

Optimal Series

Lateral Rotation Turning and Alternating Air Mattress Systems



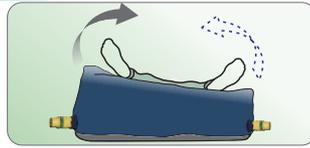
**ANTI-DECUBITUS
AIR MATTRESSES**

Features



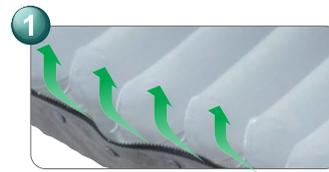
AKTC TrueCare Alternating

The patient will never experience motion sickness with our *TrueCare* air mattress system. The support surface can maintain the same height during each alternating cycle hence enhances the comfort for the patient.



SmileTurn Dynamic Mattress

Aids immobile patients to gain a wider range of visual peripheral using the turning air cells along with the alternating cycle. The *SmileTurn* is also proven not only improves pressure reduction both horizontally and vertically but also eases patient handling for the caregiver.



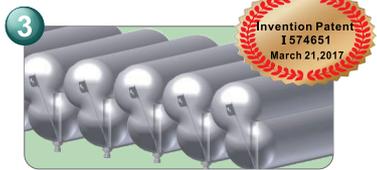
AKTC independent Low Air Loss (iLAL)

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



AKTC TrueVent True Low Air Loss

On-cell *TrueVent* ventilation provides consistency True Low Air Loss ventilation for very high risk patients' skin microclimate management.



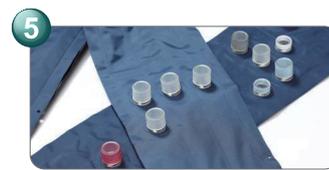
Tube-through-Cell

Cell-on-Cell with Tube-through-Cell connector design allows patient's family to sit anywhere on the mattress without worrying the disconnection of the connectors.



Dual-Way "Quick CPR"

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



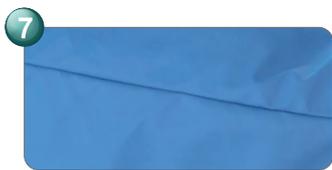
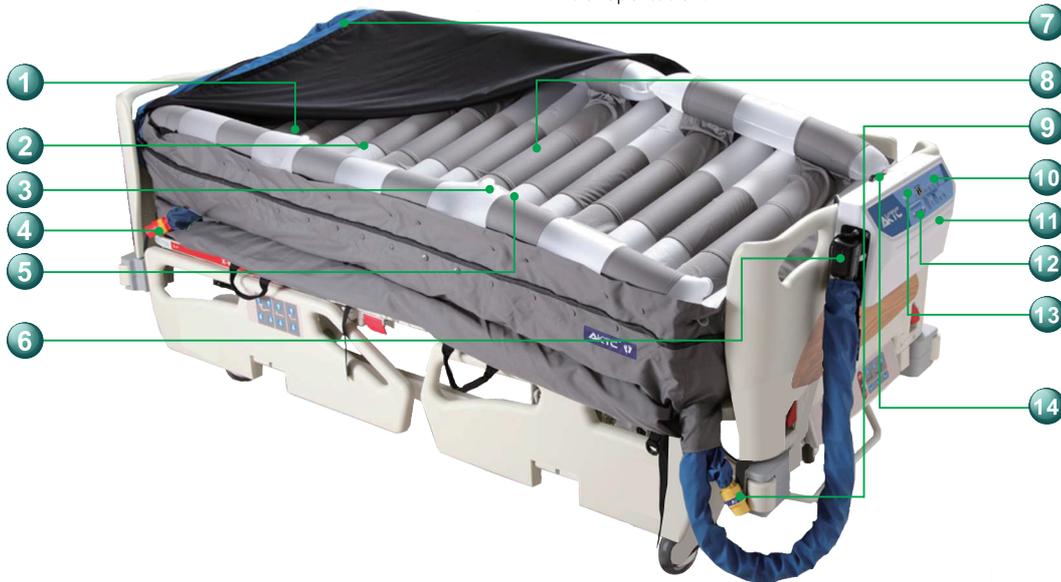
Convenient Quick Couplings (CQC) with Fabrics Manifold

CQC connector design eases air cell replacement without any tool. Fabrics manifold design prevents kink during transportation.



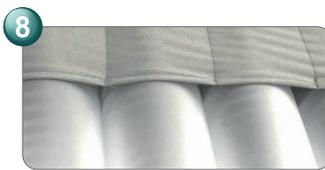
Transportation Mode

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



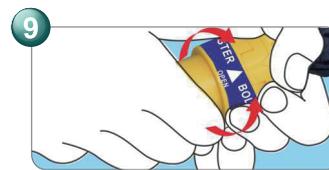
Medical Grade Stretch PU Cover

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 70° or 95° Celsius.



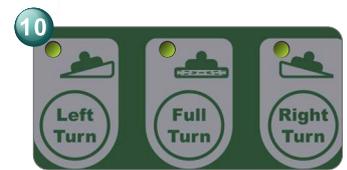
Knitted Retainer

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.



On-Demand Side Bolsters

Quick bolster release valve provides immediate inflation or deflation for patient transportation.



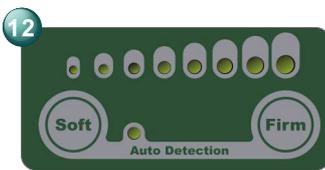
Lateral Rotation Turning

Lift-and-Turn Technology or *Drop-and-Turn Technology* with three turning modes and turning angle up to various degrees.



Self-Calibration Technology

The same precise pressure and softness air mattress regardless of the altitude whether is up on the mountain or down in the valley; of the temperature whether is in the winter or the summer; of the day whether is daytime or nighttime.



Auto-Detection Technology

Enables the pump to detect the patient automatically and provides the recommendation pressure depending on the body sizes.



Audiovisual Alarms

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



Self-Adjustment Spring Hangers

Automatic self-adjustment hangers to fit with various sizes of bed footboards.

SmileTurn

The *SmileTurn* dynamic mattress overlay or replacement system provides effective therapy for pressure ulcer prevention and aids immobile patients to gain a wider range of visual peripheral using the turning air cells along with the alternating cycle. The patient will feel happier and have better mood as they are able to see a wider range. The *SmileTurn* is also proven not only improves pressure reduction both horizontally and vertically but also eases patient handling for the caregiver.

- **Compatible with any pump** to perform lateral rotation *and* alternating simultaneously.
- TrueCare Alternating
- **iLAL** ventilation
- Three turning options with cycle time.
- Alternate, Static, Pulsate, CLP, and Fowler modes available.
- *Turning up to 10 degrees.



Optimal Dual Turn

The *Optimal Dual Turn* **Lift-and-Turn Technology** dynamic mattress replacement system has been developed for high risk patients with pressure ulcers and pneumonia symptoms. The system performs both lateral rotation and alternating simultaneously to ease both symptoms for the patients. The high flowrate digital dual compressors system is able to reduce power wattage once the pressure is reached therefore it is the most quiet, power efficiency, and extended lifetime pump.

- Dual compressors perform lateral rotation *and* alternating simultaneously.
- **Lift-and-Turn Technology** provides maximum comfort.
- TrueCare Alternating
- **iLAL** ventilation
- Three turning options with cycle time and 8 adjustable angles.
- Alternate, Static, Pulsate, CLP, and Fowler modes available.
- On-demand raised side bolsters.
- *Turning up to 30 degrees.



Optimal Turn

The *Optimal Turn* **Lift-and-Turn Technology** dynamic mattress replacement system is an advanced 1000.0L airmoving-blower True Low Air Loss system developed for very high risk patients with pressure ulcers and pneumonia symptoms. The system performs both lateral rotation and alternating simultaneously and it is the only pump can provide the True Low Air Loss ventilation for skin microclimate management through our uniquely designed on-cell **TrueVent** ventilation.

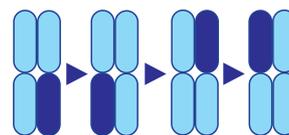
- 1000.0L air-moving blower performs lateral rotation and alternating simultaneously.
- **Lift-and-Turn Technology** provides maximum comfort.
- **TrueVent** True Low Air Loss ventilation
- Three turning options with cycle time.
- Alternate, Static, Pulsate, and Fowler modes available.
- Bariatric mode supporting up to 450kg.
- On-demand raised side bolsters.
- *Turning up to 30 degrees.



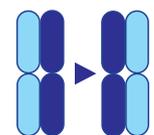
Optimal Turn Advance

The *Optimal Turn Advance* **Drop-and-Turn Technology** dynamic mattress replacement system is an advanced 1000.0L airmoving-blower True Low Air Loss system developed for very high risk patients with pressure ulcers and pneumonia symptoms. In addition to 1-in-2 alternating, the caregiver can also select 1-in-4 alternating to maximize the comfort for the patients. It is the only pump can provide the True Low Air Loss ventilation for skin microclimate management through our uniquely designed on-cell **TrueVent** ventilation.

- 1000.0L air-moving blower performs lateral rotation and alternating simultaneously in selected modes.
- **Drop-and-Turn Technology** prevents the mattress from exceeding rail clearance.
- **TrueVent** ventilation
- Three turning options with cycle time.
- 1-in-4 Alternate, 1-in-2 Alternate, Static, Pulsate, and Fowler modes available.
- Bariatric mode supporting up to 450kg.
- *Turning up to 40 degrees.



1-in-4 Alternating



1-in-2 Alternating



*Turning angles may vary due to different patient weights and body sizes.

Product Specifications

Smile Turn

Optimal Dual Turn

Optimal Turn

Optimal Turn Advance

Pump

Operation mode	<ul style="list-style-type: none"> 1-in-2 or 1-in-3 alternating static auto-firm - optional pulsate - optional CLP - optional variable cycle times fowler - optional 	<ul style="list-style-type: none"> 1-in-2 or 1-in-3 alternating static (CLP) auto-firm pulsate variable cycle times fowler left turn, full turn, right turn (10-95 min) 	<ul style="list-style-type: none"> 1-in-2 or 1-in-3 alternating static (CLP) auto-firm pulsate variable cycle times fowler bariatric left turn, full turn, right turn (10-95 min) 	<ul style="list-style-type: none"> 1-in-2 alternating 1-in-4 alternating static (CLP) auto-firm pulsate variable cycle times fowler bariatric left turn, full turn, right turn (10-95 min)
Turning angles*	Lift-and-Turn Technology 0-10 degrees	Lift-and-Turn Technology 0-30 degrees (8 adjustable angles)	Lift-and-Turn Technology 0-30 degrees	Drop-and-Turn Technology 0-40 degrees
Flowrate (liter)**	7.0 or 9.0	9.0 + 9.0	1000	1000
Digital keypad + seven-segments LED Display	Optional	✓	✓	✓
Audiovisual alarms (power failure, low pressure, and service alarm with error code)	Optional	✓	✓	✓
SelfCalibration technology	Optional	✓	✓	✓
Auto-Detection technology	Optional	Optional	N/A	N/A
Ingress protection	IP21	IP21	IP21	IP21
Supply voltage	120V/60Hz or 230V/50Hz	120V/60Hz or 230V/50Hz	120V/60Hz or 230V/50Hz	120V/60Hz or 230V/50Hz
Electrical equipment classification	Class II, Type BF	Class II, Type BF	Class II, Type BF	Class II, Type BF
Electrical safety standards	<ul style="list-style-type: none"> IEC60601-1 IEC60601-1-2 IEC60601-1-11 	<ul style="list-style-type: none"> IEC60601-1 IEC60601-1-2 IEC60601-1-11 	<ul style="list-style-type: none"> IEC60601-1 IEC60601-1-2 IEC60601-1-11 	<ul style="list-style-type: none"> IEC60601-1 IEC60601-1-2 IEC60601-1-11

Mattress

Dimensions (cm) L x W x H	<ul style="list-style-type: none"> 200 x 85 x 10 200 x 90 x 10 200 x 85 x 13 200 x 90 x 20 	<ul style="list-style-type: none"> 200 x 90 x 20 200 x 107 x 20 200 x 122 x 20 200 x 137 x 20 200 x 152 x 20 	<ul style="list-style-type: none"> 200 x 90 x 20 200 x 107 x 20 200 x 122 x 20 200 x 137 x 20 200 x 152 x 20 	<ul style="list-style-type: none"> 200 x 90 x 20 200 x 107 x 20 200 x 122 x 20 200 x 137 x 20 200 x 152 x 20
Number of cells	16/18/20/24	18/20/24	18/20/24	20
Cell material	Nylon-TPU (ether) or TPU (ether)	Nylon-TPU (ether) or TPU (ether)	Nylon-TPU (ether) or TPU (ether)	Nylon-TPU (ether) or TPU (ether)
Top cover material	<ul style="list-style-type: none"> Nylon taffeta Two-way stretch polyester Four-way stretch polyester 	<ul style="list-style-type: none"> Nylon taffeta Two-way stretch polyester Four-way stretch polyester 	<ul style="list-style-type: none"> Nylon taffeta Two-way stretch polyester Four-way stretch polyester 	<ul style="list-style-type: none"> Nylon taffeta Two-way stretch polyester Four-way stretch polyester
Static head section	✓	✓	✓	✓
Cell-on-Cell design	Optional	✓	✓	✓
Low air loss	independent Low Air Loss (iLAL)	independent Low Air Loss (iLAL)	TrueVent True Low Air Loss	TrueVent True Low Air Loss
AKTC "Quick CPR"	✓	✓	✓	✓
On-demand side bolsters with "Bolster Release"	Optional	✓	✓	N/A
Maximum patient weight (kg)	up to 255	up to 350	up to 450	up to 450

*Turning angles may vary due to different patient weights and body sizes.

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



Air Kinetic Technologies Corp.

No.3, Gongye 5th Rd., Pingzhen Dist, Taoyuan City 32459, Taiwan

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

www.aktc.com.tw

