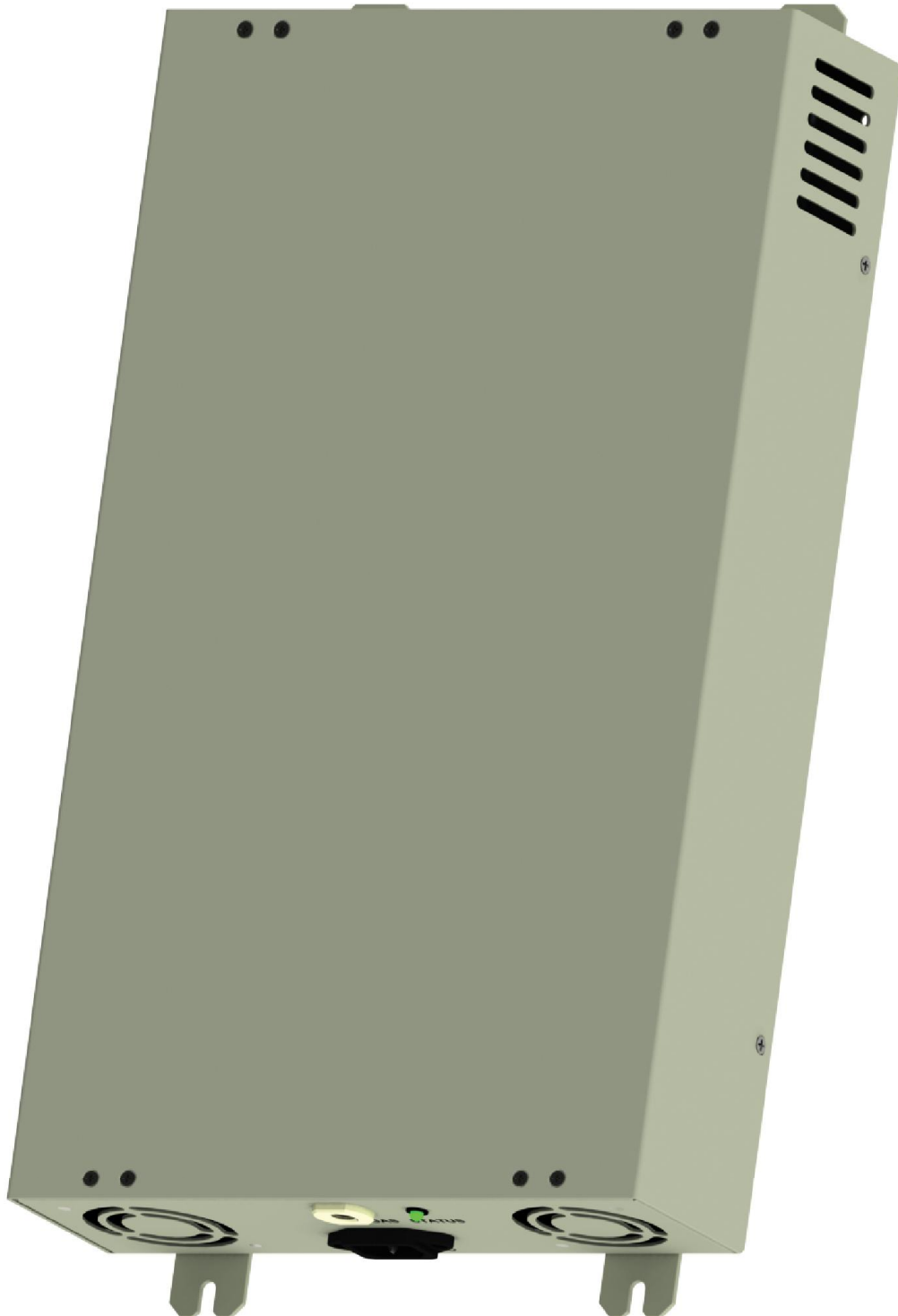




VMD-12 Owners Manual



Safety Information

This section lists the safety standards with which the product complies and other safety compliance information.

CAN/CSA C22.2 No 61010-1-12 + A1:2018. Safety Requirements for
Electrical Equipment for Measurement, Control, and Laboratory Use – Part 1:
General Requirements.

UL 61010-1(3rd. Edition) Safety Requirements for Electrical Equipment
for Measurement, Control, and Laboratory Use – Part 1:
General
Requirements.

Equipment type

Laboratory

Safety class

Class 1 – grounded product

Operating requirements

Read this section before installing the instrument. This manual contains information and warnings that must be followed by the user for safe operation and to keep the product in a safe condition. This equipment is intended for indoor laboratory environments where the user is a trained and competent individual who understands ozone and its uses. Use the product only as specified.



WARNING! THERE IS DANGEROUS HIGH VOLTAGE INSIDE!
Only trained and qualified personnel are allowed to repair the equipment.

Environmental ratings



CAUTION. To ensure proper cooling, allow sufficient air flow around the equipment, avoid blocking any exhaust fans or vents when using the equipment. Inadequate clearances can cause the equipment to over heat.

Table 1: Environmental Specifications

Characteristic		Description
Dry Air Flow		Maximum 12 lpm
Temperature	Operating	5°C to 40°C
Humidity	Operating	80%RH max. at 31°C and 50%RH max. at 40°C
Altitude	Operating	Up-to 2000m
Cooling		This product uses a fan for cooling; do not block ventilation openings.

Table 2: Electrical ratings

Feature	Description
Source voltage range and frequency	60Hz @ 120VAC, 50Hz @ 240VAC (±10% max)
Power consumption	2A max (average 100watts/hour)
Over-voltage category	II (as defined in IEC61010-1)
Pollution degree	2 (as defined in IEC61010-1) rated for dry indoor use only



Installation concerns

- 1. Ground the product.** This product is grounded through the grounding conductor of the power cord. To Avoid electrical shock, the grounding conductor of the power cord must be connected to ground. Do not disable the power cord grounding connections
- 2. Use proper power cord.** Use only the power cords specified for this product and certified for the country of use. Do not replace detachable power cord with inadequately rated cord.
- 3. Power disconnect:** The power cord disconnects the product from the power source. Position the equipment so the power cord remains accessible to the user at all times to allow for quick disconnection if needed.
- 4.** Simply connect the feedgas outlet on the air dryer to whatever device is to use the dry air.
- 5.** The air supply for room must be free of dust, oil, acid and other volatile vapors.
- 6.** Mount the air dryer on a suitable wall.

Startup and Operation

1. The air dryer has no motive to generate flow, the motive flow rate must be created as a suction from whatever device is to draw from the air dryer
2. A small LED indicates operational status of the air dryer. Solid green indicates unit is on and operational. Blinking indicates the unit is in test mode.

Maintenance

1. Only trained personnel should service the machine. Replacement of the drying media (dessicant) should be considered once every 3 years depending on environmental conditions.
2. Dry air crystal indicator is available to be placed inline after the outlet port to show, by color, the dryness of the air exiting the air dryer.
 - Blue Color indicates the air is sufficiently dry and the air dryer is working properly.
 - Pink Color indicates the air is too wet and there is a problem with the air dryer.
 - Brown/Black Color indicates the beens are destroyed and the indicator needs to be replaced.