

# Pneumotrac with RMS

An enhanced diagnostics solution that combines highly accurate **Respiratory Muscle Strength** and **Spirometry** testing in one robust, portable device.



## The importance of Respiratory Muscle Strength testing

Assessing respiratory mechanics and muscle function is critical for both clinical practice and research purposes. It is particularly useful in patients with neuromuscular diseases to contribute to diagnosis and to assess treatment efficiency. The American Thoracic Society (ATS) suggest routine evaluation of FVC, MIP, MEP, and PCF for patients with Duchenne-type muscular dystrophy (DMD)<sup>2</sup>.

MIP is used for the early evaluation of respiratory muscle strength, especially of the diaphragm in patients with neuromuscular disease (Schoser et al., 2017)<sup>3</sup>

#### PNFUMOTRAC with RMS

## Multiple respiratory diagnostics. One portable device.

The Pneumotrac™ with RMS (Respiratory Muscle Strength) is a PC-based system that combines respiratory muscle strength measurements and spirometry – offering multiple testing possibilities on a single device, as portable as your laptop.

It can be used in various settings such as in-clinic on a desk, or it can be placed on a trolley with a laptop for use at bedside.



### Provides the full range of respiratory diagnostic tests

The Pneumotrac™ with RMS is a powerful and flexible respiratory diagnostic device. Alongside detailed spirometry testing, it provides a non-invasive and simple approach to mouth pressure and nasal pressure measurements in both adults and paediatrics. It can be used to

- assess diaphragmatic weakness in patients with neuromuscular disease (NMD)
- · assess respiratory muscle strength in patients undergoing pulmonary rehabilitation e.g., COPD patients
- monitor the response of respiratory muscle training

Diagnostics	Pneumotrac with RMS	Standard Pneumotrac	
Maximum Inspiratory Pressure (MIP)	<b>⊘</b>		
Maximum Expiratory Pressure (MEP)	<b>⊘</b>		
Sniff nasal inspiratory pressure (SNIP)	<b>⊘</b>		
Upright and Supine Spirometry (VC and Post VC)	<b>⊘</b>	<b>Ø</b>	
Peak Cough Flow (PCF)	<b>Ø</b>	<b>Ø</b>	
Forced Vital Capacity (FVC) and Post Bronchodilator	<b>⊘</b>	<b>②</b>	



# All the benefits of the market leading Pneumotrac Spirometer with the addition of respiratory muscle strength measurements

#### **Easily Interpreted Results**

- · Overlay of successive curves for consistent results.
- · Multiple options for displaying of graphs.
- Fast evaluation of results with %Predicted comparison.
- · Customisable pdf reports.

#### **Onscreen Testing Guidance**

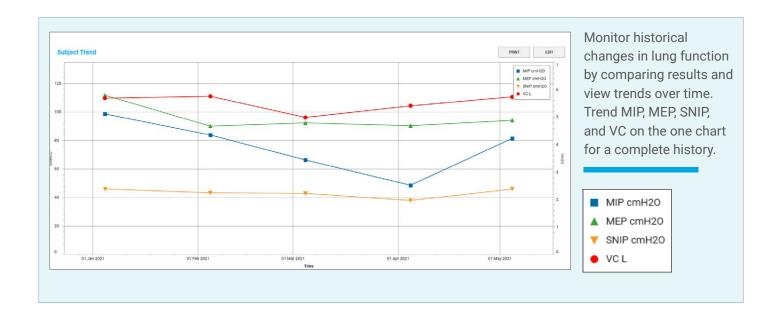
- Instant test quality feedback as per ATS/ERS guidelines ensuring maximum pressure sustained for 1 second can be recorded.
- · Repeatability feedback for rapid and easy testing.
- Real-time display of pressure/time curve on Spirotrac® 6 software

#### **Exceptional Test Accuracy**

 A high resolution of 0.1 cmH20 has superior accuracy when compared to similar devices.

#### **Hygienically Efficient**

- Low running costs and environmentally friendly: no costly disposable sensors, turbines, or flow tubes.
- Single-use Vitalograph Bacterial Viral Filters (BVF™) with validated cross-contamination efficiency
   >99.999%, protect device, patient, and operator



<sup>1.</sup> Laveneziana P, Albuquerque A, Aliverti A, et al. ERS statement on respiratory muscle testing at rest and during exercise. Eur Respir J 2019; 53: 1801214

<sup>2.</sup> American Thoracic Society. Respiratory care of the patient with Duchenne muscular dystrophy. ATS consensus statement. Am J Respir Crit Care Med 2004;170:456–465.

3. Schoser, B., Fong, E., Geberhiwot, T., Hughes, D., Kissel, J. T., Madathil, S. C., Orlikowski, D., Polkey, M. I., Roberts, M., Tiddens, H. A., & Young, P. (2017). Maximum inspiratory pressure as

Schoser, B., Fong, E., Geberniwot, I., Hugnes, D., Kissel, D. I., Madathii, S. C., Orlikowski, D., Polkey, M. I., Roberts, M., Liddens, H. A., & Young, P. (2017). Maximum inspiratory pressure as a clinically meaningful trial endpoint for neuromuscular diseases: a comprehensive review of the literature. Orphanet journal of rare diseases, 12(1), 52. https://doi.org/10.1186/s13023-017-0598-0

## **Technical Specifications**

**Product: Vitalograph Pneumotrac with RMS** 

Model: 6800

MIP MEP SNIP Measurement Range: +/- 300 cmH20

Accuracy: +/- 3

Resolution: 0.1 cmH20

RMS Test Types: MIP, MEP, SNIP, PCF, Supine VC

MIP Parameters: MIP, PIP MEP Parameters: MEP, PEP SNIP Parameters: SNIP

Predicted Sets: Wilson, Stefanutti/Uldry/Fitting



Free 5-Year warranty included with product registration.

#### **Ordering Information**

Product Model	Customer	Product
Number	Order Number	Description
6800	77972	

<sup>\*1</sup> Includes Spirotrac 6 PC software

#### **Optional Extras / Conumables**

Product Model Number	Customer Order Number	Product Description	Product Box Size
	28551	Eco BVF + Silicone Bite-On Mouthpiece + Disposable Nose Clip	60
	28553	Eco BVF with Plastic Bite Lip + Disposable Nose Clip	75
2820	28554	Eco BVF with Plastic Bite Lip	75
	28572	Eco BVF for Office Spirometers + Disposable Nose Clip	80
	28501	Eco BVF for Office Spirometers	100
3290	32956	SNIP Nasal probes consisting of 10 x Small, 10 x Medium, and 10 x Large	30

## **Contact us**

USA & Canada

#### Vitalograph Inc.

Toll Free: 1-800 255 6626 Tel: (913) 730 3200 Fax: (913) 730 3232 contact@vitalograph.com 13310 West 99<sup>th</sup> Street Lexexa, Kansas, 66215, USA

#### Ireland

#### Vitalograph (Ireland) Ltd

Tel: +353 65 686 4100 Fax: +353 65 682 9289 sales@vitalograph.ie Gort Road Business Park Ennis, Co Clare, V95 HFT4, Ireland

#### United Kingdom

Our trained customer service team are available for telephone support on sales, technical queries or information requests.

Tel: 01280 827110 Fax: 01280 823302 sales@vitalograph.co.uk Maids Moreton, Buckingham, MK18 1SW, England

Vitalograph Ltd, UK

#### Germany

#### Vitalograph GmbH

Tel: +49 40 547391-0 Fax: +49 40 547391-40 info@vitalograph.de Rellinger Straße 64a D-20257 Hamburg, Germany

#### All other countries

## Vitalograph Ltd, International

Tel: +44 1280 827120 Fax: +44 1280 823302 sales@vitalograph.co.uk Maids Moreton, Buckingham, MK18 1SW, England



Matalograph, Vitalograph®, Spirotrac®, BVF™ and Pneumotrac™ are trademarks or registered trademarks of Vitalograph Ltd.

