

## 3M™ Versaflo™ Powered Air Purifying Respirator TR-800

### Description

Before using the TR-800 PAPR, all users must read and understand the product *User Instructions*. Consult the TR-800 *User Instructions* for general system operation. Consult the TR-800 Charger and Battery Pack *User Instructions* for additional information. If you have further questions, consult your supervisor or call 3M Technical Service at 1-800-243-4630 (USA) or 1-800-267-4414 (Canada).

### Specifications

Characteristic	Value
Air flow Loose-Fitting Headgear	Nominal 6.7 cfm (190 lpm) – Standard flow Nominal 7.2 cfm (205 lpm) – Medium flow Nominal 7.8 cfm (220 lpm) – High flow
Weight TR-800 motor/blower – no battery pack Standard battery pack – TR-830 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. 1.50 lbs (676 grams) Approx. 1.50 lbs (663 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	23 °F to 131 °F (-5°C to 55 °C). Motor/blower battery alarm will activate when battery pack internal temperature exceeds 131 °F (55 °C). Motor/blower will shut down if the battery pack temperature reaches 140 °F (60 °C).
Operating altitude/elevation range	-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)

Characteristic	Value
<b>Shelf Life from date of manufacture when stored in original packaging and recommended storage conditions:</b>  1. Motor/blower 2. Battery pack 3. HE filter 4. Gas & vapor cartridge/HE	1. 5 years* 2. 6 months 3. 5 years 4. 5 years * Run for 5 minutes/year
<b>Belts</b>	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.
<b>Battery pack - TR-830</b> 1. Chemistry 2. Charge time 3. Run time	1. Lithium-ion 2. Less than 4.5 hours 90 % of full capacity in < 3.5 hours 3. Approx. 6-10 hours <sup>1, 2</sup> <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  Note: Consult a transportation specialist for any requirements or limitations prior to transporting lithium-ion battery packs.  TR-830 are shipped compliant with UN 38.3.
<b>Motor/blower alarms –</b> <b>The TR-800 features audible and visual alarms.</b>	Will alarm continually until resolved. Audible/Visual alarm: Flashing icons draw attention to reason for alarms. Flashes continually until resolved.
<b>Motor/blower operational noise</b>	< 80 dBA at ear per NIOSH Noise Level Test RCT-APR-STP-0030. Noise levels dependent on system configuration and filter loading.
<b>Motor/blower alarms –</b> 1. Filter loading/Low air flow   2. Low battery voltage   3. System alarm	1. Audible and visual 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. 2. Audible and visual 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 131 °F (55 °C). 3. Activates when system software malfunctions. All icons will flash and alarm. Power down motor/blower unit to clear alarm. If unit does not reset, contact 3M Technical Service.
<b>Intrinsic Safety</b>	The 3M™ Versaflo™ Powered Air Purifying Respirator TR-800 Motor/Blower, with the 3M™ Battery Pack TR-830 attached, has been tested and classified for intrinsic safety in Hazardous Locations (Exia) by Underwriters Laboratory (UL) for the following: Exia Division 1: Class I, II, III; Division 1(Includes Division 2), Groups C, D, E, F, G, T4 Ex ia I Ma Class I, Zone 0, AEx ia IIB, T4 Class I, Zone 0, Ex ia IIB, T4 Zone 20, AEx ia IIIC, T135°C Zone 20, Ex ia IIIC, T135°C -20°C ≤ Ta ≤ 55°C

Characteristic	Value
Silicone	The TR-800 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)	IP54 for TR-800 Blower (while in use) IP67 for TR-800 Blower with TR-653 Cleaning Plugs attached (while cleaning)

**Personal Safety Division**

3M Center, Building 235-2W-70  
St. Paul, MN 55144-1000

3M PSD products are  
occupational use only.

**In United States of America**

Technical Service: 1-800-243-4630  
Customer Service: 1-800-328-1667  
[3M.com/workersafety](http://3M.com/workersafety)

**In Canada**

Technical Service: 1-800-267-4414  
Customer Service: 1-800-364-3577  
[3M.ca/Safety](http://3M.ca/Safety)

© 3M 2018. All rights reserved.

3M and Versaflo are trademarks of 3M  
Company and affiliates. Used under license  
in Canada. All other trademarks are property  
of their respective owners.

Please recycle. Release 1, April 2018

