



Since 1989

Elite Series

Savvy Series

Optimal Dual Series

Optimal Pro Series — True Low Air Loss System



The Air Mattress Expert

Made in Taiwan

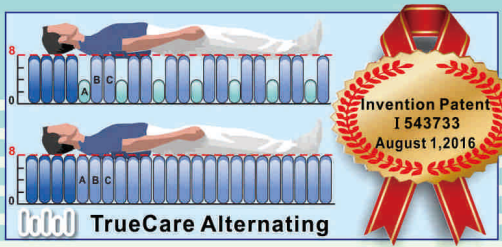


Elite Series

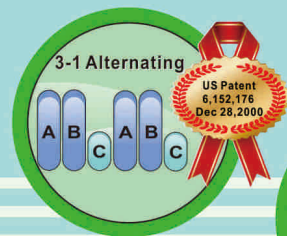
The **Elite Series** dynamic mattress overlay system provides effective therapy for pressure ulcer prevention at an affordable cost with high quality **TPU coated nylon air cells**. The 4" or 5" mattress overlay with our mechanical or semi-digital pumps is ideal for patients at **medium to high risk** of pressure ulcer development.

Elite Series

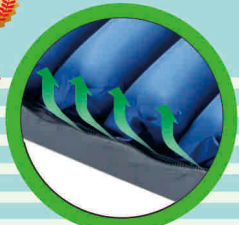
| Pump | | | | | Mattress | | |
|-----------------------------|---|---|-----------|------------|--|---|-----------------------------|
| | Mechanical Series | Semi-Digital Series | | | | 4" Overlay | 5" Overlay |
| | Elite 160 | Elite 120 | Elite 140 | Elite 200 | | | |
| Model | | | | | Dimension (cm) | 200x85x10 | 200x85x12.5 200x107x12.5 |
| Dimension (cm) | 31x10x20 | 31x10x20 | 33x12x22 | 33x13x24 | Number of Cells | 19 | 16 |
| Supply Voltage | 120V/60Hz or 230V/50Hz | | | | Cell Material | Nylon-TPU | |
| Alternating Type | 2-1 or 3-1 Alternating | | | | Top Cover Material* | Nylon-PU (Antibacterial and antifungal) | |
| Flowrate (Liter)** | 7.0 | | 9.0 | | Pillow Section | Yes | |
| Control Panel Type | Dial | Dial+Digital Keypad | | | Cell-on-Cell Design | No | |
| Mode | Alternate, Static | | | | independent Low Air Loss (iLAL) | Yes | |
| Full Cycle Time (Minutes) | 12 | Selectable 10, 15, 20 | | | CPR Type | Pull-Tab CPR | |
| Alarms | Low Pressure LED Indicator | Audiovisual Alarms (Power Failure, Low Pressure, and Service Alarm) | | | Recommendation Maximum Weight (kg) | 135 | |
| Power Code Type | Undetachable | | | Detachable | *Biocompatible two-way stretch top cover and quilted top cover are also available. | | |
| Classification | Class II, Type BF | | | | **The flow rate may be varied due to fluctuation of input voltage. | | |
| Electrical Safety Standards | IEC60601-1 IEC60601-1-2 ***IEC60601-1-11 homecare standards available | | | | ***Homecare standards does not allow ground connection 3 pin plug. | | |



The support surface can maintain the same height during each alternating cycle hence enhances the comfort for the patient



Mattress alternates every other 3 air cell during each alternating cycle to give patient a very genuine comfortable surface



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



Insert-molded elastic hangers



Static to alternate auto-switch function

Savvy Series

The **Savvy Series** dynamic mattress overlay or replacement system provides effective therapy with reliable high quality **TPU coated nylon air cells** or high quality, pliable, shear force reduced **TPU-ether air cells** for pressure ulcer prevention. The 4" or 5" mattress overlay or 8" mattress replacement with our mechanical, semi-digital, or digital pumps is ideal for patients at **medium to very high risk** of pressure ulcer development.



Savvy Series

| Pump | | | | | | | | Mattress | | | | | |
|-----------------------------|---|---|------------|---|-----------|------------|---|--|---|-----------------------------|--------------------------|-----------|--|
| | Mechanical Series | Semi-Digital Series | | Digital Series | | | | | 4" Overlay | 5" Overlay | 8" Replacement | | |
| Model | Savvy 160 | Savvy 120 | Savvy 140 | Savvy 200 | Savvy 130 | Savvy 150 | Savvy 210 | Dimension (cm) | 200x85x10 | 200x85x12.5 200x107x12.5 | 200x107x20 200x122x20 | | |
| Dimension (cm) | 31x10x20 | 31x10x20 | 33x12x22 | 33x13x24 | 31x10x20 | 33x12x22 | 33x13x24 | Number of Cells | 20 | | 16 | | |
| Supply Voltage | 120V/60Hz or 230V/50Hz | | | | | | | Cell Material | Nylon-TPU | TPU Ether | Nylon-TPU | TPU Ether | |
| Alternating Type | 2-1 or 3-1 Alternating | | | | | | | Top Cover Material* | Nylon-PU (Antibacterial and antifungal) | | | | |
| Flowrate (Liter)** | 7.0 | | 9.0 | | 7.0 | | 9.0 | Pillow Section | Yes | | | | |
| Control Panel Type | Dial | Dial+Digital Keypad | | Digital Keypad+Seven-Segments LED display | | | | Cell-on-Cell Design | No | | Yes | | |
| Mode | Alternate, Static | | | | | | Alternate, Static Constant Low Pressure (CLP) | Independent Low Air Loss (ILAL) | Yes | | | | |
| Full Cycle Time (Minutes) | 12 | Selectable 10, 15, 20 | | Selectable 10, 15, 20, 25, 30 | | | | CPR Type | AKTC Q-CPR | | | | |
| Alarms | Low Pressure LED Indicator | Audiovisual Alarms (Power Failure, Low Pressure, and Service Alarm) | | Audiovisual Alarms (Power Failure, Low Pressure, and Service Alarm with Error Code) | | | | Side Bolsters with Bolster Release Valve | No | | Optional | | |
| Auto Pressure Detection | No | | | Optional | | | | | SmileTurn | Optional | | | |
| Power Code Type | Undetachable | | Detachable | Undetachable | | Detachable | | Recommendation Maximum Weight (kg) | 135 | | 180 | | |
| Fowler Function | No | | | | | Optional | | | | | | | |
| Classification | Class II, Type BF | | | | | | | | | | | | |
| Electrical Safety Standards | IEC60601-1 IEC60601-1-2 ***IEC60601-1-11 homecare standards available | | | | | | | | | | | | |

*Biocompatible two-way stretch top cover and quilted top cover are also available.

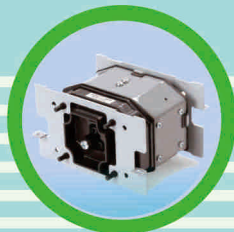
**The flow rate may be varied due to fluctuation of input voltage.

***Homecare standards does not allow ground connection 3 pin plug.

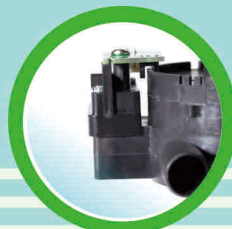


US Patent
6,257,269 B1
May 3, 2000

Patented quick inflation CPR for immediate mattress deflation or inflation with our optional handheld inflator for quick setup



High efficiency compressor with PU diaphragms, metal casing & shockproof design



Patented contactless photointerrupter optical switch



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



SmileTurn with adjustable turning functions: left turn/right turn/full turn

Optimal Dual Series

The **Optimal Dual Series** dynamic mattress replacement system provides effective therapy with reliable high quality **TPU coated nylon air cells** or high quality, pliable, shear force reduced **TPU-ether air cells** for pressure ulcer prevention.

The 8" mattress replacement with our dual compressors digital pump is ideal for patients at **medium to very high risk** of pressure ulcer development.

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**, **auto-detection mode**, and an **optional fowler detector**. To insure patient's safety, the pump has **audiovisual** low pressure, power failure, and service alarms **with error code**.



Optimal Dual Series

| Pump | |
|--------------------------------|---|
| | Digital Series |
| | Optimal Dual |
| Model | 41x13x23 |
| Dimension (cm) | 120V/60Hz or 230V/50Hz |
| Supply Voltage | 2-1 or 3-1 Alternating |
| Alternating Type | 9.0+9.0 |
| Flowrate (Liter)** | Digital Keypad+Seven-Segments LED display |
| Control Panel Type | Alternate, Static, Constant Low Pressure (CLP) or Pulsation Mode |
| Mode | No |
| Turning Mode | N/A |
| Turning Angles (Degrees) | Selectable 10, 15, 20, 25, 30 |
| Full Cycle Time (Minutes) | Selectable 5-30 |
| Pulsation Cycle Time (Minutes) | N/A |
| Turning Cycle Time (Minutes) | Audiovisual Alarms (Power Failure, Low Pressure, and Service Alarm with Error Code) |
| Alarms | Detachable |
| Power Code Type | Optional |
| Fowler Function | Class II, Type BF |
| Classification | IEC60601-1 IEC60601-1-2 ***IEC60601-1-11 homecare standards available |
| Electrical Safety Standards | |

| Mattress | | | |
|--|---|--------------------------|-----------------------------------|
| | 8" Replacement | | 8" Replacement-Bariatric Mattress |
| Dimension (cm) | 200x90x20 | 200x107x20 200x122x20 | 200x137x20 200x152x20 |
| Number of Cells | 18/20/24 | 18/20/24 | 18/20 |
| Cell Material | Nylon-TPU TPU Ether | Nylon-TPU or TPU Ether | |
| Top Cover Material* | Nylon-PU (Antibacterial and antifungal) | | |
| Pillow Section | Yes | | |
| Cell-on-Cell Design | Yes | | |
| independent Low Air Loss (iLAL) | Yes | | |
| CPR Type | AKTC Q-CPR | | |
| Side Bolsters with Bolster Release Valve | Optional | | |
| SmileTurn | Optional | N/A | |
| Recommendation Maximum Weight (kg) | 255 | 300/350 | |

*Biocompatible two-way stretch top cover and quilted top cover are also available.
 **The flow rate may be varied due to fluctuation of input voltage.
 ***Homecare standards does not allow ground connection 3 pin plug.

Optimal Dual Turn Series

| Pump | |
|--------------------------------|---|
| | Digital Series |
| | Optimal Dual Turn |
| Model | 41x13x23 |
| Dimension (cm) | 120V/60Hz or 230V/50Hz |
| Supply Voltage | 2-1 or 3-1 Alternating |
| Alternating Type | 9.0+9.0 |
| Flowrate (Liter)** | Digital Keypad+Seven-Segments LED display |
| Control Panel Type | Alternate, Static, Pulsation, and Turning Mode |
| Mode | Yes (Left Turn, Right Turn, and Full Turn) |
| Turning Mode | 0-40 (Adjustable) |
| Turning Angles (Degrees) | Selectable 10, 15, 20 |
| Full Cycle Time (Minutes) | Selectable 10, 15, 20 |
| Pulsation Cycle Time (Minutes) | Selectable 10-95 |
| Turning Cycle Time (Minutes) | Audiovisual Alarms (Power Failure, Low Pressure, and Service Alarm with Error Code) |
| Alarms | Detachable |
| Power Code Type | Yes |
| Fowler Function | Class II, Type BF |
| Classification | IEC60601-1 IEC60601-1-2 ***IEC60601-1-11 homecare standards available |
| Electrical Safety Standards | |

| Mattress | | | |
|--|---|---|--------------------------|
| | 8" Replacement-Turning Mattress | 8" Replacement-Bariatric Turning Mattress | |
| Dimension (cm) | 200x90x20 | 200x107x20 200x122x20 | 200x137x20 200x152x20 |
| Number of Cells | 18/20/24 | 18/20/24 | 18/20 |
| Cell Material | Nylon-TPU TPU Ether | Nylon-TPU or TPU Ether | |
| Top Cover Material* | Nylon-PU (Antibacterial and antifungal) | | |
| Pillow Section | Yes | | |
| Cell-on-Cell Design | Yes | | |
| independent Low Air Loss (iLAL) | Yes | | |
| CPR Type | AKTC Q-CPR | | |
| Side Bolsters with Bolster Release Valve | Yes | | |
| SmileTurn | N/A | | |
| Recommendation Maximum Weight (kg) | 255 | 300/350 | |

*Biocompatible two-way stretch top cover and quilted top cover are also available.
 **The flow rate may be varied due to fluctuation of input voltage.
 ***Homecare standards does not allow ground connection 3 pin plug.



Patented all-in-one integrated hose connectors



Audiovisual alarms ensure the nursing staff is notified in the event of faults



Auto pressure detection providing the recommendation pressure setting



Relative pressure calibration ensures precise pressure



Power cord protector prevents loosen cord from accidental impact

Optimal Pro Series — True Low Air Loss System

The **Optimal Pro Series True Low Air Loss** dynamic mattress replacement system provides effective therapy with reliable high quality **TPU coated nylon air cells** or high quality, pliable, shear force reduced **TPU-ether air cells** for pressure ulcer prevention. The 8" mattress replacement with our high volume liter per minute airmoving-blower digital pump is ideal for patients at **very high risk** of pressure ulcer development.

The 1000.0L high flowrate fast inflation airmoving-blower digital pump has a precise **digital pressure transducer** and is the only pump can provide the **True Low Air Loss ventilation** through our uniquely designed **on-cell TrueVent holes**. The digital pump has **static mode, alternate mode with selectable cycle time, pulsate mode with selectable cycle time, auto-firm mode, bariatric mode, and an optional fowler detector**. To insure patient's safety, the pump has **audiovisual** low pressure, power failure, and service alarms **with error code**.



Optimal Pro Series — True Low Air Loss System

| Pump | |
|--------------------------------|---|
| | Digital Series Optimal Pro |
| Model | 40x16x27 |
| Dimension (cm) | 120V/60Hz or 230V/50Hz |
| Supply Voltage | 2-1 or 3-1 Alternating |
| Alternating Type | 1350.0 |
| Flowrate (Liter)** | Digital Keypad+Seven-Segments LED display |
| Control Panel Type | Alternate, Static, Pulsation |
| Mode | No |
| Turning Mode | N/A |
| Turning Angles (Degrees) | Selectable 5, 10, 15, 20, 25, 30 |
| Full Cycle Time (Minutes) | Selectable 1-20 |
| Pulsation Cycle Time (Minutes) | N/A |
| Turning Cycle Time (Minutes) | Audiovisual Alarms (Power Failure, Low Pressure, and Service Alarm with Error Code) |
| Alarms | Optional |
| Fowler Function | Class I, Type BF |
| Classification | IEC60601-1 IEC60601-1-2 |
| Electrical Safety Standards | |

| Mattress | | | |
|--|---|-----------|--|
| | 8" Replacement | | 8" Replacement-Bariatric Mattress |
| Dimension (cm) | 200x90x20 | | 200x107x20 200x122x20 200x137x20 200x152x20 |
| Number of Cells | 18/20/24 | | 18/20/24 18/20 |
| Cell Material | Nylon-TPU | TPU Ether | Nylon-TPU or TPU Ether |
| Top Cover Material* | Nylon-PU (Antibacterial and antifungal) | | |
| Pillow Section | Yes | | |
| Cell-on-Cell Design | Yes | | |
| independent Low Air Loss (LAL) | No | | |
| On Cell TruVent True Low Air Loss(LAL) | Yes | | |
| CPR Type | AKTC Q-CPR | | |
| Side Bolsters with Bolster Release Valve | Optional | | |
| Recommendation Maximum Weight (kg) | 300 | | 365/450 |

*Biocompatible two-way stretch top cover and quilted top cover are also available.
**The flow rate may be varied due to fluctuation of input voltage.

Optimal Turn Series — True Low Air Loss System

| Pump | |
|--------------------------------|---|
| | Digital Series Optimal Turn |
| Model | 40x16x27 |
| Dimension (cm) | 120V/60Hz or 230V/50Hz |
| Supply Voltage | 2-1 or 3-1 Alternating |
| Alternating Type | 1350.0 |
| Flowrate (Liter)** | Digital Keypad+Seven-Segments LED display |
| Control Panel Type | Alternate, Static, Pulsation |
| Mode | Yes, (Left Turn, Right Turn and Full Turn) |
| Turning Mode | 0-40 |
| Turning Angles (Degrees) | Selectable 10, 15, 20 |
| Full Cycle Time (Minutes) | Selectable 10, 15, 20 (Double Cycles) |
| Pulsation Cycle Time (Minutes) | Selectable 5-95 |
| Turning Cycle Time (Minutes) | Audiovisual Alarms (Power Failure, Low Pressure, and Service Alarm with Error Code) |
| Alarms | Yes |
| Fowler Function | Class I, Type BF |
| Classification | IEC60601-1 IEC60601-1-2 |
| Electrical Safety Standards | |

| Mattress | | | |
|--|---|-----------|--|
| | 8" Replacement-Turning Mattress | | 8" Replacement-Bariatric Turning Mattress |
| Dimension (cm) | 200x90x20 | | 200x107x20 200x122x20 200x137x20 200x152x20 |
| Number of Cells | 18/20/24 | | 18/20/24 18/20 |
| Cell Material | Nylon-TPU | TPU Ether | Nylon-TPU or TPU Ether |
| Top Cover Material* | Nylon-PU (Antibacterial and antifungal) | | |
| Pillow Section | Yes | | |
| Cell-on-Cell Design | Yes | | |
| independent Low Air Loss (LAL) | No | | |
| On Cell TruVent True Low Air Loss(LAL) | Yes | | |
| CPR Type | AKTC Q-CPR | | |
| Side Bolsters with Bolster Release Valve | Yes | | |
| Recommendation Maximum Weight (kg) | 300 | | 365/450 |

*Biocompatible two-way stretch top cover and quilted top cover are also available.
**The flow rate may be varied due to fluctuation of input voltage.



Tube-through-cell design ensures the connector is fitted firmly.



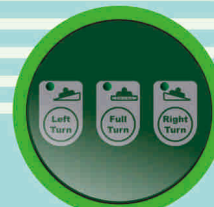
Patent pending convenient quick couplings(CQC)



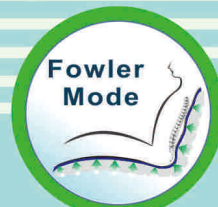
Welded manifolds prevent kink during transportation



TrueVent True Low Air Loss



Three turning modes available: left turn, full turn, right turn



Fowler function (optional)

WHO WE ARE

- Founded in Taiwan in 1989, **AKTC** is a professional air mattress system developer and manufacturer. Since our inception in 1989, we have sold millions of air pumps for air mattress and Deep Vein Thrombosis (DVT) applications.
- In 2010 **AKTC** acquired and built a brand new factory with more than triple of capacity for air mattress system manufacture to fulfill our abundant innovation patents and the sense of providing the best medical equipment for pressure ulcer prevention.
- Loyalty, integrity, and to never compete with our customers are the core business values that we truly believe in and these values are strictly followed.

VISION

- As the population aging and patients with chronic diseases increasing, the number of patient with pressure ulcers is growing steadily. The result is a huge financial burden to not only the patient's family and care givers, but also the medical system of the country. The prevention and treatment for pressure ulcers and DVT have therefore increased significantly due to the importance of the role and the value on preventive medicine.
- **AKTC** continuously engages in pressure ulcer prevention and DVT related equipment manufacture because we truly believe its importance for the human society and we devote to provide the highest quality products.

INNOVATION RECORD

| Patent No. | Patent Description |
|-----------------|---|
| US 8,651,131 B2 | CONTROL VALVE FOR AIR CUSHION BED |
| US 6,832,630 B2 | ADJUSTABLE AIR SUPPLY VALVE OF AIR CUSHION BED |
| US 6,832,629 B2 | RAPID INFLATION AND VENTING AIR VALVE OF AIRBED |
| US 6,571,412 B1 | MULTIPLE TUBES COMBINATION STRUCTURE |
| US 6,457,197 B1 | SWIFT CONNECTION JOINT BETWEEN AIRBAGS |
| US 6,266,833 B1 | AIR BED STRUCTURE CAPABLE OF ALTERNATE AERATING AND LYING THEREON ON ONE'S SIDE |
| US 6,257,269 B1 | MULTIPLE-PURPOSED AIR VALVE COMPONENT FOR AIR MATTRESS |
| US 6,253,402 B1 | AIR BED STRUCTURE CAPABLE OF ALTERNATE LYING THEREON ON EITHER OF ONE'S SIDES |
| US 6,152,176 B1 | AIR VALVE STRUCTURE FOR ALTERNATELY AERATED THREE-PIPE STYLE AIR BED |
| TW No. I 580877 | Quad-output valve structure |
| TW No. I 575176 | Air valve adjusting structure of air bed |
| TW No. I 574651 | In-cell gas delivery structure of air bed with a plurality of layers |
| TW No. I 543733 | Method for keeping height of air bed constant when exchanging air and air valve structure thereof |
| TW No. I 427232 | Quick connection structure for back-flow and loose prevention |
| TW No. I 417456 | Single-unit air pump structure |
| TW No. I 405906 | Improvement of pump back-flow prevention film structure |
| TW No. I 400403 | Structure of control valve for the air mattress |
| TW No. I 385687 | Micro switches for minor adjustment settings |
| TW No. M426698 | All-in-one quick connector |
| TW No. 217705 | Quick inflation and deflation air valve structure for the air mattress |
| TW No. 211316 | Multi-connections pipe structure |
| TW No. 202528 | Pipe-less air valve structure for the air mattress |
| TW No. 183892 | Adjustable air valve for the air mattress |
| TW No. 180442 | Alternating and lateral rotation functions for the air mattress structure |
| TW No. 180422 | Structure of quick connector for air cells |
| TW No. 180413 | Two-stage alternative lateral rotations function for the air mattress structure |
| TW No. 170630 | Multifunctional air valve structure for the air mattress |
| TW No. 153420 | Air valve structure for three-pipe alternative air mattress |
| TW No. 131764 | Improvement of pump intake and exhaust silencer structure |
| TW No. 95260 | Pump structure improvement for the pressure ulcer prevention air mattress |

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
WEBSITE: www.aktc.com.tw

