

# *Optimal Dual*



## **Advance Dynamic Alternating Mattress**

The ***Optimal Dual*** 20 air cells dynamic mattress replacement system provides effective therapy with reliable high quality TPU coated air cells for pressure ulcer prevention.

The 8" height 20 air cells with full 4" height immersion mattress replacement with our digital pumps is ideal for patients at **medium to very high risk** of pressure ulcer development.



The **Optimal Dual** features 20 dynamic alternating air cells with 2-1 Alternating and 3 static head cells. The 20 cell-on-cell design provides better support and more comfortable experience. In the event of power outage, the cell-on-cell design can also support the patient.



The **Optimal Dual** is an advanced multi-functional microcontroller programmed **9.0L+9.0L dual linear compressors digital pump** with a **detachable power cord** dynamic mattress replacement system. The high flowrate fast inflation dual compressors digital pump has a precise **digital pressure transducer** which is able to reduce the power wattage once the pressure is reached therefore it is the most quiet, power efficiency, and extended lifetime pump. The digital pump has 20 minutes **static mode, alternate mode with selectable cycle time, Constant Low Pressure (CLP) or pulsate mode with selectable cycle time, auto-firm mode, and auto-detection mode**. To insure patient's safety, the pump has **audiovisual** low pressure, power failure, and service alarms **with error code**.

## Other Features



### AKTC TrueCare Alternating

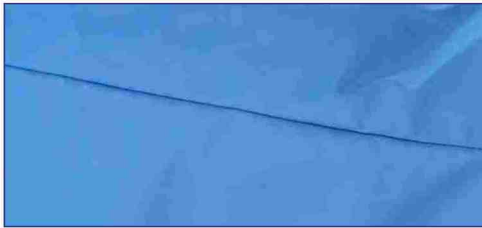
TrueCare Alternating will give patient the best sleep without the disturbance. The support surface can maintain the same height during each alternating cycle hence enhances the comfort for the patient. The patient will never experience motion sickness with our TrueCare air mattress system.



### AKTC independent Low Air Loss (iLAL)

iLAL effectively reduces the moisture and skin heat on the support surface by periodically providing a high volume of low air loss relief.

Low air loss is ventilated through 30 of 1.5 mm diameters holes on the manifold and releases up to 75L per cycle. More effective and longer lifetime than on-cell laser holes.



### Medical Grade Two-Way Stretch PU Cover



Medical grade vapor permeable and spill resistance with fire retardant cover keeps the moisture away from patient's skin. Two high quality molded-tooth zippers cover for easy replacement and laundry. The cover is washable to 95° Celsius.



### Knitted Retainer

The retainer is built with strong high quality knitted material to ensure the air cells are placed firmly. The knitted retainer is easy to be detached for washing and replacing.



### Dual-Way "Quick CPR"

Immediate mattress deflation in case of emergency and immediate mattress inflation with our optional handheld inflator for quick setup

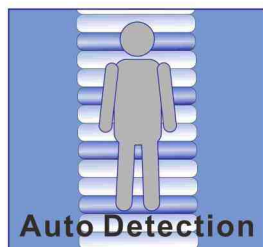


### Tube-through-Cell Connector

CQC (Convenient Quick Couplings) Tube-through-Cell connector design eases up air cell replacement without any tool. The downward connector design allows patient's family to sit anywhere on the mattress without worrying the disconnection of the connectors.



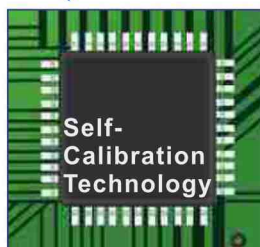
## Technical Specifications



### Auto Detection

#### Auto Pressure Detection

Auto pressure detection providing the recommendation pressure setting based on patient's body size.



### Self-Calibration Technology

#### Self-Calibration Technology

The same softness air mattress regardless the altitude, temperature, and atmospheric pressure. Most precise pressure up on the mountain or down in the valley, winter or summer, daytime or night time.



#### Audiovisual Alarms

Power failure, low pressure, and service alarm with error code to ensure the nursing staff is notified in the event of faults.



#### Transportation Mode

The transportation cap can be used in case of patient transportation or power outage.

## Optimal Dual

Pump	Digital
Dimension (cm)	43x13x24
Supply Voltage	230V/50Hz
Alternating Type	2-1 Alternating
Flowrate (Liter)*	9.0 + 9.0
Control Panel Type	Digital Keypad+Seven-Segments LED display
Mode	Alternate, Static, Constant Low Pressure (CLP)
Full Cycle Time (Minutes)	Selectable 10, 15, 20, 25, 30
Alarms	Audiovisual Alarms (Power Failure, Low Pressure, and Service Alarm with Error Code)
Auto Pressure Detection	Yes
Power Code Type	Detachable
Classification	Class II, Type BF
Electrical Safety Standards	IEC60601-1 IEC60601-1-2 IEC60601-1-11 homecare standard
Warranty	1 year

Mattress	8" Replacement
Dimension (cm)	200x90x20
Number of Cells	20
Cell Material	TPU
Top Cover Material	Two-Way Stretch Polyester
Pillow Section	Yes, 3 cells
Cell-on-Cell Design	Yes
independent Low Air Loss (iLAL)	Yes (up to 75L per cycle)
CPR Type	AKTC Q-CPR
Recommendation Maximum Weight (kg)	255
Warranty	1 year

\*The flow rate may be varied due to fluctuation of input voltage.



Air Kinetic Technologies Corp.

No.3, Gongye 5th Rd., Pingzhen Dist, Taoyuan City 324, Taiwan

TEL: +886-3-419-4567 FAX: +886-3-469-3789 E-MAIL: service@aktc.com.tw

[www.aktc.com.tw](http://www.aktc.com.tw)