



# Technical Specifications

## 3M™ Versaflo™ Powered Air Purifying Respirator TR-600

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**Rev: 1** Replaces all previously published guides on this topic until superseded.

**Before using the TR-600 PAPR, all users must read and understand the product *User Instructions*.**

Consult the TR-600 *User Instructions* for general system operation. Consult the TR-600 Charger and Battery Pack *User Instructions* for additional information.

Air flow Loose-Fitting Headgear	Nominal 6.5 cfm (185 lpm) – Standard flow Nominal 7.2 cfm (205 lpm) – Medium flow Nominal 8.0 cfm (225 lpm) – High flow
Weight TR-600 motor/blower – no battery pack Standard battery pack – TR-630 High capacity battery pack – TR-632 TR-6700 Series filter TR-6800 Series filter TR-6300 Series filter/cartridge TR-6500 Series filter/cartridge High Durability belt – TR-626 High Durability extender – TR-626X Easy clean belt – TR-627 Easy clean belt extender – TR-627X TR-6700FC Filter Cover TR-6800FC Filter Cover TR-6300FC Filter Cover TR-6500FC Filter Cover TR-6600 Prefilter TR-626 Spark arrestor	Approx. 1.48 lbs (671 grams) Approx. 0.99 lbs (450 grams) Approx. 1.36 lbs (620 grams) Approx. 0.5 lbs (230 grams) Approx. 0.6 lbs (270 grams) Approx. 1.5 lbs (700 grams) Approx. 1.9 lbs (786 grams) Approx. 0.95 lbs (432 grams) Approx. 0.3 lbs (152 grams) Approx. 0.6 lbs (270 grams) Approx. 0.20 lbs (89 grams) Approx. 0.13 lbs (61 grams) Approx. 0.17 lbs (75 grams) Approx. 0.24 lbs (108 grams) Approx. 0.25 lbs (115 grams) Approx. 0.01 lbs (1 grams) Approx. 0.01 lbs (5 grams)
Operating Conditions Operating temperature  Operating altitude/elevation range	14 °F to 129 °F (-10 °C to 54 °C). Motor/blower battery alarm will activate when battery pack internal temperature exceeds 130 °F (55 °C). Motor/blower will shut down if the battery pack temperature reaches 140 °F (60 °C).  -328 feet to 16,404 feet (-100 meters to 5000 meters)
Storage conditions Relative humidity Temperature (daily storage) Temperature (extended storage) Optimal storage temp for battery packs to maintain existing charge while off charger	< 90% -22 °F to 122 °F (-30 °C to 50 °C) 40 °F to 95 °F (4 °C to 35 °C) 59 °F (15 °C)
Battery Charging	Optimal: 68 °F to 77 °F (20 °C to 25 °C) Permissible: 32 °F to 104 °F (0 °C to 38 °C)

<p>Shelf Life from date of manufacture when stored in original packaging and recommended storage conditions:</p> <ol style="list-style-type: none"> <li>1. Motor/blower</li> <li>2. Battery pack</li> <li>3. HE filter</li> <li>4. Gas &amp; vapor cartridge/HE</li> </ol>	<ol style="list-style-type: none"> <li>1. 5 years*</li> <li>2. 1 year</li> <li>3. 5 years</li> <li>4. 5 years</li> </ol> <p>*Run for 5 minutes/year</p>
<p>Belts</p>	<p>All belts approx. 52 in. (132 cm)  Belt extender approx. 20 in (50 cm)  TR-627 Easy Clean – Easy clean refers to the non-porous material and submergibility of the belt.  TR-626 High Durability – Leather straps with a durable rubber hip belt.</p>
<p>Battery pack – TR-630 &amp; TR-632</p> <ol style="list-style-type: none"> <li>1. Chemistry</li> <li>2. Charge time</li> <li>3. Run time<sup>1</sup></li> </ol> <p><sup>1</sup> Consult the 3M™ Versaflo™ PAPR TR-600 System Run Times Guide for more detailed information.</p>	<ol style="list-style-type: none"> <li>1. Lithium-ion</li> <li>2. Less than 4.5 hours 90% of full capacity in &lt; 3.5 hours</li> <li>3. Approx. 7-19 hours<sup>1,2</sup> (TR-630 7-12.5 hours; TR-632 10.5-19 hours)</li> </ol> <p><sup>1</sup> New battery and filter, used at 68° -70 °F (20° – 21.1°C)  <sup>2</sup> Dependent on headgear, filter/cartridge, selected airflow, and filter loading</p> <p>Note: Consult a transportation specialist for any requirements or limitations prior to transporting lithium-ion battery packs.  3M TR-630 &amp; TR-632 are shipped compliant with UN 38.3.</p>
<p>Motor/blower alarms –  The TR-600 features audible, visual, and vibrating alarms.</p>	<p>Audible alarm: 85 dBA at 4 inches (10 cm). Beeps continually until resolved.  Visual alarm: Flashing icons draw attention to reason for alarms. Flashes continually until resolved.  Vibratory alarm: Designed to alert the wearer of an alarm in high noise environments. Vibrates for one second every 10 seconds.</p>
<p>Motor/blower operational noise</p>	<p>≤ 75 dBA at ear. Noise levels dependent on system configuration and filter loading.</p>
<p>Motor/blower alarms –</p> <ol style="list-style-type: none"> <li>1. Filter loading/Low air flow</li> <li>2. Low battery voltage</li> <li>3. System alarm</li> </ol>	<ol style="list-style-type: none"> <li>1. Audible, visual, and vibratory alarms will activate when filter pressure exceeds that which the blower can assure adequate airflow of at least 6 CFM (170 lpm) for greater than approx. 30 seconds. Bottom LED on filter loading indicator will flash red. System will power down after approx. 15 minutes.</li> <li>2. Audible, visual, and vibratory alarms will activate when approx. 10-15 minutes of power remains. Bottom LED of battery charge status indicator will flash red. This alarm will also activate if the battery pack temperature reaches or exceeds 130 °F (55 °C)</li> <li>3. Activates when system software malfunctions. All icons will flash and alarm. Power down</li> </ol>

	motor/blower unit to clear alarm. If unit does not reset, contact 3M Technical Service.
Latex	The TR-600 assembly does not contain components of dry or natural rubber latex
Silicone	The TR-600 assembly does not contain components made of free silicone* *The optional cleaning and storage plugs (TR-653) uses silicone gaskets (TR-654).
Ingress Protection (IP Rating)	IP53 for TR-600 Blower (while in use) IP67 for TR-600 Blower with TR-653 Cleaning Plugs attached (while cleaning)