



Bi-Polar Ionization

Product Brochure

Product overview

Advanced-oxidation odor control that neutralizes odorous molecules at the source — an ideal solution for enclosed spaces, pump stations, and sensitive urban environments.

Bi-polar ionization generates positive and negative ions that react with odorous compounds such as H₂S and VOCs in the air, breaking them down through oxidation into odorless end-products. Because treatment occurs in the gas phase without a packed bed, the system is exceptionally compact, has a very low pressure drop, and requires no media replacement or chemical dosing.

Etaniv deploys bi-polar ionization where space is limited or where rapid, low-maintenance odor knockdown is needed — either as a standalone solution for lighter loads or in combination with biological and carbon stages for demanding sites.

Key features

Key technical and commercial advantages:

- Treats odor at the source with no packed bed and very low pressure drop
- Extremely compact — fits confined pump stations and enclosed plant rooms
- No media to replace and no chemical dosing in operation
- Rapid response with immediate effect on switch-on
- Low energy consumption and quiet operation
- Scalable and easily combined with biological or carbon stages

Typical applications

Typical application types include:

- Sewage pump stations and confined wet wells
- Enclosed plant rooms and screening buildings
- Urban and residential-adjacent installations with strict odor limits
- Supplementary treatment alongside biological or carbon systems

Technical specifications

Flow rate (m³/hr)	Tailored to project; typically compact-to-medium air volumes
Principle	Bi-polar ion generation — gas-phase advanced oxidation
Target compounds	H ₂ S, VOCs and mixed odorous streams
Media / chemicals	None — no packed bed, no dosing in operation
Pressure drop	Very low; minimal impact on ventilation fans
Installation	In-duct or in-room; compact modular units
Materials of construction	Corrosion-resistant enclosure and components
Power	Low energy consumption; single- or three-phase supply
Temperature range (°C)	Effective across normal ventilation-air temperatures

Product photo



Why Etaniv

Etaniv B.Y. Ltd is an Israeli manufacturer and integrator of environmental technologies for water, wastewater, and odor control. We design, supply, install, and maintain our systems in-house — backed by 20+ years of field experience and international technology partnerships.

- Full lifecycle service — design, installation, and maintenance by one team
- Own manufacture — quality controlled from design to delivery
- Compliant with the Israeli Clean Air Act and Odor Nuisance Guideline
- Backed by international technology partnerships
- 50+ active clients across Israel

Contact us

Etaniv B.Y. Ltd

17 Ha'Alia St., Bazra 6094400

Israel

Tel: +972 9 760 1548

Mobile: +972 54 587 9007

Email: info@etaniv.co.il

www.etaniv.co.il

Office hours

Sunday – Thursday, 08:00 – 17:00

24/7 emergency support available