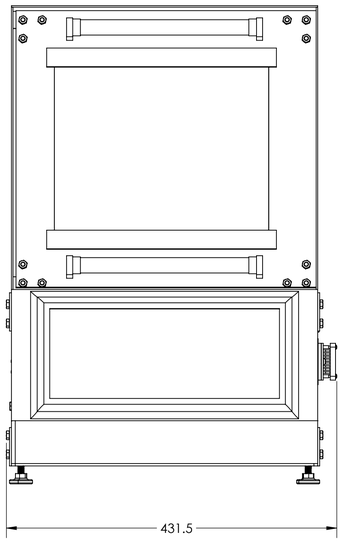
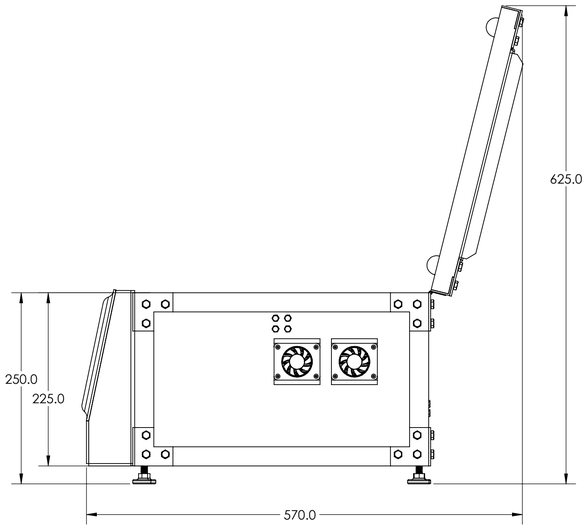




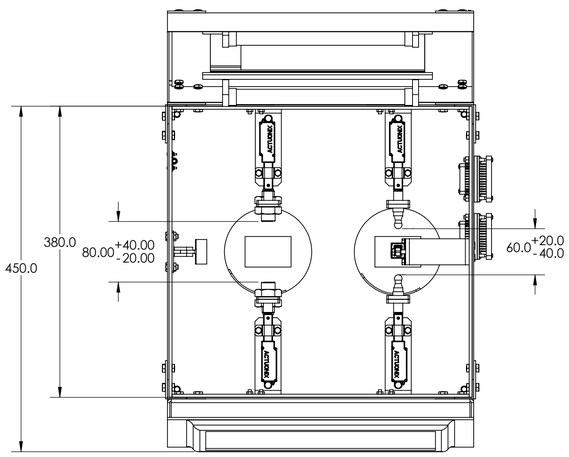
General Description

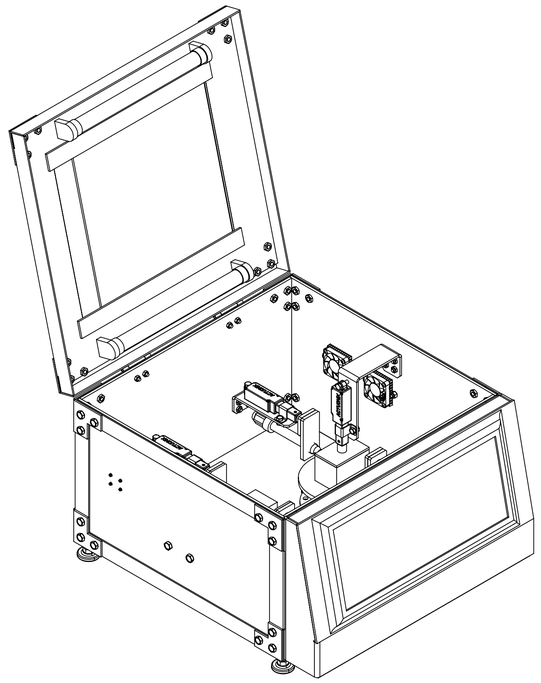
The multi-parameter desktop device for meat freshness and quality assessment is a compact, experimental system designed to compare and optimize different meat evaluation techniques. It integrates ultrasound, optical, and mechanical measurements to assess key parameters such as water-holding capacity (WHC), fat content, elasticity, pH, and color. By identifying overlapping or redundant methods, the device streamlines meat quality testing, ensuring efficient, non-detructive, and accurate analysis for both research and industrial applications.

In the open mode, the device has dimensions of 625 mm in height, 570 mm in width, and 431.5 mm in length.
The maximum height of the device is 640 mm at its highest point.

Technical parameters

1. The device can hold specimen Size: 60mm × 40mm × 40mm
2. Operating Temperature: 15°C – 23°C (±0.2°C accuracy)
3. Water-Holding Capacity (WHC): Ultrasound (70% – 80% water by
4. weight)
5. Elasticity: Force & deformation analysis (50N – 200N range)
6. pH: Glass electrode sensor (0 – 14 pH, ±0.01 accuracy)
7. Color: RGB Camera (30.4 MP, ΔE < 2, 6500K light source)





UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR: ± 0.1% ANGULAR:		FINISH:			DEBURR AND BREAK SHARP EDGES	DO NOT SCALE DRAWING / REVISION
	NAME	SIGNATURE	DATE			Riga Technical University
DRAWN	S. M Jayawickrama					TITLE: Genaral drawing of the multi-parameter desktop device for meat freshness and quality assessment (GD)
CHK'D	Aleksejs Tatarinovs					
CHK'D	Hermanis Sorokins					
APPV'D	Jurijs Dehtjars					
Q.A	Nicole Burtovaja			MATERIAL:		DWG NO. IP.005.00.000.GD — A1
				WEIGHT:		SCALE:1:4 — SHEET 1 OF 1