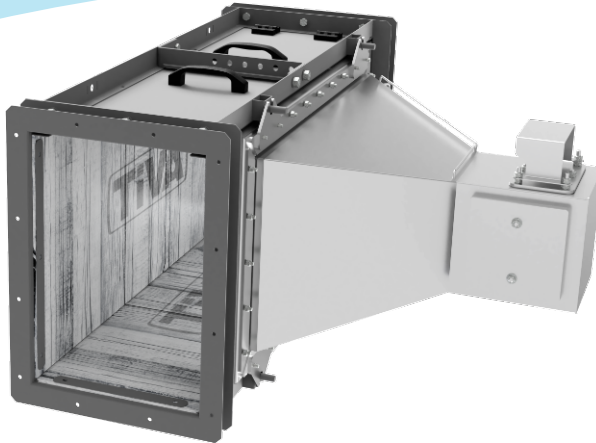# *TiVA FC*

REAL-TIME ANALYSIS – CUTTING EDGE FISH COUNTING

Fish counting using artificial intelligence

TiVA FC is a fish counter that combines the latest technological advancements with years of experience in fish monitoring.

The counter delivers **high-quality results and high reliability** alongside a user-friendly platform. It is based on camera technology that recognizes, counts, and measures fish using smart algorithms and software.

TiVA's fish counter is **continuously connected to a web platform** where data can be accessed almost instantly as the fish pass by the camera. The platform features user-friendly analysis and reporting tools, accessible from any computer or mobile device for quick and easy access.
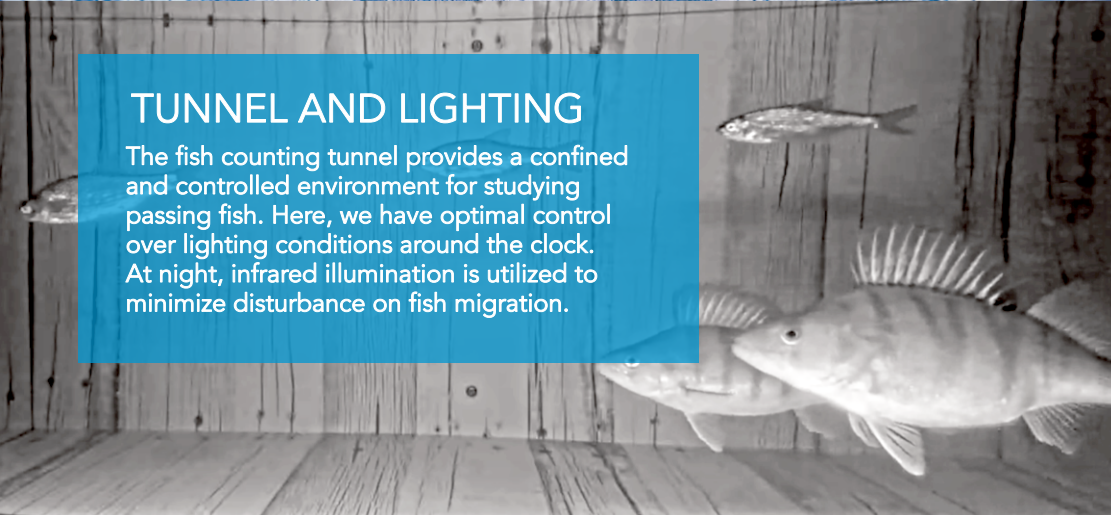
TROUT 68 CM UPSTREAM

ADIPOSE FIN

TUNNEL AND LIGHTING

The fish counting tunnel provides a confined and controlled environment for studying passing fish. Here, we have optimal control over lighting conditions around the clock. At night, infrared illumination is utilized to minimize disturbance on fish migration.
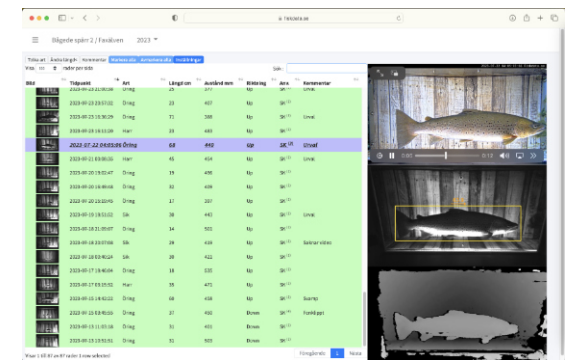
FISH RECOGNITION USING AI

The fish counter utilizes advanced camera technology coupled with artificial intelligence in the form of custom-trained algorithms designed specifically for fish detection. The system processes all video streams in real-time and counts only fish that make a complete passage through the fish counter. In addition to counting fish with species identification, we have also implemented detection of adipose fin and fungal growth.

CAMERA CONE

The fish counter's camera cone contains the technology required for reliable data collection. It includes a 3D camera that enables precise measurement of fish size, as well as an HD network camera with a 1/1.8" image sensor that provides sharp images even in low-light conditions. The cone also houses hardware that processes data in real-time and uploads it to our web platform.

WEB PLATFORM

All the records collected by TiVA FC are continuously sent to a user-friendly web platform where the user can access all the data and view all the video clips.

The platform features tools for analyzing every registration and create reports with charts and tables. Of course, it's also possible to export all the data to Excel or similar software for further data processing.
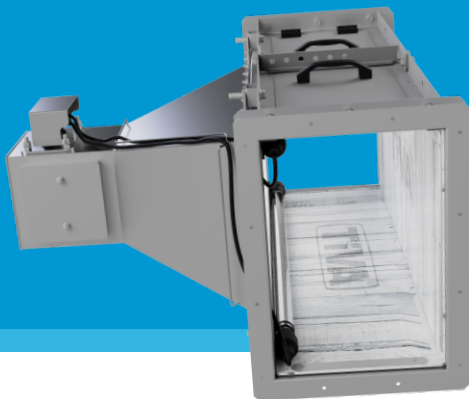
FISKdata.se

TiVA FC
SPECIFICATIONS

POWER SUPPLY

Voltage	230 VAC or 24 VDC
Power usage, normal operation	Approx. 50 W
Power usage, energy-saving	Approx. 20 W
Solar-powered	Optional feature

ELECTRICAL CABINET

Size (H x W x D)	650 x 450 x 250 mm
IP Protection class	IP66
PC display	10" touch optional
4G router	Included
Remote relay	Included

CABLING

Electrical cabinet – counter	10 m (standard)
	25–50 m (optional)
Counter – lighting tubes	1 m (standard)

ILLUMINATION

White light	Yes
IR light	Yes

TUNNEL BIG/SMALL

Length	140 cm / 100 cm
Inner dimensions (H x W)	50 x 50 cm / 40 x 30 cm
Weight (incl. cone)	80 kg / 70 kg
Material	Stainless steel (1.4301)
Service hatch	Included

OPTICS

Video	Network camera
Resolution	Up to 1920 x 1080 px
Frame rate	30 fps
Day and night function	Yes, IR filter
Size measuring	3D camera

SOFTWARE

Analysis	Real time
Obtained data	Timestamp, direction, length, distance, still image, depth image, video footage
Interface	Web interface
Species recognition	Yes, with AI*
Fungal detection	Yes, with AI*
Adipose detection	Yes, with AI*

* Optional feature if operating agreement has not been signed. Additional information upon request.

TiVA
INNOVATION THAT COUNTS