Pro-Tech diagnostic sensor catalog

PHILIPS

RESPIRONICS

As a leader in the development, manufacturing, and supply of sensors to the sleep diagnostics industry, we offer a full line of high-performance, quality Pro-Tech sensors to help you obtain the data you need. Our sensor product line includes quality sensors that detect respiratory airflow, respiratory effort, snoring, periodic limb movements, and sleep position.

We are strongly committed to research and development that enables us to provide products that create a better experience for both clinicians and their patients.

Our sensors also meet important AASM accreditation standards. The AASM scoring rules have guidelines regarding the use of certain types of sensors in order for sleep labs to meet accreditation standards. We have included an appendix on page 19 that will assist you in the selection of our products that meet the AASM scoring guidelines.

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Airflow sensors

Cannulas

Our Pro-Flow and Pro-Flow Plus cannulas offer optimal performance and patient comfort. The nasal prongs are soft and narrow and specifically designed for pressure transducer airflow monitoring. The prong size minimizes nasal resistance and provides maximum patient comfort.

The Pro-Flow cannula product line also incorporates narrow kink-resistant tubing to help ensure excellent response to high-frequency signals such as snoring. All Pro-Flow and Pro-Flow Plus cannulas have a hydrophobic, anti-microbial filter inline to help prevent patient cross-contamination and transducer failure from moisture.

Pro-Tech airflow sensors

Description	Part number
Nasal cannula adult, (60 per case)	P1259
Pro-Flow adult (10 pack)	P1301
Pro-Flow adult 8.25" (60 per case)	P1306
Pro-Flow adult 8.25" (5 pack)	P1309
Pro-Flow adult 1.1M (20 per case)	P1317-20
Pro-Flow adult 16" (60 per case)	P1328-60
Pro-Flow adult 16" (5 pack)	P1390
Nasal cannula pediatric (60 per case)	P1263
Pro-Flow pediatric (10 pack)	P1302
Pro-Flow pediatric 8.25" (60 per case)	P1330
Pro-Flow pediatric 8.25" (10 pack)	P1331
Pro-Flow pediatric 1.1M (20 per case)	P1321-20
Pro-Flow pediatric 16" (60 per case)	P1381
Nasal cannula pediatric small (60 per case)	P1267
Pro-Flow pediatric small (10 pack)	P1303
Pro-Flow pediatric small 1.1M (20 per case)	P1323-20
Pro-Flow sample pack, includes P1259 (qty: 2) and P1295 (qty: 2)	P1258

Pro-Flow Plus nasal/oral cannulas

Developed to address monitoring of mouth-breathing patients, the Pro-Flow Plus has an oral prong that detects pressure changes in the mouth. They are available in adult and pediatric sizes.

Description	Part number
Nasal oral cannula adult (30 per case)	P1295
Pro-Flow Plus adult (5 pack)	P1300
Pro-Flow Plus adult 8.25" (30 per case)	P1308
Pro-Flow Plus adult 1.1M (10 per case)	P1319-10
Nasal Oral cannula adult 8.25" (30 per case) no filter	P1334
Pro-Flow Plus adult 16" (30 per case)	P1343
Nasal cannula pediatric (30 per case)	P1354
Pro-Flow Plus pediatric 16" (30 per case)	P1383

Pro-Flow MultiPurpose and Pro-Flow Plus MultiPurpose cannulas

These cannulas are designed to concurrently monitor airflow and end-tidal CO_2. This enables the monitoring of three parameters (airflow, snore, and $EtCO_2$) with one patient interface. These cannulas can be used with most pressure transducers and continuous sampling capnographs.

The Pro-Flow MultiPurpose cannula is available for both pediatric and adult patients. There are both nasal only and nasal-oral models. The airflow connection has a hydrophobic anti-microbial filter and the other connector is a Luer Lok fitting.

Pro-Flow MultiPurpose nasal cannulas

Our Pro-Flow MultiPurpose nasal cannulas sample $EtCO_2$ while concurrently detecting airflow.

Description	Part number
Nasal cannula adult (30 per case)	P1350
Pro-Flow MultiPurpose adult (5 pack)	P1368
Nasal cannula pediatric (30 per case)	P1346
Pro-Flow MultiPurpose pediatric (5 pack)	P1369
Nasal cannula pediatric small (30 per case)	P1348
Pro-Flow MultiPurpose cannula pediatric small (5 pack)	P1370

Pro-Flow Plus MultiPurpose cannulas

Our Pro-Flow Plus MultiPurpose cannulas sample $EtCO_2$ while concurrently detecting airflow.

Description	Part number
Nasal oral cannula, adult (30 per case)	P1373
Pro-Flow Plus MultiPurpose adult (5 pack)	P1374
Nasal Oral cannula pediatric (30 per case)	P1366
Pro-Flow Plus MultiPurpose pediatric (5 pack)	P1375

Special note: Pro-Tech cannulas are designed to optimize nasal and oral signal transfer. Pro-Tech cannulas use special filters to prevent moisture contamination to the pressure transducer and the possible transfer of airborne disease from patient to patient.

Cannula accessories

Description	Part number
Cannula adapter kit	P1324
Cannula titration filter (50 pack)	P1107
Cannula titration filter (10 pack)	P1109
RUSleeping RTS kit	1041483

Thermal airflow

We provide both thermocouples and thermistors compatible with most major PSG systems. Our comfortable and easy-to-place sensors continue to be a leader at sleep testing facilities around the world. Variations include the ability to monitor oral/nasal separately and/or together with adult and pediatric sizes, and disposable thermocouples. Insulated tips eliminate artifact and are available in single and separate channel versions.

Specifications:
Sensor technology: thermocouple and thermistor
Typical PSG settings:
- Sensitivity: 2 – 30 µV/mm
- Low frequency filter: 0.16 Hz or lower
- High frequency filter: 15 Hz

Typical signal amplitude: 400 µV peak-to-peak
(three element single channel sensor)
Output impedance: 7 Ohms
Standard connector type: 1.5 mm safety connector
Wire length: 7.0 feet (2.13 meters)

Reusable thermocouple (cannula style)

Description	Part number
Thermocouple 6" single element adult	P1221
Airflow sensor 1 channel, adult	P1222
One channel ADAM nasal only	P1228
One channel ADAM nasal and oral	P1229
One channel BREEZE nasal and oral	P1229-4523
Airflow sensor 1 channel pediatric	P1223
Airflow sensor 1 channel pediatric small nasal bridgemount	P1214
Airflow sensor 2 channel adult	P1224
Airflow sensor 2 channel ADAM nasal and oral	P1230
Airflow sensor 2 channel pediatric	P1225
Airflow sensor 3 channel adult	P1226
Airflow Sensor 3 channel pediatric	P1227

Disposable thermocouple

Description	Part number
Reusable wireset	P1238
Disposable airflow sensors (10 pack)	P1242
BreathSensor cable	P1332
BreathSensor cable (Suzanne)	P1333
BreathSEN cable SD20 adult	P1112
BreathSEN cable Sandman Pocket adult	P1154

Reusable thermistor

Description	Part number
Thermistor 1 channel adult 1.5mm Alice 5	P1274
Airflow sensor 1 channel adult (Alice 4)	P1286
Airflow sensor 1 channel adult (Alice 3)	P1246
Airflow sensor 1 channel, adult (Suzanne)	P1312
Airflow sensor 1 channel adult (Sandman Express)	P1364
Airflow sensor 1 channel adult (Embletta)	P1274-249
Airflow sensor 1 channel pediatric (Alice 5)	P1336
Airflow sensor 1 channel pediatric (Alice 4)	P1299
Airflow sensor 1 channel pediatric (Alice 3)	P1298
Airflow sensor 1 channel pediatric (Suzanne)	P1313
Airflow sensor 1 channel pediatric (Embletta)	P1298-249
Airflow sensor 1 channel pediatric (Sandman Express)	P1378
Airflow sensor 1 channel pediatric small nasal bridgemount (Alice 5)	P1337
Airflow sensor 1 channel pediatric small nasal bridgemount (Alice 4)	P1297
Airflow sensor 1 channel pediatric small nasal bridgemount (Alice 3)	P1296
Airflow sensor 1 channel pediatric small nasal bridgemount (Suzanne)	P1314
Airflow sensor 3 channel pediatric	P1227
Thermistor airflow nasal-oral adult (Alice PDx)	P1388

Oral airflow sensors

Description	Part number
Thermocouple, with 1.5mm safety connectors	P1273
Thermistor (Embletta)	P1273-249
Thermistor 1 channel adult oral 1.5mm (Alice 5)	P1360
Thermistor 1 channel adult oral (Alice 4)	P1285
Thermistor 1 channel adult oral (Alice 3)	P1284
Thermistor 1 channel adult 20" (Flaga)	P1275
Thermistor adult oral (Alice 5)	P1344
Oral thermistor adult (Alice PDx)	P1379

Pressure transducers

PTAF2 Pressure Transducer

The PTAF2 is a pressure-based transducer designed to generate accurate respiratory signals. Other features include high and low level outputs, unfiltered or filtered airflow output, snoring output, and remote-control options. It is used in either AC or DC configurations and during nCPAP titrations. Using the PTAF2 along with Pro-Tech cannulas helps ensure signal integrity and patient comfort. PTAF2 is warranted for one year.

Specifications:

Sensor technology: differential pressure transducer
Jackbox connection: AC or DC
Output types: airflow and snore
Cannula connector: dual female Luer Lock
Size: 4.96" (126mm) x 2.76" (70mm) x .95" (24mm)
Weight: .29 lbs. (30 grams (with battery))
Power source: 9 volt battery, alkaline
Battery life: 1000 hours
Input pressure range: +/- 25 cm H_2O
High level outputs (typical):
  2.0V peak to peak (+/- 1V)
Low level outputs (typical):
  600 µV peak to peak (+/- 300 µV)
Output cable connectors:
  Varies by polygraph manufacturer
Output cable length:
  7 ft. (2.13 m) (extensions available)

PTAF2

Description	Part number
PTAF2 startup kit	P1287
Kit contains: 1287: PTAF2 module; 9V alkaline battery; 1258: cannula sample pack; airflow cable(s) and snore cable	

Please have the make and model number of polygraph you are using when you contact our customer service department to receive the correct cable configuration for your unit.

PTAF2 cables

Description	Part number
Low level cable 1.5mm connector	P1075
Low level cable 1/8 male connector	P1076
Low level cable 3/32 male connector	P1077
High level cable 1/8 male connector	P1078
High level cable 1/8 female connector	P1079
High level cable 3/32 male connector	P1080
High level cable 1/4 male connector	P1081
High level cable 6-4 modular connector	P1082
EXT cable with coupler 25' connector	P1087-025
EXT cable with coupler 50' connector	P1087-050
EXT cable with coupler 100' connector	P1087-100
EXT cable with coupler 200' connector	P1087-200
High level cable 3.5mm connector	P1138

PTAF Lite

Description	Part number
PTAF Lite startup kit	P1289
PTAF Lite for Alice 5	P1304
Kit contains: 1258: cannula sample pack; 1289: PTAF Lite	

Please have the make and model number of polygraph you are using when you contact our customer service department to receive the correct configuration for your unit.

Pressure accessories

Description	Part number
Cannula titration filter (50 pack)	P1107
Cannula titration filter (10 pack)	P1109
Cannula adapter kit	P1324
CPAP titration kit	P1327
CPAP titration kit Alice PDx	P1391

The PTAF Lite is a small, piezo-style pressure transducer and is a lightweight AC device. This product is warranted for one year.

Specifications:

Sensor technology: piezo style pressure transducer

Jackbox connection: AC only

Output types: airflow and snore

Cannula connector: single female luer lock

Size: 2.13" (54mm) x 1.38" (35mm) x .58" (15mm)

Weight: 25 grams

Power source: none required

Input pressure range: +/- 25mc H_2O

Respiratory effort sensors

Respiratory Inductive Plethysmography

Our affordable zRIP technology provides true breathing movement tracings with no false paradoxing and accurate signals for the detection of respiratory effort. The zRIP sensor belts have been designed for complete patient coverage and are fully washable. The zRIP modules are available in a SUM RT (breath-to-breath summation) and in a non-sum model.

zRIP specifications

Typical polygraph settings:

Sensitivity: Approximately 10-50 µv/mm per channel. Adjustment of the sensitivity up or down is typically required. Response is dependent upon such variables as sensor application and patient effort.

Low frequency filter/time constant:
.16 Hz/1 second or longer. Shorter time constants or higher low frequency filter settings will significantly attenuate waveforms. Longer time constants or lower low-frequency filter settings will display more information regarding patient effort.

High Frequency Filter: 35 Hz

Battery: two AAA replaceable batteries with green light indicator button to check batteries. 600 hours continuous operation.

zRIP startup kits

Description	Part number
zRIP kit adult	P1808
Kit contains: P1133: 2 each zRIP wiresets; P1732: zRIP driver module; P1806: 2 each zRIP adult effort belts	
zRIP Sum RT kit adult	P1839
Kit contains: P1133: 2 each zRIP wiresets; P1733: zRIP Sum RT driver module; P1806: 2 each zRIP adult effort belts	
zRIP kit adult (Alice 5)	P1818
Kit contains: P1133: 2 each zRIP wiresets; P1736: zRIP driver module (Alice 5); P1806: 2 each zRIP adult effort belts	
zRIP kit adult (Alice 4)	P1816
Kit contains: P1133: 2 each zRIP wiresets; P1735: zRIP driver module (Alice 4); P1806: 2 each zRIP adult effort belts	
zRIP kit adult (Alice 3)	P1812
Kit contains: P1133: 2 each zRIP wiresets; P1734: zRIP driver module (Alice 3); P1806: 2 each zRIP adult effort belts	
zRIP kit adult (Bio-logic)	P1820
Kit contains: P1133: 2 each zRIP wiresets; P1738: zRIP driver module (Bio-logic); P1806: 2 each zRIP adult effort belts	
zRIP kit adult Alice PDx	P1837
Kit contains: 2 each P1170 wiresets, 2 each P1806 zRIP adult effort belts	
zRIP kit adult QDC	P1841
Kit contains: 1 each P1176 abdomen cable, 1 each P1177 ribcage cable and 2 each P/N 1806 zRIP adult effort belts only	
zRIP kit pediatric	P1809
Kit contains: P1133: 2 each zRIP wiresets; P1732: zRIP driver module; P1807: 2 each zRIP pediatric effort belts	
zRIP Sum RT kit pediatric	P1840
Kit contains: P1133: 2 each zRIP wiresets; P1733: zRIP Sum RT driver module; P1807: 2 each zRIP pediatric effort belts	
zRIP kit pediatric (Alice 5)	P1819
Kit contains: P1133: 2 each zRIP wiresets; P1736: zRIP driver module (Alice 5); P1807: 2 each zRIP pediatric effort belts	
zRIP kit pediatric (Alice 4)	P1817
Kit contains: P1133: 2 each zRIP wiresets; P1735: zRIP driver module (Alice 4); P1807: 2 each zRIP pediatric effort belts	
zRIP pediatric (Alice 3)	P1815
Kit contains: P1133: 2 each zRIP wiresets; P1734: zRIP driver module (Alice 3); P1807: 2 each zRIP pediatric effort belts	
zRIP kit pediatric (Bio-logic)	P1821
Kit contains: P1133: 2 each zRIP wiresets; P1738: zRIP driver module (Bio-logic); P1807: 2 each zRIP pediatric effort belts	
zRIP kit pediatric QDC	P1842
Kit contains: 1 each P1176 abdomen cable, 1 each P1177 ribcage cable and 2 each P1807 zRIP pediatric effort belts only	

zRIP – non-kit part number list

Description	Part number
zRIP driver module	P1732
zRIP Sum RT driver module	P1753
zRIP module (Alice 5)	P1736
zRIP module (Alice 4)	P1735
zRIP module (Alice 3)	P1734
zRIP module (Bio-logic)	P1738
zRIP adult effort sensor 24" – 75" (61cm – 190cm)	P1806
zRIP adult effort sensor large 45" – 123" (114cm – 312cm)	P1822
zRIP Pediatric effort sensor 16" – 42" (41cm – 107cm)	P1807
zRIP wireset	P1133
zRIP wireset (Medcare)	P1137
zRIP wireset (Alice PDx)	P1170
zRIP cable abdomen (QDC)	P1176
zRIP cable ribcage (QDC)	P1177

Respiratory effort sensors

Piezo respiratory effort

Easy to apply for all sizes of patients, the low profile of the sensor straps maximizes patient comfort during sleep studies. The belting solutions with our piezo effort sensors range from stretch Velcro® straps to one-size-fits-all (CT2 versions). Our piezo effort sensors are compatible with most PSG systems and plug directly into standard AC channels. All sensors are latex free.

Specifications:

Typical polygraph settings:
- Sensitivity: 2-30 µV/mm
- Low frequency filter: 0.15 Hz or lower
- High frequency filter: 15Hz

Typical signal amplitude:
  600 µV peak-to-peak

Standard connector type:
  1.5 mm safety connector

Wire length:
  7.0 feet (2.13 meters)

Piezo respiratory effort kits

Description	Part number

One channel kit, adult, 1.5"
  Kit contains: P1420: adult Velcro strap kit 1.5";
  P1460: piezo sensor 1.5"
	P1461

Two channel plus kit, adult 1.5"
  Kit contains: P1420: 2 each adult Velcro strap
  kit 1.5"; P1460: 3 each piezo sensor 1.5"
	P1463

One channel kit, adult 1.5" (Alice 4)
  Kit contains: P1420: adult Velcro strap kit 1.5";
  P1571: piezo sensor, 1.5" (Alice 4)
	P1572

One channel kit, adult 1.5" (Alice 3)
  Kit contains: P1420: adult Velcro strap kit 1.5";
  P1547: piezo sensor, 1.5" (Alice 3)
	P1548

One channel kit, pediatric 1"
  Kit contains: P1448: pediatric Velcro strap kit 1";
  P1453: pediatric piezo sensor 1"
	P1462

Two channel plus kit, pediatric 1"
  Kit contains: P1448: 2 each pediatric Velcro
  strap kit 1"; P1453: 3 each pediatric piezo sensor 1"
	P1464

Piezo respiratory effort sensors

Description	Part number
Piezo sensor 1.5"	P1460
Piezo sensor 1.5" (Alice 4)	P1571
Piezo sensor 1.5" (Alice 3)	P1547
CT2 piezo sensor adult	P1582
CT2 piezo sensor adult (Bio-logic Traveler)	P1582-249
CT2 piezo sensor adult (Alice 5)	P1586
CT2 piezo sensor adult (Alice 4)	P1804
CT2 piezo sensor adult (Alice 3)	P1803
CT2 piezo sensor adult (Suzanne)	P1589
CT2 piezo sensor adult, (Embletta)	P1800
CT2 adult chest (Sandman Pocket)	P1823
CT2 adult abdominal (Sandman Pocket)	P1824
Piezo sensor 1" pediatric	P1453
CT2 piezo sensor pediatric	P1585
CT2 piezo sensor pediatric (Alice 5)	P1587
CT2 piezo sensor pediatric (Alice 4)	P1814
CT2 piezo sensor pediatric (Alice 3)	P1813
CT2 piezo sensor pediatric (Suzanne)	P1584
CT2 pediatric chest (Sandman Pocket)	P1825
CT2 pediatric abdominal (Sandman Pocket)	P1826

Straps and extensions

Straps and extensions

Description	Part number
CT1 adult Velcro strap kit 1.5"	P1420
Kit contains: P1421: adult Velcro strap 1.5", size 1; P1422: adult Velcro strap 1.5", Size 2; P1423: adult Velcro strap 1.5", size 3	
CT1 pediatric Velcro strap kit 1.5"	P1416
Kit contains: P1417: pediatric Velcro strap 1.5", size 1; P1418: pediatric Velcro strap 1.5", size 2; P1419: pediatric Velcro strap 1.5", size 3	
CT1 pediatric Velcro strap kit 1"	P1448
Kit contains: P1449: pediatric Velcro strap 1", size 1; P1450: pediatric Velcro strap 1", size 2; P1451: pediatric Velcro strap 1", size 3; P1452: pediatric Velcro strap 1", size 4	
CT2 extension strap	P1592

Body position sensors

Body position sensors

Description	Part number
SPI sensor DC with 3.5mm mono connector	P1664
SPI sensor DC with 1.5mm safety connector	P1664-WS2074
SPI resistive flaga	P1676
SPI sensor with 220 connector (Bio-logic)	P1692
Body position sensor (Alice 5)	P1694
Body position sensor (Alice 4)	P1707
Body position sensor (Alice 3)	P1706
SPI sensor DC (Suzanne)	P1695
Body position sensor (Sandman SD20)	P1719
Body position sensor resistive (Bio-logic T2)	P1737
Body position sensor DC with 3.5mm female connector	P1746
Body position sensor (Sandman Pocket)	P1744

Our Body Position Sensors have the versatility to identify the primary sleep positions: prone, supine, left, right and upright. Body position can be continuously monitored no matter how much the patient moves during sleep testing. The success of many sleep test sessions is dependent on patient relaxation. We have designed our Body Position Sensors with comfort in mind; they easily and comfortably attach to the thoracic respiratory effort belt. Our Body Position Sensors are compatible with most computer PSG systems on the market.

Specifications:

Typical signal amplitude:
  Prone: 0.62 VDC
  Supine: 0.41 VDC
  Left: 0.19 VDC
  Right: 0.78 VDC
  Upright: 0.0 VDC
All positions are +/- 10% over the life of the battery

Output impedance: 78.8 KOhms
Wire length: 7.0 feet (2.13 meters)

Snore sensors and microphones

Snore sensors and microphones

Description	Part number
Piezo snore sensor	P1696
Snore microphone (Alice 4)	P1704
Snore microphone (Alice 3)	P1703
Snore microphone (Suzanne)	P1705
Snore microphone	P1716
Snore sensor (Embletta)	P1718

We offer two snore sensing options: piezo sensors and microphones. Utilizing a thin piezo crystal, the snore sensor provides an accurate, reproducible signal. The snore microphone is designed to provide a thin baseline and clear responsive signals. The piezo sensor and microphone are compatible with most PSG systems.

Piezo snore sensor
(P1696, P1718) specifications:

Typical polygraph settings:
- Sensitivity: 20-75 µV/mm
- Low frequency filter: 5 Hz
- High frequency filter: 70 Hz

Typical signal amplitude: 1000 µV peak-to-peak
Wire length: 7.0 feet (2.13 meters)

Snore microphone – dynamic
(P1716) specifications:

Typical polygraph settings:
- Sensitivity: 20-75 µV/mm
- Low frequency filter: 10 Hz
- High frequency filter: 70 Hz

Typical signal amplitude: 1000 µV peak-to-peak
Wire length: 7.0 feet (2.13 meters)

Snore microphone (P1704, P1703, P1705) –
electret specifications:

Typical polygraph settings: Refer to PSG manual
Typical signal amplitude: 1000 µV peak-to-peak
Wire length: 7.0 feet (2.13 meters)

Periodic Limb Movement

Periodic Limb Movement

Description	Part number
PLM sensor	P1697
PLM sensor kit	P1698
Kit contains: P1697: PLM sensor; P1689: Velcro strap, PLM large; P1690: Velcro strap, PLM small	
PLM sensor kit, 2 sensors	P1699
Kit contains: P1697: 2 each PLM sensor; P1689: 2 each Velcro strap, PLM large; P1690: 2 each Velcro strap, PLM small; P1097: 1.5mm safety male jumper wireset	
1.5mm male jumper wireset	P1097
PLM Velcro strap large	P1689
PLM Velcro strap small	P1690

Our Periodic Limb Movement (PLM) sensors detect a patient's leg or arm movement during sleep studies and provide clean, reliable signals while permitting the utmost patient comfort. Piezo technology is sensitive to subtle movements and requires no skin preparation prior to patient application. Using kits, multiple sensors can be configured to combine PLM signals onto a single channel.

Specifications:
Sensor technology: piezo
Typical polygraph settings:
 • Sensitivity: 10-50 µV/mm
 • Low frequency filter: 5 Hz
 • High frequency filter: 70Hz
Typical signal amplitude: 700 µV peak-to-peak
Connector type: 1.5 mm safety connector
Wire length: 11.0 feet (3.35 meters)

Sensor tester

Sensor tester

Description	Part number
ST-3 sensor tester kit	P1711
Kit contains: P1315: continuity test wireset;	
P1710: ST-3 sensor tester	
ST-3 sensor tester kit (Alice)	P1722
ST-3 continuity test wireset	P1315

The ST-3 Sensor Tester is the solution for verifying functionality of sleep equipment and accessories. The ST-3 checks and verifies EEG electrodes and wires for continuity. The square wave generator feature verifies channels of the polygraph, and helps ensure that the jackbox inputs and DC hi-level boxes are functional. In addition, respiratory effort belts, snore sensors, airflow sensors, and PLM sensors can be tested for output.

Specifications:
Size: 2.76" (70mm) x 4.96" (126mm)
Weight: 130 grams (with battery)
Power: 9 volt battery, alkaline

Education

We offer a complete line of in-lab and portable diagnostic equipment and screening tools, as well as equipment used in the treatment of sleep disorders.

Visit www.respironics.com to see our complete line of products.

Visit www.pro-tech.com to determine the Pro-Tech sensor for your system.

Education

Description	Part number
Introduction to Diagnostic Equipment for the Sleep Technologist – Nasal Airflow Pressure Transducer, Pulse Transit Time, Respiratory Inductance Plethysmography	1052673

Appendix: AASM scoring manual guidelines and Pro-Tech sensor application

AASM scoring manual guideline – adults	Pro-Tech sensor
Thermal airflow Adults VIII.1.A: "The sensor to detect absence of airflow...is an oronasal thermal sensor"	Oronasal thermocouple P1222
Flow nasal pressure Adults VIII.1.B: "The sensor for detection of.... hypopnea is a nasal air pressure transducer..."	PTAF2 Startup kit P1287 Nasal cannulas: adult (60 per case) P1259
Respiratory effort Adults VIII.1.C: "The sensor for detection of respiratory effort is.... inductance plethysmography.")	Respiratory Inductance Plethysmography: zRIP adult kit P1808

AASM scoring manual guideline – children	Pro-Tech sensor
Thermal airflow Children VIII.1.A: "The sensor to detect absence of airflow....is an oronasal thermal sensor."	Oronasal thermocouple P1223
Flow nasal pressure Children VIII.1.B: "The sensor for detection of.... hypopnea is a nasal air pressure transducer..."	PTAF2 startup kit P1287 Nasal cannulas: pediatric (60 per case) P1263
Respiratory effort Children VIII.1.C: "The sensor for detection of respiratory effort is.... inductance plethysmography."	Respiratory Inductance Plethysmography: zRIP pediatric kit P1809
Hypoventilation Children VIII.1.E: "Acceptable methods for assessing alveolar hypoventilation.... end-tidal PCO_2 monitoring." Enable $EtCO_2$ and pressure monitoring simultaneously from both nostrils using one cannula.	Pro-Flow MultiPurpose Cannula: pediatric (30 per case) P1346

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