Our unique analysis technology has been cultivated from our years of experience holding a large share of the Japanese Holter ECG market. This insight has been applied to the development of our technology and also included with our patient monitor.





Multi-Fit

Various module configurations accommodate roles for every environment







Maintenance



60-minute battery

Removable internal battery enables 60 minutes of continuous operation.



Centralized time management

If the central monitor is connected to the hospital's time server, the patient monitor's time will also be synchronized, eliminating the daily task of verifying the time. In addition, all data can be affirmed reliable because time is synchronized with the hospital's clock.

Data storage

Patient data is stored to the SD card.
Up to 240 hours of waveform data can be saved by using the larger optional SD card.



Central Monitor
DS-1700 System

Patient Monitor
DS-1200 System

Option lineups



Multi Gas Module S
MG-120



Multi Gas Module
MG-110



Gas Unit I/F Module
HC-120



CO_2 Gas Module
HC-110

[Image of connection with BISx]





BISx IF Cable (0.4m)
CJO-29TR0.4



Trolly
OTO-16S*

*When using the OTO-16S with the DS-1200, be sure to attach the OAO-1011A.
However, when using the *OTO-16L*, the OAO-1011A is not necessary.
For more information, please contact our representative.

Specification

Size	400 (W) mm×290 (H) mm×170 (D) mm (not including the protrusion)
Weight	5.0kg (not including the optional accesories)

Environment Conditions

Operating Temperature	10°C to 40°C
Operating Humidity	30% to 85% (non condensing)
Transport/ Storage Temperature	-10°C to 60°C
Transport/ Storage Humidity	10% to 95% (non condensing)
Storage Atmospheric Pressure	70kPa-106kPa

Power Supply

Rated Voltage	100-240V AC
Frequency	50/60Hz
Power Consumption	100VA and below

Battery for Operating the Equipment

Battey Operation Time	1 hour (When NIBP measurement of 15 min intervals or other optional units are not operating) The battery operation time is based on the conditions below; The battery pack is fully charged, and no alarms are generated.
Battery Charging Time	Rapid Charge (when the device is not operating): 2.5 hours, Normal Charge (when the device is operating): 5 hours

Performance

Display

Display Device	15.6 inch TFT Color LCD
Resolution	15.6 inch: 1366 pixel × 768 pixel, refresh frequency 60 Hz
Function Control	Touch Screen Method
Displayed waveform	ECG, Resp, SpO_2, IBP Max. 8channels, $EtCO_2$ (optional)/ O_2(optional)/ BIS (optional) Agent (optional)/ Spirometry (optional)
Displayed parameter	Heart rate/ST/QT/arrhythmia Respiration rate (impedance) Arterial oxygen saturation, pulse rate SpCO, SpMet, SpHb, PVI (when MASIMO sensor is used) RR_SpO_2 (when Medtronic sensor is used) NIBP (SYS/DIA/MAP, Cuff pressure, pulse rate) IBP Max. 8 channels (with optional module) Temp Max. 8 channels (with optional module) CO 1 channel Gas concentration ($EtCO_2$, $InspCO_2$, N_2O(In/Ex), O_2 (In/Ex), AG (In/Ex), Respiratory rate), Spirometry function Scoring, Shock index (SI) BIS, SR, EMG, SQI
Arrhythmia analysis	28 parameters Asystole, VF, VF, Slow VT, Run, Couplet, Pause, Bigeminy, Trigeminy, Frequent, Tachy, Brady, Ext Tachy, Ext Brady, R on T, Multiform, Vent Rhythm, SVT, AFib, Irregular RR, Prolonged RR, Pacer Not Capture, Pacer Not Pacing, Triplet, S Frequent, S Couplet, VPC, SVPC

Composition of the System

Type	Specification	Recorder	Telemeter
DS-1200N	SpO_2 unit Medtronic	×	×
DS-1200NR		○	×
DS-1200NT		×	○
DS-1200NRT		○	○
DS-1200M	SpO_2 unit MASIMO	×	×
DS-1200MR		○	×
DS-1200MT		×	○
DS-1200MRT		○	○

Related product

Model	Size	Specification
MG-110	80 (W)×100 (H)×135 (D) mm	Multi-gas module CO_2, O_2, N_2O, Agent
MG-120	120 (W)×100 (H)×135 (D) mm	Multi-gas module (with spiro) CO_2, O_2, N_2O, Agent
HC-110	40 (W)×100 (H)×135 (D) mm	CO_2 gas module $ETCO_2$ (side stream)
HC-120		Gas unit I/F module $ETCO_2$ (main stream)
HM-800		Multi-module (IBP, TEMP, CO)×2
HG-810		SpO_2 module for Masimo's device
HG-820		SpO_2 module for Medtronic's device
HP-800		Multi-port module External device connection