

## Opalum Technical Product Description: FLOW.4810 mkII

This document provides technical background information about the Opalum FLOW.4810

### The speakers

The FLOW.4810 speakers are each using 48 pieces of 1" aluminum drivers configured in an array. Three of the drivers are used as tweeters and the remaining 45 drivers are used as woofers and configured in 5 groups of 9 drivers.

The speakers are active and powered by Opalums Actiline® technology. Each speaker receives a digital signal through the speaker cable. The signal is heavily processed using Opalums own technology building blocks and then amplified and sent to the 48 drivers.

There are eight (8) dedicated and extremely efficient High PSRR Closed-loop Class D Amplifiers used in EACH of the speakers and are configured to deliver 20w to each of the 3 tweeters (3x20w) and 5x20w for the woofer groups of 9 drivers per group (RMS and 0,05% THD). In total 320 w for a FLOW.4810 system. The crossover frequency is 3 kHz and implemented with a digital 4<sup>th</sup> order Linkwitz-Riley filter.

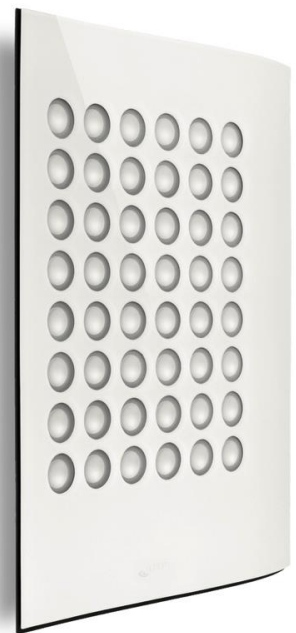
Opalums core technology Actisonic® is what makes the FLOW.4810 a sonic masterpiece: Years of research from Linköping University has resulted in a technology platform that allows Opalum to create clear and pleasant sound from physically constrained, seemingly impossible acoustic designs. Model specific characterization and measurements ensure total control of the audio sub-system including electronics, transducer and enclosure coloring of the sound.

The foundation of the technology is based on advanced inverse-filtering algorithms optimizing both frequency and time domain characteristics, giving a more natural sound, clearer details and a very well defined stereo image even from the worst possible acoustic form-factors.

The dispersion of the FLOW.4810 is designed to be narrower vertically than horizontally. This means that the FLOW.4810 should be mounted up-right and not turned 90 degrees.

The unique slim and award winning design of the FLOW.4810 was inspired by a sheet of paper floating down along a wall. The aluminum cabinet and the elegant undulating shape is not only pleasing to the eye, it minimizes vibrations and conducts the sound directly to the listener.

Typical setups would be for TVs, Home Theater Systems, and whole house audio.



### Main Office:

Opalum ApS ● Ørstedsvej 10 ● DK-8660 Skanderborg ● Phone: +45 7877 0500

[www.opalum.com](http://www.opalum.com)