

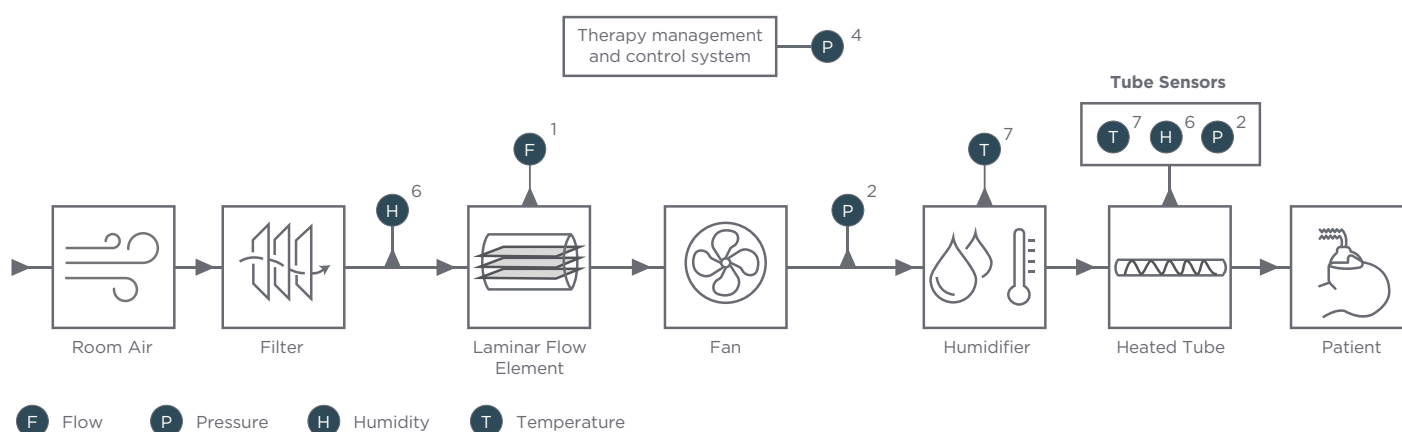
SENSORS FOR CPAP MACHINES

Continuous Positive Airway Pressure (CPAP) devices are used to force breathable air into the lungs of patients who suffer from sleep apnea, where breathing unintentionally starts and stops during sleep. Detecting and curing the interval breathing cessation during overnight sleep helps to reduce the risk of hyper blood pressure, cardiovascular disease and relative secondary diseases. TE Connectivity's (TE) sensors allow for the continuous, accurate control of air flow, pressure, vibration and humidity to keep patients comfortable and safe.

TE CONNECTIVITY ADVANTAGES

- Portfolio Breadth
- Medical Experience
- Manufacturing Scale
- Customization Capability

CPAP



1 Pressure 0 to 5 cmH₂O or Flow + 200 sipm

2 Pressure 30 to 45 cmH₂O

4 Barometric Air Pressure

7 Temperature 60° to 120°F

6 Humidity 0 to 100% RH

SENSORS FOR CPAP MACHINES

SENSORS

Sensor Technology		Application	Key Product Features	Benefits
SMI 6000		<ul style="list-style-type: none"> Monitor system air pressure to patient Also monitor air flow through humidifier if present 	<ul style="list-style-type: none"> Small size High accuracy Available with gauge or differential reference Analog I²C, or SPI outputs Very low power requirements 	<ul style="list-style-type: none"> Helps maintain constant patient positive air pressure Facilitates proper humidification of the air Fits compact packaging Low power Easy to interface
SM1xxx		<ul style="list-style-type: none"> Monitor system air pressure to patient Also monitor air flow through humidifier if present 	<ul style="list-style-type: none"> Small size High accuracy Available with gauge or differential reference Analog I²C, or SPI outputs Very low power requirements 	<ul style="list-style-type: none"> Helps maintain constant patient positive air pressure Facilitates proper humidification of the air Fits compact packaging Low power Easy to interface
SMI 9000		<ul style="list-style-type: none"> Monitor system air pressure to patient Also monitor air flow through humidifier if present 	<ul style="list-style-type: none"> Small size High accuracy Available with gauge or differential reference Analog I²C, or SPI outputs Very low power requirements 	<ul style="list-style-type: none"> Helps maintain constant patient positive air pressure Facilitates proper humidification of the air Fits compact packaging Low power Easy to interface
SMI 7000		<ul style="list-style-type: none"> Monitor system air pressure to patient Also monitor air flow through humidifier if present 	<ul style="list-style-type: none"> Small size High accuracy Available with gauge or differential reference Analog I²C, or SPI outputs Very low power requirements 	<ul style="list-style-type: none"> Helps maintain constant patient positive air pressure Facilitates proper humidification of the air Fits compact packaging Low power Easy to interface
LMI		<ul style="list-style-type: none"> Monitor patient air flow rate Inhale and exhale respiration 	<ul style="list-style-type: none"> Thermal microflow channel measurement technique Differential and bidirectional sensing I²C interface 	<ul style="list-style-type: none"> Very accurate at low pressure and low flow rate measurement Accuracy is % of reading Easy interface
LME		<ul style="list-style-type: none"> Monitor patient air flow rate Inhale and exhale respiration 	<ul style="list-style-type: none"> Thermal microflow channel measurement technique Differential and bidirectional sensing SPI or analog output 	<ul style="list-style-type: none"> Very accurate at low pressure and low flow rate measurement Accuracy is % of reading Easy interface
44000 series		<ul style="list-style-type: none"> Monitor patient air temperature 	<ul style="list-style-type: none"> Small size Low cost High sensitivity 	<ul style="list-style-type: none"> Maintain patient air temperature for comfort
HTU3x		<ul style="list-style-type: none"> Monitor and control patient air humidity 	<ul style="list-style-type: none"> Full range 0-100% RH Small size I²C interface 	<ul style="list-style-type: none"> Maintain patient air RH for comfort
KMT36H		<ul style="list-style-type: none"> Monitor fan rotation 	<ul style="list-style-type: none"> Magnetic non-contact 360° range Low cost 	<ul style="list-style-type: none"> Helps maintain constant patient air pressure