

Optimal Pro Expandable



Advance Dynamic Alternating Mattress

The **Optimal Pro Expandable** 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.

AKTC[®]

Since 1989



**Width Expandable
Control Valve**



**Length Expandable
Control Valve**

The **Optimal Pro Expandable** is a versatile air mattress system featuring two independent control valves for mattress width and length configurations to meet patient's individual needs, and it is designed for safe working load up to 1000lbs.

- The 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.
- Simply rotate the control valves without any hassle to inflate or deflate the extension sections.
- Easy to use control valves provide three width configurations: 35", 41", and 47" and three length configurations: 80", 84", and 88".

35"W x 80"L x 8"H
35"W x 84"L x 8"H
35"W x 88"L x 8"H



41"W x 80"L x 8"H
41"W x 84"L x 8"H
41"W x 88"L x 8"H

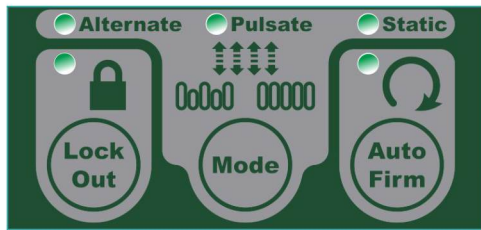


47"W x 80"L x 8"H
47"W x 84"L x 8"H
47"W x 88"L x 8"H



The **Optimal Pro Expandable** is an advanced multi-functional microcontroller programmed **airmoving-blower digital pump** dynamic mattress replacement system. 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 the air openings on manifolds. 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**.

Other Features



Four Operations Modes: Static, Alternate, Pulsate, and Auto-Firm

- Static mode providing maximum pressure redistribution.
- Alternate mode stimulates blood flow to promote wound healing.
- Auto-Firm mode provides immediate maximum inflation in just few seconds to save caregiver time.
- Pulsate mode aids in the increase of capillary blood flow and lymph flow to help increasing oxygenation to wound tissue and help reduce pain and edema.



Medical Grade Two-Way Stretch PU Cover

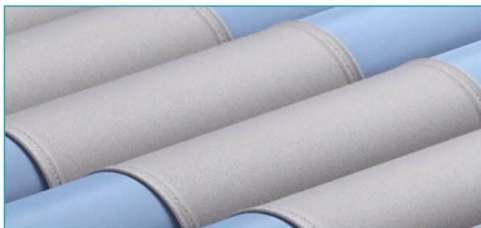


Medical grade vapor permeable and spill resistance with fire retardant cover keeps the moisture away from patient's skin. Two high quality molded-tooth zippers cover for easy replacement and laundry. The cover is washable to 95° Celsius.



Auto Pressure Detection

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



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

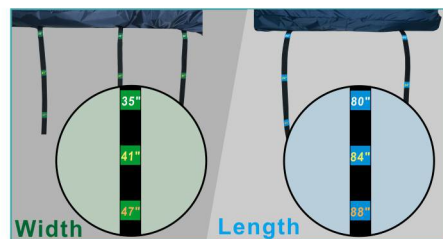
CQC (Convenient Quick Couplings) Tube-through-Cell connector design eases up air cell replacement without any tool. The downward connector design allows patient's family to sit anywhere on the mattress without worrying the disconnection of the connectors.



SelfCalibration 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.

Technical Specifications



Color Coded Straps System

Color coded straps system to assist different mattress width and length configurations.



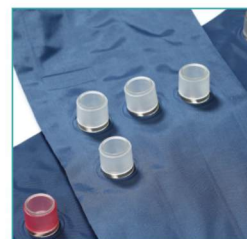
Audiovisual Alarms

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



Transportation Mode

In case of patient transportation or power outage the mattress will remain inflated.



Convenient Quick Couplings (CQC) with Fabrics Manifold

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



Self-Adjustment Spring Hangers

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

Optimal Pro Expandable

Pump	Digital
Height (cm)	41x16x27
Supply Voltage	120V/60Hz or 230V/50Hz
Alternating Type	2-1 Alternating or 3-1 Alternating
Flowrate (Liter)*	1000
Control Panel Type	Digital Keypad+Seven-Segments LED display
Mode	Alternate, Static, Pulsate, Auto-Firm
Full Cycle Time (Minutes)	Selectable 5, 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
Electrical Safety Standards	IEC60601-1 IEC60601-1-2
Warranty	1 year

Mattress	8" Replacement
Height	8"
Width	35", 41", 47"
Length	80", 84", 88"
Number of Cells	18, 19, 20
Cell Material	TPU Ether
Top Cover Material	Two-Way Stretch Top Cover (Vapor Permeable, Water Resistant, Biocompatible Approved, Fire Retardant BS 7175: Crib 5, Wash up to 95 degrees Celsius)
Pillow Section	Yes, 3 cells
Cell-on-Cell Design	Yes
True Low Air Loss	Yes (air openings on manifolds)
CPR Type	AKTC Q-CPR
Recommendation Maximum Weight (lbs.)	350 (standard) / 1000 (bariatric)
Warranty	1 year

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



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