What is claimed is:

1. A gas filter, comprising:

a housing including a mounting portion and a main portion attached to the mounting portion, the mounting portion configured to mount the gas filter on a surface of a device, the main portion configured to be positioned apart from the surface of the device, the main portion extending from the mounting portion in a horizontal direction and being configured to extend along a side of the device, the housing having an inlet and an outlet, the inlet being arranged on the surface of the device, the housing defining a flow channel between the inlet and the outlet, the flow channel including an L-shaped flow channel formed by first and second channel portions, the first channel portion extending from the inlet to the second channel portion, the second channel portion extending in a direction parallel to the horizontal direction; and

a filter member positioned in the flow channel between the inlet and the outlet and welded to the main portion.

2. A gas filter, comprising:

a housing including a mounting portion and a main portion, the mounting portion configured to mount the gas filter on a surface of a device, the main portion configured to be positioned apart from the surface of the device, the main portion extending from the mounting portion in a horizontal direction and being configured to extend along a side of the device, the housing having an inlet and an outlet, the inlet being arranged on the surface of the device, the housing defining a flow channel between the inlet and the outlet, the flow channel including an L-shaped flow channel formed by first and second channel portions, the first channel portion extending from the inlet to the second channel portion, the second channel portion extending in a direction parallel to the horizontal direction; and

a filter member positioned in the flow channel between the inlet and the outlet, wherein the filter member and the outlet are concentrically aligned and the outlet is offset from the second channel portion.

3. The gas filter of claim 1 or 2, wherein first channel portion extends in a direction perpendicular to the direction of the second channel portion.

4. The gas filter of any one of claims 1 to 3, wherein the flow channel includes a chamber defined by the housing, the filter member being positioned in the chamber.

5. The gas filter of any one of claims 1 to 4, wherein the filter member includes two parallel surfaces, the surfaces positioned perpendicular to the horizontal direction.

6. The gas filter of any one of claims 1 to 5, wherein the filter member includes a membrane.

7. The gas filter of any one of claims 1 to 5, wherein the filter member includes a sintered material having a plurality of layers.

8. The gas filter of claim 1, wherein the outlet is offset from the second channel portion.

9. A method of filtering a gas, the method comprising:

directing a stream of gas through the gas filter of claim 1 or 2; and

capturing impurities within the gas of the stream of gas at the filter member.